Agricultural Policy Monitoring and Evaluation 2012

OECD COUNTRIES

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Foreword

This report Agricultural Policies: Monitoring and Evaluation 2012 – OECD Countries monitors agricultural policy developments in OECD member countries. The OECD uses a comprehensive system for measuring and classifying support to agriculture – the Producer and Consumer Support Estimates (PSEs and CSEs) and related indicators. They provide insight into the increasingly complex nature of agricultural policy and serve as a basis for OECD's agricultural policy monitoring and evaluation.

The Executive Summary synthesises the key findings of the report. Part I provides an overview of developments in agricultural policies and related support in OECD countries and emerging economies. Chapter 1 in Part I provides an overview of developments in agricultural policies and related support measures across OECD. Chapter 2 in Part I provides a special focus on policies to foster innovation and productivity growth in agriculture. Part II summarises the developments in agricultural policies in each individual OECD country (with the European Union considered as a whole). Part III contains detailed background tables with indicators of agricultural support covering both OECD countries and emerging economies.

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List of acronyms and abbreviations

AANZFTA	Australia-New Zealand Free Trade Agreement
ACHIPIA	Agency for Quality and Food Safety (Chile)
ACRE	Average Crop Revenue Election (United States)
AMS	Aggregate Measurement of Support
ASEAN	Association of South East Asian Nations
BAF	Financial Coordination Subsidy (Bono de Articulación Financiera; Chile)
BRK CU	Belarus-Kazakhstan-Russia Customs Union
BRM	Business Risk Management
CAP	Common Agricultural Policy (of the European Union)
CCP	Counter-Cyclical Payments
CEPEA	Comprehensive Economic Partnership in East Asia
CETA	Comprehensive Economic and Trade Agreement (Canada – EU)
CNDP	Complementary National Direct Payments
CONADI	National Service for Indigenous Development (Corporación Nacional de Desarrollo Indígena) – MIDEPLAN, Chil
CORFO	Economic Development Agency (Corporación de Fomento a la Producción; Chile)
COOL	Country of Origin Labelling
COTRISA	Wheat marketing enterprise (Chile)
CPI	Consumer Price Index
CWB	Canadian Wheat Board
DIRA	Dairy Industry Restructuring Act (New Zealand)
DP	Direct Payments
EAFRD	European Agricultural Fund for Rural Development
EAGF	European Agricultural Guarantee Fund
EEA	European Economic Area
EFP	Environmental Farm Planning
EFSA	European Food Safety Authority (European Union)
EFTA	European Free Trade Association
EPA	Economic Partnership Agreements
EQIP	Environmental Quality Incentives Program
ERA	Environmental Risk Assessment (European Union)
ETS	Emissions trading scheme (New Zealand)
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FDA	Food and Drug Administration (United States)
FDI	Foreign Direct Investment
FMD	Farm management Deposits (Australia)

FTA	Free Trade Agreement
FTP	Joint Federal, Provincial and Territorial agreements (Canada)
FY	Financial year
GAO	Gross Agricultural Output
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
GIs	Geographical Indications
GM(O)	Genetically Modified (Organism)
GSP	Generalised System of Preferences
IAF	Irrigation Acceleration Fund (New Zealand)
IMF	International Monetary Fund
INDAP	National Institute for Agricultural Development (Instituto Nacional de Desarrollo Agropecuario; Chile)
LDC	Least Developed Countries
LEADER	Links Between Actions for the Development of the Rural Economy
LFA	Less Favoured Areas
MERCOSUR	Southern Common Market
MFN	Most Favoured Nation
MMA	Minimum Market Access
NAFTA	North American Free Trade Agreement
NAIT	National Animal Identification and Tracing (New Zealand)
NYBOT	New York Board of Trade
OECD	Organisation for Economic Co-operation and Development
PBS	Price Band System (Chile)
PEM	OECD Policy Evaluation Model
PPP	Purchasing Power Parity
PROCAMPO	Programme providing payments based on historical areas (Mexico)
PROCHILE	DIRECON's Department, to promote Chilean exports
PROGAN	Programme providing payments based on livestock numbers (Mexico)
R&D	Research and Development
RDP	Rural Development Plan
RDR	Rural Development Regulation
RMA	Resource Management Act 1991 (New Zealand)
SAG	Agriculture and Livestock Service (Servicio Agrícola Ganadero; Chile)
SAPARD	Special Accession Programme for Agriculture and Rural Development
SAPS	Single Area Payment Scheme
SFF	Sustainable Farming Fund (New Zealand)
SMP	Skimmed milk powder
SNAP	Supplemental Nutrition Assistance Program (United States)
SPS	Single Payment Scheme
SPS	Sanitary and Phytosanitary
SSG	Special Safeguard
STE	State Trading Enterprise
TBT	Technical Barriers to Trade
TPP	Trans-Pacific Partnership Agreement
TRQ	Tariff Rate Quota
UN	United Nations

UNCTAD	United Nations Commission for Trade and Development
URAA	Uruguay Round Agreement on Agriculture
USA	United States of America
VAT	Value Added Tax
WTO	World Trade Organization

OECD indicators of support

CSE	Consumer Support Estimate
GSSE	General Services Support Estimate
MPS	Market Price Support
NAC	Nominal Assistance Coefficient
NPC	Nominal Protection Coefficient
PSE	Producer Support Estimate
SCT	Single Commodity Transfers
TSE	Total Support Estimate

Currencies

AUD	Australian dollar
CAD	Canadian dollar
CLP	Chilean peso
CHF	Swiss frank
EUR	Euro
ILS	Israeli shekel
ISK	Icelandic krona
JPY	Japanese yen
KRW	Korean wong
MXN	Mexican peso
NOK	Norvegian krone
NZD	New Zealand dollar
TRY	New Turkish lira
USD	United States dollar

Executive summary

Producer support in OECD countries continues to decline…

In 2011 support to producers across the OECD area amounted to USD 252 billion or EUR 182 billion as measured by the Producer Support Estimate (PSE). This is equivalent to 19% of farm gross receipts in OECD countries, down slightly from 20% in 2010. This is the lowest level observed since OECD began measuring support in the mid-1980s, when the PSE as percentage of gross farm receipts was almost twice as high (37%).

…but in recent years primarily as a result of higher world prices

The recent decline in producer support was in many countries driven by developments on international markets, rather than by explicit policy changes. With higher world prices, policies to support domestic prices generated smaller transfers. As a result, the market price support component of the PSE declined to around 40% in 2011. In some countries budgetary support increased, primarily as a result of payments to help farmers cope with exceptional circumstances, such as droughts or floods.

The potentially most distorting support still represents around half of the total …

The share of potentially most production and trade distorting support, defined as payments based on output and variable inputs use without input constraints, was as high as 86% in 1986-88 and has come down to 51% in 2009-11.

… although there is a general move away from support directly linked to production

OECD countries are moving at different speeds away from supporting farmers through policies that raise domestic prices. Other mechanisms to channel support are progressively being introduced, such as payments based on historical area, livestock numbers, and farm income or receipts, which do not directly affect current production decisions. The less that support is directly coupled to production, the less production and market distorting it is.

Large variations in support levels across OECD countries remain

Differences in support levels across countries remain large. The lowest levels of support are observed in New Zealand, Australia and Chile, where less than 1% to 4% of gross farm receipts were due to policy transfers in the 2009-11 period. On the other hand, in Norway, Switzerland, Japan, Korea and Iceland between one half and two-thirds of gross farm receipts originate from policy transfers.

Total support to agriculture relative to national income is falling in the OECD area

The estimated total support as percentage of GDP declining from 3% on average in 1986-88 to less than 1% in 2009-11. This declining trend is observed in all OECD countries over the long term.

Still relatively little policy effort directly addresses environmental and risk management objectives…

Measures designed to encourage improved environmental outcomes remain a relatively small share of total support; environmental objectives are often pursued through regulations and payments based on criteria other than environmental performance. Public support for *ex ante* risk management instruments remains uneven, while expenditures on *ad hoc* disaster programmes increased in 2011.

…and more policy attention could be directed at increasing agricultural productivity growth, sustainably

Since the post-war period the growth rate of total factor productivity (TFP) in agriculture has converged across major world regions at around 2% per year. However, TFP growth rates have declined in the last decade in some OECD countries that start from a high productivity level. Government expenditure on agricultural R&D continues to increase in all OECD countries, but there are signs of deceleration in the rate of increase. On average, public expenditures on agricultural R&D amount to about 1% of agricultural value added in the OECD area. Many governments are now beginning to re-examine the performance of their agriculture innovation systems, including ways to effectively harness the innovative and financing potential of the private sector.

No major farm policy changes were introduced in OECD countries in 2011

While most countries are in consultations about new agricultural policy frameworks, no major changes have been implemented in 2011. Specific proposals for the new Farm Bill in the United States and for the Common Agricultural Policy post-2013 in the European Union are under active consideration.

Agriculture policy performance could be improved by targeting current policy objectives…

There is clear progess across the OECD area in moving towards agriculture support that is less market distorting and more efficient in transferring income to farm households. Further policy reforms could usefully focus on addressing the policy priorities expresssed by Ministers of Agriculture during their meeting at OECD in 2010. There remains relatively little policy effort directly targeted to improving the environmental performance of agriculture and ensuring the sustainable use of land, water and biodiversity resources; ensuring farmers have available to them the tools necessary to manage their own farm risks, along with clear and predictable systems to address unavoidable catastrophic losses; and to increase both public support and private incentives for innovation across the food and agriculture system, including research and development, technology transfer, and education and advisory services. Improving coherence across agriculture and other policy areas could both improve domestic policy performance in many countries and contribute to meeting the MDG goals of reducing poverty and hunger in many developing countries.

…in particular in light of buoyant global markets

After decades of declines in the real prices of agricultural commodities, both the current situation and the medium term outlook are for relatively high commodity prices; in essence, markets today are providing the remuneration to farmers that many countries' policies have sought to provide in the past. With significant demand growth envisaged, along with greater pressure on limited resources compounded by the uncertain effects of climate change, and continuing market volatility (albeit around a higher average price level), there is a clear opportunity to better align policies with these new priorities. Fiscal consolidation across many OECD countries may serve to strengthen the urgency of improving the cost effectiveness of agriculture policies.

PART I

Agricultural policies: Monitoring and evaluation 2012 OECD countries

PART I

Chapter 1

Evaluation of developments in agricultural policy and support

The key economic and market developments which provide the framework for the implementation of agricultural policies and related support to farming sector are analysed in the first part of this chapter. Highlights are then presented of the main recent changes and new initiatives in agricultural policies in 2011-12 in OECD countries. Finally, the developments in the estimated support (using the OECD PSE methodology) are evaluated in terms of its level, composition and changes over time in OECD countries.

1.1. Key economic and market developments

The global economy deteriorated in 2011 after showing signs of recovery in 2010 (OECD, 2012a). Global concern about sovereign debt sustainability in the Euro area became widespread and emerging economies, notably China, showed signs of slowing growth. Unemployment, particularly long term, remained high in many OECD economies. Employment growth accelerated in the United States, while the average unemployment rate in the euro area increased in the second half of 2011. In the first quarter of 2012, short-term prospects showed an improvement relative to the situation prevailing in late 2011, but indicators still suggest a fragile recovery. Projections reinforce the contrast between robust growth in the United States and Canada, and fragile activity in Europe. Japan's economy shrank in 2011 after the 11 March earthquake and tsunami, but is projected to rebound in 2012.

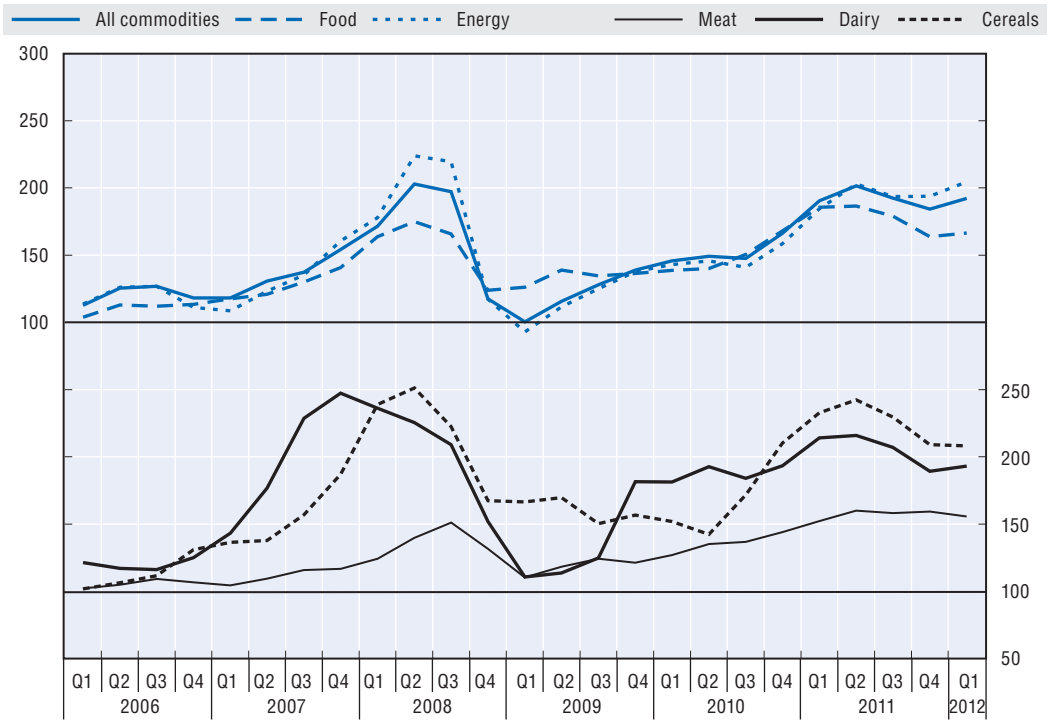
Monetary policy remained very supportive in OECD countries, particularly in the euro area. Concerns about the sovereign debt sustainability in the European monetary union became widespread in 2011. The rebound in world equity prices reflected greater confidence in financial markets, but structural reforms, deleveraging in the financial sector, and fiscal consolidation are on-going in a number of countries, including within the euro area. Several OECD governments are implementing or designing significant reductions in public expenditure that affect most areas of public policy.

World trade growth slowed slightly in 2011, after having surpassed pre-crisis levels in 2010 (WTO, 2012). South and Central American exports continued to expand at high growth rates, while in other parts of the world, including Asian emerging economies, exports were less dynamic, reflecting a weakening of demand, particularly in Europe and Japan. Tensions in currency markets continued with interventions in several countries to avoid the appreciation of their currencies, and a G7 joint intervention was announced in March 2011 to weaken the Japanese Yen after the earthquake and tsunami.

Primary commodity prices continued to increase in the first half of 2011 and average levels were well above those of the previous year (IMF, 2012). Energy prices have led this trend with oil prices in 2011 rising on average 32% above the 2010 level and increasing further at the beginning of 2012. The food price index also increased at the beginning of 2011 to levels that were above the 2008 peak, following a similar trajectory as the energy price index in the last five years (Figure 1.1). The evolution of energy prices contributes to inflation pressures in OECD countries (OECD, 2012). Higher inflation in emerging economies is to some extent driven by high food prices (OECD Stat, 2012).

World production of both wheat and coarse grains registered a record high in 2011, helping to replenish world stocks and restraining prices during the second half of the year (OECD 2012b). Unfavourable weather conditions during the first months of 2012 – intense cold in Europe and Russia, dry conditions in the southwest of the United States, and delayed and insufficient rainfall in South America – added pressure on prices. Price movements in dairy and meat were less pronounced, but increased feed costs are likely to

Figure 1.1. **Commodity prices index, 2006 to 2012**



Source: International Monetary Fund for all commodities, food and energy indices; * FAO for meat, dairy and cereal indices. Base year is 2005.

StatLink http://dx.doi.org/10.1787/888932652795

dampen supply response to higher prices in the livestock sector. Production and use of biofuels continues to grow, driven by policies in place and high energy prices. World ethanol prices, like crude oil prices, increased strongly in 2011 to levels well above the 2007/08 highs. These production and price changes are estimated to have had a positive impact on farm income in several OECD countries; for instance, on the estimated net farm income in the United States and the real agricultural income per worker in the European Union (ERS 2012; EC 2011).

1.2. Main changes in agricultural policies

This section discusses the main policy changes in OECD countries in 2011. A more detailed description of policies can be found in the corresponding country chapters in Part II.

Over the long term, OECD countries have been gradually progressing towards lower levels of support and policies that create less distortion in production and trade. There are significant differences between the momentum of countries, but the OECD principle of decoupling support from commodity production is widely recognised as a driving force behind policy reform. Attempts to better target policies are also reflected in new initiatives oriented to a number of objectives that were outlined in the OECD 2010 Ministerial communiqué: supporting investment and innovation, management of risk, including the impact of price volatility, and enhancing incentives and disincentives to improve environmental performance, and the adaptation and mitigation of climate change. However, no major policy shifts have occurred in recent years. As shown by on-going OECD

work in these areas, strengthening the explicit connection of policies to specific objectives and beneficiaries, and improving cost-effectiveness is still a challenge.

Agriculture has been on the G20 agenda, in particular since the Seoul Summit of November 2010, and OECD and other international organisations have been contributing their expertise in this area. OECD and the FAO have played a leading role in two reports on price volatility and agricultural productivity, and this co-ordination has influenced specific policy initiatives undertaken by G20 leaders (Box 1.1).

Box 1.1. **OECD Contributions to the G20 Agenda on Food and Agriculture**

In response to calls from the G20 at the 2010 Seoul Summit, the OECD and the FAO co-ordinated a report for the G20 entitled *Price Volatility in Food and Agricultural Markets: Policy Responses*. In addition to the FAO and the OECD, eight other international organisations, namely, the World Bank Group, IFAD, UNCTAD, WFP, WTO, IMF, IFPRI and the UN HLTF, contributed to this work. The report contains comprehensive recommendations in three categories: 1) increasing the productivity, sustainability and resilience of agriculture; 2) reducing price volatility; and 3) dealing with its consequences, particularly for the most vulnerable. This report was finalised on 2 June 2011 and discussed by G20 Ministers of Agriculture at their meeting on 22-23 June 2011. They adopted an Action Plan that was subsequently endorsed by leaders at the G20 Summit in Cannes in November of that same year.

The OECD is now actively participating in preparations for the implementation of several of the actions agreed to by Ministers. The most important one is the Agricultural Market Information System (AMIS) initiative which has three objectives: 1) to improve the information base and disseminate information in a transparent manner; 2) to develop the capacity to produce detailed commodity market data; and 3) to facilitate policy dialogue and co-ordination in the event of a serious development in commodity markets. AMIS is comprised of three components: 1) the AMIS Secretariat; 2) the Information Group (composed of experts in capitals); and 3) the Rapid Response Forum. The Secretariat is based at the FAO, with active involvement from OECD and other international organisations. The first meetings of both the Information Group and the Rapid Response Forum have taken place and considerable progress is reported in developing new systems to improve the quality and timeliness of market data for key food crops.

G20 leaders also committed to increasing agricultural production and productivity in a sustainable manner, particularly in developing countries and with a view to the impact on smallholders (Cannes Declaration). With the OECD and the FAO again leading, the international organisations began to undertake work in the first half of 2012 to define the steps governments might take to help close the agriculture productivity gap in a sustainable way. The final report was discussed at the G20 Vice-Ministers of Agriculture meeting held 17-18 May 2012 in Mexico City and highlights the importance of innovation and investment in fostering productivity growth and the need for a coherent policy environment and provides a set of forward-looking policy recommendations.

OECD countries are set to introduce new agricultural policy frameworks affected by fiscal tightening

No change in the legislative framework on agricultural policies occurred in any OECD country in 2011. Most countries are at the consultation stage to develop post 2008-09 crisis agricultural policy frameworks. In the current economic environment, with most OECD

countries engaged in structural fiscal consolidation, the opportunity costs of budgetary resources are high and agricultural expenditures are likely to tighten. In the last few years, budgetary expenditures on agriculture in OECD countries remained stable, while there was an increase in some emerging economies. This is likely to continue and should be an opportunity for OECD countries to better target agricultural policies and improve their cost-effectiveness.

Two important policy frameworks are undergoing legislative review: the Farm Bill of the ***United States***, which expires in September 2012, and the ***European Union*** Common Agricultural Policy legislation, which expires at the end of 2013. The decision making processes for each differ. The Common Agricultural Policy is subject to discussion among member countries and institutions (Commission, Council and European Parliament), while the Farm Bill is negotiated within Congress. The EU Commission has tabled a full proposal for negotiation with detailed regulations expected to come into force as of 1 January 2014 (Box 1.2). In the United States, a number of formal proposals were presented in late 2011 by stakeholders and members of the US Congress in conjunction with the budget deliberations of the Joint Select Committee on Deficit Reduction. The Congressional agriculture committees continue to work towards finding a consensus on new legislation, but there remains the possibility that the current law will be extended if consensus is not reached in time. An evaluation of the definitive new policy frameworks in the European Union and the United States will be made in future editions of this publication.

In 2011/12, several reform and policy frameworks expired in other OECD countries, but governments have not yet approved or announced new packages. In ***Switzerland***, the Agricultural Policy Reform 2011 initiative marked the end of four years of reforms characterised by a gradual shift away from market price support and to budgetary payments. Negotiations are underway for a new package. In ***Australia***, the Farming Future initiative which focuses on adaptation and adjustment to climate change will expire; several of its programmes will be incorporated into economy-wide initiatives, such as the Clean Energy Futures Plan. In ***Mexico,*** the Sectoral Development Programme and Climate Change Strategy expires in 2012. In 2012, ***Norway*** approved its White Paper on Agriculture and Food Policies, but the key agricultural policy instruments remain and implementation parameters are routinely negotiated every year with farmers' organisations.

In other countries where policy frameworks will expire in the coming years, consultations for new legislation are underway. These include for example the 2010-14 Strategic Plan in ***Turkey*** and the three agreements with dairy, sheep and horticulture sectors in ***Iceland***. ***Canada***'s Growing Forward Policy will be replaced by a new Federal-Provincial-Territorial (FPT) multilateral framework in 2013. ***Japan***'s current Basic Plan for Food, Agriculture and Rural areas will be effective until 2015, but the Basic Principle and Action Plan to implement the Basic Policy on Comprehensive Economic Partnership were presented in 2011. In order to facilitate Japan's participation in comprehensive trade agreements that include agriculture, this plan envisages further consideration of policy options to gradually move away from market price support to fiscal measures.

Other countries implemented changes in their institutional arrangements. ***Chile***'s Agency for Quality and Food Safety (ACHIPIA) was incorporated into the Ministry of Agriculture. ***New Zealand*** announced the merger of the Ministry of Agriculture and Forestry with the Ministry of Fisheries, becoming the Ministry for Primary Industries.

Box 1.2. **European Commission proposals for the Common Agricultural Policy post-2013**

In October 2011, the European Commission tabled draft regulations on various aspects of the Common Agricultural Policy (CAP) *with a declared objective to meet the challenges of food security, sustainable use of natural resources and growth*. The proposals are being discussed in the Council and the European Parliament during 2012 and 2013, and the new legislation is expected to be approved by the end of 2013.

Commission proposals on the Multi-Annual Financial Framework for 2014-20 would maintain CAP spending at 2013 levels in nominal terms.[*] For this seven-year period, total funding would be up to EUR 435.5 billion (USD 605.7 billion). Pillar II would fund rural development programmes, accounting for close to a quarter of all funds. Additional support would include EUR 17.1 billion for food safety measures (EUR 2.5 billion), aid to most deprived persons (EUR 2.8 billion), a reserve for crises in the agricultural sector (EUR 3.9 billion), European Globalisation Fund (up to EUR 2.8 billion), and research and innovation on food security, the bio-economy and sustainable agriculture (EUR 5.1 billion).

Market measures: The draft regulations do not propose any change to current intervention or private storage systems and include the ending of milk quotas, sugar quotas and of vine planting rights restrictions. However attention is given to improving the functioning of the food supply chain.

Direct payments

The Basic Payment Scheme would replace the Single Payments Scheme in the EU15 and the Single Area Payments Scheme (SAPS) in most of the EU12 after 2013. This would continue to be subject to respecting certain environmental, animal welfare and other rules (see cross compliance below). According to the EU Commission proposal, all member states would be obliged to move towards a uniform payment per hectare at the national or regional level by the start of 2019. The national envelopes for direct payments would be adjusted so that those which receive less than 90% of the EU average payment per hectare will receive more. The gap between the amounts currently foreseen and 90% of the EU27 average would be reduced by one third.

Greening: Member States would use 30% of the national envelope to pay farmers for: 1) maintaining permanent pasture; 2) implementing crop diversification (a farmer must cultivate at least three crops on his arable land none accounting for more than 70% of the land, and the third crop at least 5% of the arable area); and 3) maintaining an "ecological focus area" of at least 7% of farmland (excluding permanent grassland) – *i.e.* field margins, hedges, trees, fallow land, landscape features, biotopes, buffer strips, afforested area. Organic producers would benefit from the greening component without fulfilling any further requirements. Greening would be compulsory.

Areas with natural constraints: Member states (or regions) would be able to grant an additional payment for areas with natural constraints (as defined under Rural Development rules) of up to 5% of the national envelope. This would not affect the options for Less-Favoured Areas (LFA) available under Rural Development. The definition of LFA would be adjusted to reflect objective criteria.

Young farmers: Member states would have to use up to 2% of the national envelope to top up the Basic Payment to new entrant Young Farmers (those under 40) by an additional 25% for the first five years of installation. This would be limited to a maximum of the average farm size in that member state. For member states where the farm size is small, the limit would be 25 ha.

Small farmers: Up to 2% of the national envelope could be used to fund a new Small Farmers Scheme, which would be open to farmers claiming support in 2014 who decide by 15 October, 2014 to participate and thereby receive an annual payment fixed by the member state of between EUR 500 and EUR 1 000, regardless of the farm's size. Participants who opt for this scheme in place of the general payment scheme would face less stringent cross-compliance requirements, and be exempt from greening.

Optional commodity-specific payments: Member states would have the option of providing limited amounts of payments linked to a specific product. This would be limited to 5% of the national envelope if the member state currently provides 0-5% of coupled support, or up to 10% if the current level of coupled support is higher than 5%. The Commission may approve a higher rate if the Member States can show it is justified.

Box 1.2. **European Commission proposals for the Common Agricultural Policy post-2013** *(cont.)*

Cross compliance: The awarding of all payments from the Direct Payment national envelope would continue to be linked to the respect of a number of baseline requirements relating to environment, animal welfare and plant and animal health standards. However, the number of Statutory Management Requirements (SMRs) would be reduced.

Capping: The amount of support that any individual farm can receive from the Basic Payment Scheme would be limited to EUR 300 000 per year, and the payment would be reduced by 70% for the part from EUR 250 000-300 000; by 40% for the part from EUR 200 000-250 000, and by 20% for the part from EUR 150 000-200 000. The holding would be able to deduct the costs of salaries. The funds "saved" under this mechanism would stay in the member state concerned and would be transferred to the Rural Development envelope, to be used for innovation projects by farmers, and European Innovation Partnership operational groups. Greening would not be subject to capping.

Active farmers and Eligible hectares: Payments would not be granted to applicants whose CAP direct payments are less than 5% of total receipts from all non-agricultural activities. The rules foresee setting 2014 as the new reference year for eligible land area, but there would be a link to beneficiaries of the direct payments system in 2011 in order to avoid speculation.

Transferring funds between Pillars: Member States would have the possibility of transferring up to 10% of their national envelope for Direct Payments (Pillar I) to their Rural Development envelope (Pillar II); and the member states that get less than 90% of the EU average for direct payments would now be able to transfer up to 5% of their Rural Development funds to their Pillar I national envelope.

Rural development

A new Common Strategic Framework would apply for Rural Development Funds as for the European Regional Development Fund (ERDF), the European Social Fund (ESF), the Cohesion Fund (CF), and the European Maritime and Fisheries Fund (EMFF). Targets would have to be set for all Rural Development programmes. Some 5% of the funds will be made available only when it can be shown that progress towards meeting these targets is being made.

The multiannual schemes would continue to be designed and co-funded by member states (or regions). The new programming period would have six priorities: Fostering knowledge transfer and innovation; Enhancing competitiveness; Promoting food chain organisation and risk management; Restoring, preserving and enhancing ecosystems; Promoting resource efficiency and transition to low carbon economy; Promoting social inclusion, poverty reduction and economic development in rural areas.

The EU co-funding rates would be 85% in less developed regions, the outermost regions, and the smaller Aegean islands, and 50% in other regions for most payments, but can be higher for innovation and knowledge transfer, co-operation, establishing producer groups, young farmer installation grants, and LEADER projects.

* The EU budget for 2014-20 is still being discussed.

Source: Documents and information on the CAP reform proposal are available at: ec.europa.eu/agriculture/cap-post-2013/legal-proposals/index_en.htm.

Policies are only gradually re-focussing on innovation and productivity

Productivity growth has been the subject of renewed attention as recent developments in agricultural markets have reinforced concerns about global food security, sustainability, and the challenges resulting from climate change. Innovation and stronger productivity growth in the agri-food sector are recognised as essential to successfully respond to increased and more diversified demands of agricultural products (OECD 2010; G20 2011). There are many factors, including agricultural policy, that influence the adoption of innovation, the choice of production practices, and in particular the balance between

productivity growth and sustainability[1]. Policies to focus on the innovations on the agri-food sector and supporting services and knowledge for the adoption of technologies are gaining importance. This is reflected in several policy initiatives by OECD countries in 2011 and in existing programmes (Chapter 2). These initiatives often lead to payments that are accounted for as support to general services to the sector, including research and development, and information and training for farmers rather than support to commodities or inputs. However, in most countries no substantial reorientation occurred in favour of general services to the sector, such as research and extension services to farmers.

The ***European Commission*** proposed to allocate EUR 5.1 billion of EU funds for research and innovation in the agricultural sector as part of its *Horizon 2020* which is reflected in the Commission proposals for the Common Agricultural Policy post 2013 (Box 1.2). Three pan-European research facilities will be created to pool resources in areas such as the response by ecosystems to land-use changes and bio-security. Additionally, a specific proposal on agriculture was launched as part of a European Innovation Partnership initiative launched in February 2012 to accelerate the uptake of innovation through a multi stakeholder public-private partnership. This initiative will offer a co-operative platform to improve the effectiveness of other policy measures, rather than provide new funding.

Mexico's expenditures on extension services have significantly increased in recent years and a new Capacities Development and Extension Programme supports viable farmers and research and extension institutions to facilitate the transfer of technological knowledge and technical assistance services. Several programmes follow a three-component approach: investment in equipment and infrastructure, extension services, and investment in land and water conservation. This is the case of the *Strategic Project for Food Security* (PESA), in collaboration with the FAO, which provides support to small farms and farm households in highly marginal rural areas.

In ***Korea***, a comprehensive research and development plan for the seed industry was established in December 2011. The *Golden Seed* project aims to develop 20 varieties of crops, fruits and livestock. In ***New Zealand***, the *Primary Growth Partnership* programme was recently introduced to invest in research and innovation to boost productivity, with industry contributions at least equal to government funding. Several OECD countries participate in the Global Research Alliance on Agricultural Greenhouse Gases, which was launched in December 2009 and brings countries together to find ways to grow more food without increasing greenhouse gas emissions. The main focus of the Alliance's activities is on research, development and extension of technologies and practices.

Managing the interaction between agriculture and the environment remains a challenge…

Agriculture has a significant impact on the environment particularly because of its predominant position in the use of natural resources such as water and land. Agri-food and agri-environmental policies directly affect the environmental performance of agriculture and many OECD countries have implemented new initiatives in this area. Ideally, these new measures should be designed to pay for the provision of their environmental outcome and not for specific commodities or production inputs. In practice, although these types of payments have increased in the last decades, they remain a marginal share of total support. Environmental objectives are often pursued through payments based on area or other implementation criteria, while imposing some constraints to the use of input or

production techniques. Cross-compliance represents a typical example of such constraints. Chapter 2 discusses this evolution in policies in greater detail (Figure 2.5).

In the ***European Union*****,** measures are taken by member countries to meet their obligations under the EU Water Framework Directive (***Denmark***, ***France*** and the ***United Kingdom***). This includes changes in regulations and financial assistance to increase water retention capacities, EU and national funds granted for projects to reduce water use, such as switching to water-saving crops, and the design and adoption of more efficient irrigation systems. ***France*** and ***Slovenia*** have developed measures to improve the implementation of the EU Nitrate Directive by applying stricter limits on manure spreading or revising the definition of vulnerable zones.

In ***Australia***, the recent *Caring for our Country* fund the environmental management of natural resources programmes by communities, farmers and other land managers to enhance the sustainability of food and fibre production. In ***New Zealand*****,** the Irrigation Acceleration Fund (IAF) announced in the 2011/12 budget finances projects on regional rural water infrastructures to promote the efficient use of water and environmental management. ***Norway*** increased support through the National Environmental Programme to maintain cultural landscapes across the country, prioritising counties with water pollution problems.

... in particular, an efficient response to climate change

The complexities and uncertainities associated with climate change may require adjustments in the institutional setting in addition to exploring new initiatives to enhance farmer awareness and adaptation, and creating incentives for mitigation. Some countries deal with these complexities through specialised government units, such as the recently created Ministerial Technical Committee on Climate Change in ***Chile*** that involves all relevant departments and agencies. ***Australia****'s Farming Future* initiative on adaptation equips primary producers to adjust to climate change and several of these programmes will be maintained under broader policy initiatives beyond 2012.

On the mitigation side, ***New Zealand*** is the first country to include agriculture in a price-based mechanism for greenhouse gases. The agriculture sector, which is responsible for methane and nitrous oxide, and other emitters of these gases must either reduce their emissions or purchase emission rights from 2015. Reporting of agricultural emissions to the New Zealand Emissions Trading Scheme is mandatory as of 2012; full entrance into the scheme is scheduled from 2015.

Mexico responded to rising concerns about the impact of CO_2 emissions due to increased expenditure on the agricultural diesel programme by offering producers the option to use this support for machinery renewal, with the per litre subsidy to be phased out by the end of 2014. On renewable energy, several key biofuel incentives in the ***United States*** – import duty for ethanol, tax credits for biodiesel, renewable diesel and ethanol – expired at the end of 2011, but the Renewable Fuel Standard mandate, which requires that the nation's fuel supply contains a specified amount of blended biofuel, remains. In the ***European Union*** no changes in the regulations related to renewable energy were implemented.

Some events overwhelmed ex ante *disaster programmes...*

The development of *ex ante* mechanisms to steer disaster assistance is a major component of risk management policies in most OECD countries. However, when an

extreme event occurs, these mechanisms are challenged by the urgency of action needed as well as by political pressures. For example, the massive earthquakes which hit the eastern part of ***Japan*** on 11 March 2011 caused extensive damage in the coastal areas, including on 20 000 hectares of farmland. This disaster required an *ad hoc* plan, developed by the Government, to restore farming on most of this farmland by 2014. Various programmes have been introduced that provide support for restoration of on-farm and irrigation infrastructure, and provide payments and credit concessions to affected farmers.

The flooding in eastern ***Australia*** in early 2011 caused a decrease in the production of fruit and vegetables, cotton, grain sorghum and some winter crops. Losses from floods do not qualify for the *ex ante* Exceptional Circumstances drought programme and thus the state governments of Queensland, Tasmania and Victoria implemented specific flood assistance schemes to pay for the costs to clean-up and resume business activities. ***Canada*** triggered several measures under the AgriRecovery programme, such as excess moisture compensation in several provinces and feed shortage assistance for transportation and pasture restoration. Additional programmes were put in place by provincial governments, in particular Manitoba, to respond to excess moisture.

The ***European Union*** and ***Mexico*** advanced some of their direct payments to farmers affected by drought. In 2011, ***Belgium***, ***France***, ***Italy***, ***Spain*** and ***Luxembourg*** distributed up to 50% of direct payments six weeks earlier than usual to farmers affected by the spring drought. In March 2012, advance payments requests were filed by ***Portugal*** and ***Spain*** to support producers affected by a dry spring. ***Mexico***'s central and northern states were also affected by persistent drought and the government used existing budgetary resources to advance payment of PROCAMPO, PROGAN and diesel subsidies, and to accelerate the delivery of indemnities from AGROASEMEX insurance policies.

… market instruments for risk management continue to develop, driven by public support…

Several OECD countries implement subsidised insurance schemes which tend to expand over time. Starting in January 2012, a single agricultural risk insurance management scheme was introduced in ***Hungary*** combining a government damage control scheme that requires mandatory participation from large farms with a commercial insurance scheme. ***Korea*** increased the number of crop products covered by the supported insurance scheme, while most livestock are already included in the programme. The ***United States*** *Risk Management Agency* began to offer crop insurance in 2011 for four organic crops. Expenditures on crop insurance were particularly high in 2011, partly due to higher market prices, with an increase of USD 2.7 billion compared to 2010.

In August 2011, the Tokyo Grain Exchange and Kansai Commodities Exchange listed rice futures for the first time as a two-year pilot project. The fact that the government eased control on the price of rice in ***Japan*** may facilitate the development of futures trading. In the last six years, expenditures in ***Mexico*** on the Price Hedging programme that subsidises options in the US future markets has expanded with an increase of 47% in 2011, becoming the second largest programme by expenditure after PROCAMPO.

… while risks related to plant, animal and human health triggered policy action and new regulations

A ***European Union*** package was made available to fresh vegetable growers affected by the E-coli crisis in 2011. Between 50% and 70% of market losses will be compensated and a

three-year support package was subsequently approved for the promotion of fruit and vegetables in the internal market and third countries (*e.g.* China, Russia and Ukraine). Beyond the common European policies, EU member states may use their own instruments to manage some risks. In ***Turkey***, the second phase of the Control of Rabies Project and of the Foot and Mouth Disease Control Project was launched in 2011. The ***New Zealand*** Government's Ministry for Primary Industries is supporting the industry-led programme for managing the kiwifruit disease Psa.

New Zealand's mandatory National Animal Identification and Tracing scheme is scheduled to commence for cattle on 1 July 2012. This sets out the legal framework and the development of a web-based system to give the Ministry instant access to information for biosecurity alerts or natural disasters.

Two rules governing imported foods developed by the *Food and Drug Administration* (FDA) of the ***United States*** to implement the Food Safety Modernisation Act took effect in July 2011. The first strengthens the FDA's ability to prevent potentially unsafe food from entering commerce, and the second requires the FDA to be informed of the identity of any country to which an article of imported food, including food for animals, has been refused entry.

The ***European Union*** regulation on dioxin control for feed will be tightened from September 2012. In response to changes in the EU's Environmental Risk Assessment (ERA) rules, the European Food Safety Authority (EFSA) launched new and more precise guidelines to monitor the environmental impact of authorised Genetically Modified (GM) crops. The tolerance threshold for Genetically Modified Organism (GMO) traces in feedstuffs was fixed at 0.1% as compared with the previous zero tolerance approach.

Programmes aiming to support farm income represent a significant share of support, but there has been little development in this area

The reform of market price support and the shift to more decoupled direct payments, being undertaken at different speeds by OECD countries, is intended to reduce distortions and improve efficiency in transferring income to farmers. Payments based on area or animals, particularly if this does not require production of commodities, generate less production distortions and are more efficient in transferring income to farmers. These programmes broadly benefit all farmers in direct relation to the size of their farms but are not targeted to low income farmers.

The ***European Union*** discontinued several commodity specific payments in 2011 and 2012, but the single payment scheme still provides flexibility for countries to maintain limited commodity-specific payments and sector-specific assistance under the so-called Article 68 measures. The ***United States*** has not changed its direct and countercyclical schemes; the latter have not been triggered due to high market prices. The 2008 US Farm Bill authorised payments to asparagus producers to partially compensate for revenue losses due to high imports from 2004 to 2007. ***Mexico*** continued PROCAMPO beyond its original deadline of 2008; no decisions have been taken about its continuation after 2012.

In 2011, ***Japan*** formally implemented the new farm income support payment for rice, following a pilot programme in 2010, and for upland crops. They are designed to bridge the gap between producer price and production cost. All farms with sales records are eligible for payments, but participating farms are required to meet the quantitative production target allocated to each farmer.

Support in several OECD countries target poor food consumers and is registered as part of the consumer support estimate. The ***European Union***'s food aid scheme will continue in 2012 and 2013. The funding was increased and the coverage of the EU school fruit scheme introduced in 2010 was expanded to a larger number of pupils in an increasing number of countries. ***Finland***, ***Sweden*** and the ***United Kingdom*** have chosen to opt out of this scheme.

However, production and trade distorting policies remain…

The reform process towards more decoupled forms of income transfers to farmers has been unequal across countries and, overall, price support remains the largest form of support in many OECD and emerging economies. Market price support is provided through tariffs and other border measures, and government interventions in the domestic market. In 2011, there was some movement to reduce these interventions, but export subsidies and other trade distorting measures are still in place.

Norway's annual agreement between the government and farmer organisations set an increase in target prices. Export subsidy spending by the European Union continued to gradually decrease in 2011, thanks to recent reforms of the sugar, fruit and vegetable, wine and dairy regimes and the rise in world prices. In ***Israel,*** the guaranteed price for milk was increased in 2011 against the recommendation of an inquiry committee on the dairy sector. In ***Turkey,*** export subsidies for agricultural products were announced in the *Official Gazette* in 2011 and were applied on exports of 16 commodity groups. In contrast, ***Switzerland*** phased out its export subsidies for processed eggs in 2012.

However, in the dairy sector, milk quotas are being gradually expanded or dismantled in OECD countries at very different speeds. As planned, milk quotas in the ***European Union*** were increased and some member countries introduced dairy-specific payments to facilitate the transition. The milk quota system was abolished in ***Switzerland*** in 2009 after a three-year transition period and a temporary levy on milk producers was introduced in 2011 to finance the disposal of surplus butter stocks. The milk quota will be increased by 1% in ***Norway*** in 2012, and farmers will have more flexibility for temporary increases in production.

… while concerns about the competitive structure of agro-food markets persist…

Price support centralises the determination of domestic prices and weakens competition. Yet, highly concentrated structures can remain even after reform has been implemented. Independent enquires were carried out in some countries to identify and correct possible abuse of market power. ***Israel*** saw social protests in 2011 against a continuing rise in food prices, called "cottage cheese protests," leading to a reduction in retail prices by local dairy monopolies. Several inquiry committees recommended reducing the guaranteed price of raw milk and a partial opening of the dairy market. Another committee on competitiveness recommended the reduction of custom duties on fresh and manufactured goods, but excluded supported commodities such as dairy, eggs and poultry. According to a new official report in ***Norway***, the food supply chain is characterised by a heavy concentration in the retail, wholesale and supply links, and distribution chains have increased their bargaining power over suppliers. France created the Observatory of Prices and Margins in 2010 and its first report was delivered in June 2011.

… and some policy responses unfolded

Canada implemented the Marketing Freedom for Grain Farmers Act that will dismantle, as of August 2012, the Canadian Wheat Board's (CWB) monopoly on the

marketing of wheat and barley. The CWB will be transformed within a five-year transition period into a voluntary privately-owned marketing organisation. ***New Zealand*** amended the Dairy Industry Restructuring Act of 2001 (DIRA), allowing the Minister of Agriculture to use an auction system or alternative methods to determine the price and allocation of regulated raw milk. Additionally, a review was initiated in 2011 to consider the transparency of Fonterra's farm gate price setting process and enable Fonterra to introduce a new capital structure.

Doha negotiations are in an impasse while Russia is set to become a member of WTO…

The multilateral system of trade rules under the WTO has proved to be an asset for the world economy, particularly in times of crisis. Governments did not resort to protectionism on a significant scale during the crisis and import-restricting measures adopted since the crisis affect less than 2% of world trade. There is, however, a protectionist sentiment that is fuelled by persistent unemployment and sluggish growth in some countries. As highlighted in the latest OECD-WTO-UNCTAD report on G20 trade and investment measures covering the period May to October 2011, the incidence of protectionism in that period was as high as during the most worrying quarters in 2009, when crisis-driven protectionist fears were at their peak and several countries are putting restrictions on their exports of primary products.

Despite the great potential benefits for the global economy, the Doha Development Agenda negotiations are not moving forward, with no formal movement or decision taken in 2011. The Uruguay Round Agreement on Agriculture that was agreed in 1994 remains the legally binding multilateral system of rules that sets bounds on domestic support to agriculture and binds trade policies. In the negotiations on agriculture, the last negotiating text dates back to 2008 draft modalities covering the three pillars of market access, export competition and domestic support.

While the Doha Development Agenda negotiations are at an impasse, the WTO membership formally approved the Accession Package of the Russian Federation on 16 December 2011 (Box 1.3).

… while the WTO dispute settlement mechanisms remain active…

The long standing dispute concerning measures imposed by ***Australia*** on the importation of apples from ***New Zealand*** that began in 1919 and was brought to WTO in 2007, was concluded in 2011. In September 2011, Australia reported that it had adopted the measures necessary to comply with the recommendations and rulings of the Dispute Settlement Body and that imports of New Zealand apples into Australia had commenced as of 19 August 2011.

In February 2011, the European parliament signed a pact with *Latin American* countries over the banana import regime, putting an end to the banana dispute. The dispute over beef hormones between the ***European Union*** and ***Canada*** ended in March 2011 and with the ***United States*** in November. The European Union will expand its high quality beef quota for both countries and the United States removed retaliatory sanctions.

Consultations on the ***United States*** mandatory country of origin labelling (COOL) provisions in the Food, Conservation, and Energy Act 2008 (2008 Farm Bill) began in 2008. These measures contain an obligation to inform consumers at the retail level of the country

Box 1.3. **Russia's WTO accession and commitments in agriculture**

The 18-year accession negotiations with Russia were formally closed on 16 December 2011 when the Eighth WTO Ministerial Conference approved the Accession Package of the Russian Federation. On 23 July Russia notified the WTO Secretariat that the domestic ratification process was completed and will officially become the organisation's 156th member on 22 August 2012.

Agriculture emerged in the accession negotiations as one of the most difficult areas, in particular issues such as market access for meat, in the sanitary and phyto-sanitary areas, and the amount of domestic support. Russia's WTO commitments should also be viewed within the context of the Belarus-Kazakhstan-Russia Customs Union (BKR CU), which came into force on 6 July 2010. Russia's WTO commitments in areas which fall under the competence of the CU thus concern all its participants. Furthermore, Belarus and Kazakhstan are not yet WTO members and are currently in the process of individual WTO accession negotiations. Their future WTO commitments will also have implications for all CU participants.

Import tariffs: Russia will bind tariffs on all products. For agriculture, most tariff reductions will be implemented as of Russia's accession, covering over 60% of agricultural tariff lines. By 2016, final tariff bindings are to be reached on 94% of tariff lines, with all the remaining bindings (for pigmeat) becoming effective by 2020. The average of final bound rates on agricultural goods is estimated at around 10.8%, compared to the current average applied tariff rate of 13.2% (similar rates for industrial goods are 7.3% and 9.5% respectively). Zero final binding tariffs are agreed for certain live animals, soya beans, soya cake, and colza seeds. The highest final bound rate is set for over-quota imports of beef meat (55%, HS 0201 and HS 0202) and poultry meat (80%, HS 0207), provided these quotas are maintained. If quotas are not maintained, significantly lower final tariff bindings shall apply for these groups (see below).

Tariff rate quota (TRQ): Since the mid-2000s, TRQs have been applied for beef, pigmeat and poultry imported from outside the Commonwealth of Independent States (CIS). After accession to the WTO, Russia will maintain its meat TRQs. Global in-quota imports and bound tariffs will remain unchanged over the implementation period for all of them. Pigmeat TRQs will be eliminated and a bound tariff rate of 25% will apply as of 2020. No commitment to eliminate beef and poultry TRQs is included, but if it will become the case, bound rates of 25% and 37.5% shall respectively apply. Apart from meat, a small TRQ will also be opened for whey in specific forms.

Domestic support: Russia negotiated an Aggregate Measurement of Support (AMS) at USD 9.0 billion in 2012 and 2013, which will then be reduced in equal parts over the following five years to USD 4.4 billion in 2018. As an additional commitment to limit trade distortions, the sum of all product-specific support shall not exceed 30% of its non-product specific support.

Export competition: Russia has agreed to bind subsidies on exports of agricultural products at zero.

Quantitative export restrictions: In application of quantitative restrictions on agricultural products, Russia has committed to act in accordance with the relevant articles of the GATT (Article XI) and the WTO Agreement on Agriculture (Article 12). With respect to the BKR CU regulations, a CU party may unilaterally impose a temporary non-tariff measure if it, among other specified cases, is aimed at the "prevention or reduction of the critical shortage in the domestic market of food or other goods essential for the domestic market".

Box 1.3. **Russia's WTO accession and commitments in agriculture** *(Cont.)*

Export duties remain outside the competence of the BKR CU and are subject to national regulations. As far as agricultural goods are concerned (in the WTO definition), at the date of accession Russia may apply export duties on oilseeds, certain fish products, and ethanol. Duties on soya beans will be more than halved within three years following the accession, and they will be more than halved for sunflower seeds within four years. Duties for other oilseeds will be eliminated after the first year of accession. For fish products and ethanol, duties will be removed within four years following accession.

Sanitary and phyto-sanitary issues: all SPS measures would be developed by Russia or the competent BKR CU bodies in accordance with the WTO SPS Agreement. Russia's commitments in the SPS area entail substantial post-accession work, most of which will be carried out within the framework of the BKR CU. This will concern further harmonisation of SPS measures with international criteria, improvements in risk assessment practices, transparency, control, inspection, and approval procedures.

Russia's commitments in agriculture represent a comprehensive liberalisation package, but with relatively modest binding reductions in the areas of market access and domestic support. Russia's WTO accession is likely to have more significant impacts in terms of improved regulations, procedures, and harmonisation with in ternational standards and norms, in particular in the sanitary and phyto-sanitary area. An important challenge following the accession resides in successful implementation of these commitments. WTO accession, together with Russia's joining the OECD Anti-bribery Convention in February 2012, is an important landmark in Russia's advancement towards OECD membership.

Source: WTO (2011a); WTO (2011b).

of origin of the covered commodities, including beef and pork. Upon ***Canada***'s and ***Mexico***'s request, a WTO panel was established in November 2009 to examine these provisions. The panel's report was circulated on 18 November 2011. It found that the COOL measure is a technical regulation under the WTO's TBT Agreement, and that it is inconsistent with the United States' WTO obligations. On 23 March 2012, the United States notified its decision to appeal before the WTO's dispute settlement body adopts the panel report.

… and more countries are pursuing broader regional and bilateral free trade agreements

The *Trans-Pacific Partnership Agreement* (TPP) has emerged as a priority for many OECD countries and a potential driver of agricultural policy reform in several OECD countries. This agreement will build on the Trans-Pacific Strategic Economic Partnership Agreement (P4) between Brunei Darussalam, ***Chile, New Zealand*** and Singapore, which entered into force in 2006. The TPP includes the P4 Parties as well as ***Australia***, Peru, the ***United States***, Viet Nam and Malaysia. Since 2011, there have been discussions on the possibility of ***Canada, Japan*** and ***Mexico*** joining these negotiations.

In March 2011, a trade agreement entered into force between ***Chile*** and ***Turkey***. ***Chile's*** free trade agreements with *Malaysia*, *Nicaragua* and *Viet Nam* are now signed and before Parliament. A free trade agreement between ***Israel*** and Mercosur, signed at the end of 2007, entered into force in September 2011. The Free Trade Agreement between ***Korea*** and Peru

became effective on 1 August 2011 and between the ***United States*** and ***Korea*** on 3 March 2012. The ASEAN, ***Australia*** and ***New Zealand*** Free Trade Agreement (AANZFTA) entered into force on 10 January 2012 following Indonesia's ratification.

The ***European Union–Korea*** Free Trade Agreement entered into force in July 2011. In April 2011, the ***European Union*** and ***Norway*** signed a bilateral trade agreement covering meat and dairy products, fruits, vegetables, ornamental plants, and pet food. A trade agreement allowing duty-free and mostly quota-free entry into the ***European Union*** for *Palestinian* agricultural and fisheries products was reached in October 2011 and will enter into force at the beginning of 2012. A trade agreement between the ***European Union***, ***Colombia*** and ***Peru*** was concluded in April 2011 and subsequently ratified by the European Parliament, but it foresees no tariff reduction for butter, fresh cheeses, beef and poultry meat.

Croatia will join the ***European Union*** in 2013. In February 2012, the number of import quotas with zero or low duty from Morocco to the ***European Union*** was increased and a number of tariffs on agricultural products were reduced or removed. In May 2011, the European Commission proposed to exclude the fastest 96 developing trading partners from the *Generalised System of Preferences (GSP)*, thereby focussing on a reduced number of 80 beneficiary countries.

1.3. Developments in agricultural support

This section provides a quantitative evaluation of policies based on OECD indicators of agricultural support, which express the diversity of support measures applied in different countries in simple numbers that are comparable across countries and time. These indicators also show how policies evolve over time in terms of their potential to distort producer incentives and agricultural markets. The percentage Producer Support Estimate (%PSE) is the OECD's key indicator to measure support to agricultural producers. It is complemented by other indicators, each focussing on a specific dimension of support (Annex 1.A2 contains the definitions of these indicators).

The evaluation begins with the presentation of the changes in agricultural support levels in 2011 and the main drivers behind these changes. Next, longer term trends in the level and the structure of support are shown, highlighting how countries' efforts to reform agricultural policies contributed to reductions of policy distortions in agriculture over time. Finally, implications of agricultural support for consumers and its overall cost to OECD economies are examined.

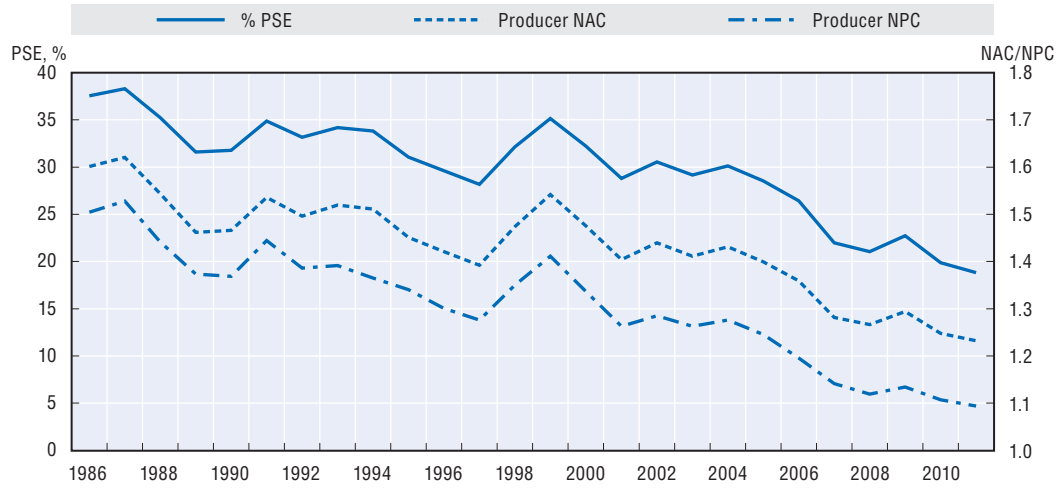
Producer support in the OECD area fell slightly in 2011 and reached an historical low

About a fifth of farmers' gross receipts in OECD countries is due to public policies supporting farmers. This is indicated by the percentage Producer Support Estimate (%PSE) which equalled 19% in 2011, remaining very close to the previous year's level when it was at 20% (Figure 1.2).

The current level of producer support in the OECD area is at an historical low. The average %PSE for the 2009-11 period is estimated at 20%, compared to 30% for 1995-97 and 37% for the 1986-88 period.

A similar long term downward trend in producer support is reflected in other indicators that complement the %PSE (Figure 1.2). As shown by the Nominal Assistance Coefficient (NAC), total farm receipts in the OECD area were on average 26% higher in 2009-11 than if

Figure 1.2. **Evolution of OECD support indicators, 1986-2011**



% PSE: Producer Support Estimate (left scale).
NAC: Nominal Assistance Coefficient (right scale).
NPC: Nominal Protection Coefficient (right scale).
The OECD total includes Chile and Israel from 1995.

Source: OECD, *PSE/CSE Database*, 2012.

StatLink http://dx.doi.org/10.1787/888932652814

they were generated at non-supported prices and with no budgetary support (a NAC of 1.26). This differential has narrowed markedly compared to 1995-97 when it was 42% and represents an even greater reduction as compared to 1986-88 when it was 59%.

Farmers in OECD countries received prices that were 11% above the international levels in 2009-11, as reflected by the Nominal Protection Coefficient (an NPC of 1.11). This is a remarkable evolution, as in 1995-97 domestic prices were supported at levels exceeding international prices by 31%, and in 1986-88 they were above these levels by almost 50%.

In assessing these declining support trends it should be kept in mind that in recent years they are also driven by the rise in world market commodity prices. With high world prices, policies to support domestic prices in OECD countries generated smaller transfers, resulting in the overall reduction in support to producers.

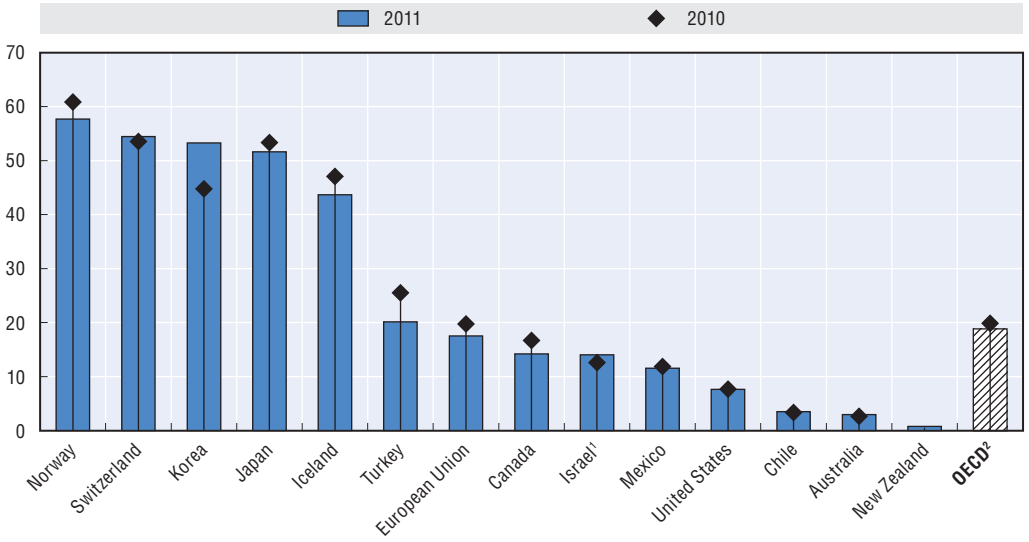
In most OECD countries support declined only modestly or remained unchanged in 2011

Taking a look across individual OECD countries, producer support, as measured by the %PSE, fell in many countries in 2011, but these declines were within a modest range of 1 to 3 percentage points. Support remained approximately at the previous year's level in ***Switzerland***, ***Mexico***, the ***United States***, ***Australia,*** and ***New Zealand***. ***Korea*** and ***Israel*** were exceptions to this general picture; the %PSEs in these countries rose by 8 and 1 percentage points respectively in 2011 (Figure 1.3).

Although support slightly declined or remained unchanged in relation to gross farm receipts, its absolute monetary value expressed in national currencies increased in the majority of OECD countries in 2011 (Tables III.54, III.55 and III.56 in Part III). These increases ranged from almost 50% in ***New Zealand***, but from very low levels, to slightly over 1% in ***Switzerland*** and ***Mexico***. However, in several countries support fell not only in relative, but also in monetary terms, including ***Turkey*** (by 16%), ***Canada*** (by 6%), the

Figure 1.3. **Producer Support Estimates by country, 2010 and 2011**

Per cent of gross farm receipts



1. The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
2. The OECD total does not include the non-OECD EU member states.

Source: OECD, *PSE/CSE Database*, 2012.

StatLink http://dx.doi.org/10.1787/888932652833

European Union (by 4%), and ***Norway*** (by 2%). As discussed in Box 1.4, these results were generally driven by the price developments on domestic and international markets, *i.e.* by the changes in the market price support component of the PSE. Only in ***Australia***, the ***United States***, and ***Chile*** does higher budgetary spending largely explain the increase in the value of support provided in 2011.

In the long run, support is declining in all countries but differences in levels remain large

Compared to the levels in the second half of the 1990s, support to producers fell in all OECD countries. However, these levels continue to vary widely (Figure 1.5). ***New Zealand***, ***Australia***, and ***Chile*** are on one end of the range, where between 0.6% and 4% of producer gross receipts were due to agricultural policy transfers in 2009-11. At the other end are ***Norway***, ***Switzerland***, ***Japan***, ***Korea*** and ***Iceland*** where support policies generated from slightly less than one-half to two-thirds of gross receipts of agricultural producers. Between these two ends of the spectrum are all other OECD countries, but within this range support levels are also widely spread – from 25% in ***Turkey*** to 9% in the ***United States*** in 2009-11.

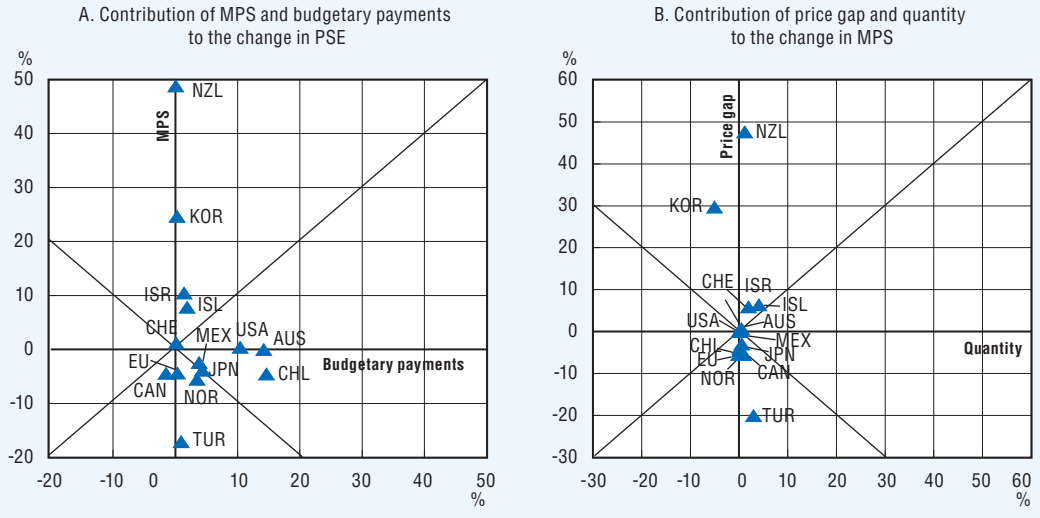
These large variations in support levels across the OECD area reflect differences in economic, social and political choices that result in policies which induce larger or smaller transfers to the agricultural sector from consumers and taxpayers. The differences in support levels observed currently also reflect varying scales and speeds of agricultural policy reform across the OECD area.

Box 1.4. **What drove changes in the monetary value of support in 2011?**

Figure 1.4 presents contributions of various factors to the annual changes in the monetary value of support. Panel A maps the contributions of market price support (vertical axis) and budgetary payments (horizontal axis) to the total PSE. Two diagonal lines are the locus where these contributions are equal. The closer the country points are to the vertical axis, the higher the contribution of changes in market price support to the change in PSE, while the closer the country points are to the horizontal axis, the higher the contribution of budgetary payments. It can be seen that the prevailing factor driving the changes in monetary support across OECD countries were changes in market price support, as the majority of country points are located in the north and south triangles of the graph. This played a particularly strong role in ***New Zealand***,* ***Korea***, ***Israel*** and ***Iceland*** (increasing support) as well as in ***Turkey***, ***Canada*** and the ***European Union*** (decreasing support). ***Australia***, the ***United States***, and ***Chile*** were the few countries where an important increase in budgetary payments occurred in 2011, and which strongly (and entirely in ***Australia***) explains the increase in the value of support in these countries. In the ***United States***, budgetary increases were mainly linked to increased crop insurance expenditures, and in ***Australia*** to disaster events, while Chile enhanced support to indigenous farmers (Table III.54).

Panel B further disaggregates changes in the market price support by its two components – the gap between domestic and border prices (vertical axis) and quantities of production which receive this support (horizontal axis). The majority of country points are aligned closely to or almost on the vertical axis, indicating that the variations in market price support were predominantly driven by the changes in the price gaps. The direction of changes was nevertheless different; in some countries, such as ***New Zealand***, ***Korea***, ***Iceland*** and ***Israel***, the gaps between domestic and border prices widened, driving market price support upwards. In other countries, such as ***Turkey***, ***Norway***, ***Canada***, ***Japan***, and the ***European Union***, domestic-to-border price differentials narrowed resulting in a decrease in market price support (Table III.55).

Figure 1.4. **Contribution of various factors to the change in the Producer Support Estimate in 2011**



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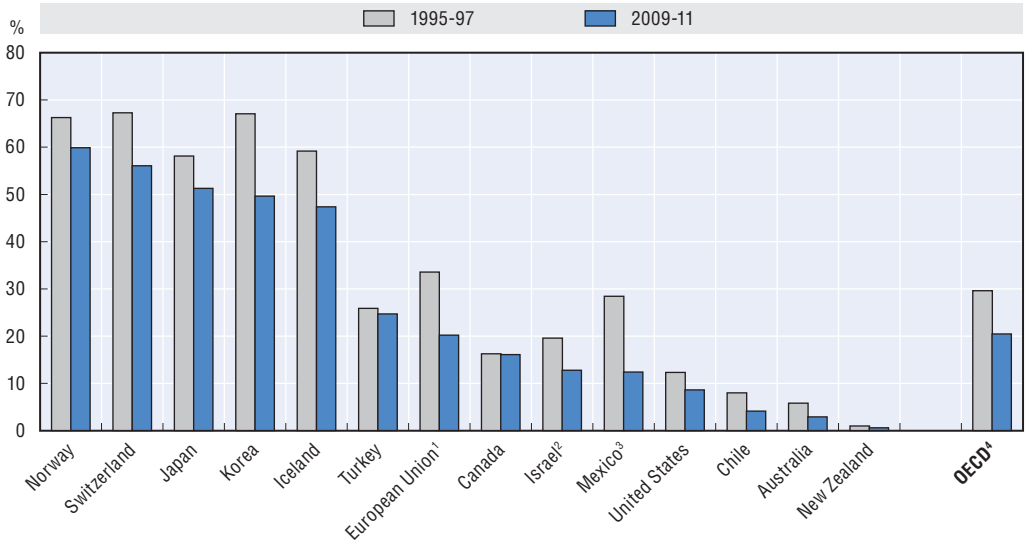
Some insight into the factors that shifted the relative levels of domestic and border prices in 2011 can be obtained by looking at what changed border prices expressed in national currencies. These changes were largely explained by the fluctuation in border prices measured in US dollars (Table III.56). The majority of countries saw higher border prices in 2011. Although the exchange rates strengthened *vis-à-vis* the US dollar in almost all countries, this only partly mitigated the rises in the US-dollar border prices.

* In New Zealand price support is measured only for poultry and eggs and is due to non tariff protection applied on SPS grounds.

Source: OECD, *PSE/CSE Database*, 2012.

Figure 1.5. **Producer Support Estimate by country, 1995-97 and 2009-11**

Per cent of gross farm receipts



Countries are ranked according to PSE levels in 2009-11.

1. EU15 for 1995-97 and EU27 for 2009-11.
2. The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
3. For Mexico, 1995-97 is replaced by 1991-93.
4. Austria, Finland and Sweden are included in the OECD total for all years and in the EU from 1995. The Czech Republic, Estonia, Hungary, Poland and the Slovak Republic are included in the OECD total for all years and in the EU from 2004. Slovenia is included in the OECD total from 1992 and in the EU from 2004. Chile and Israel are included in the OECD total from 1995. The OECD total does not include the non-OECD EU Member States.

Source: OECD, *PSE/CSE Database*, 2012.

StatLink http://dx.doi.org/10.1787/888932652871

Countries differ significantly in the ways they provide support

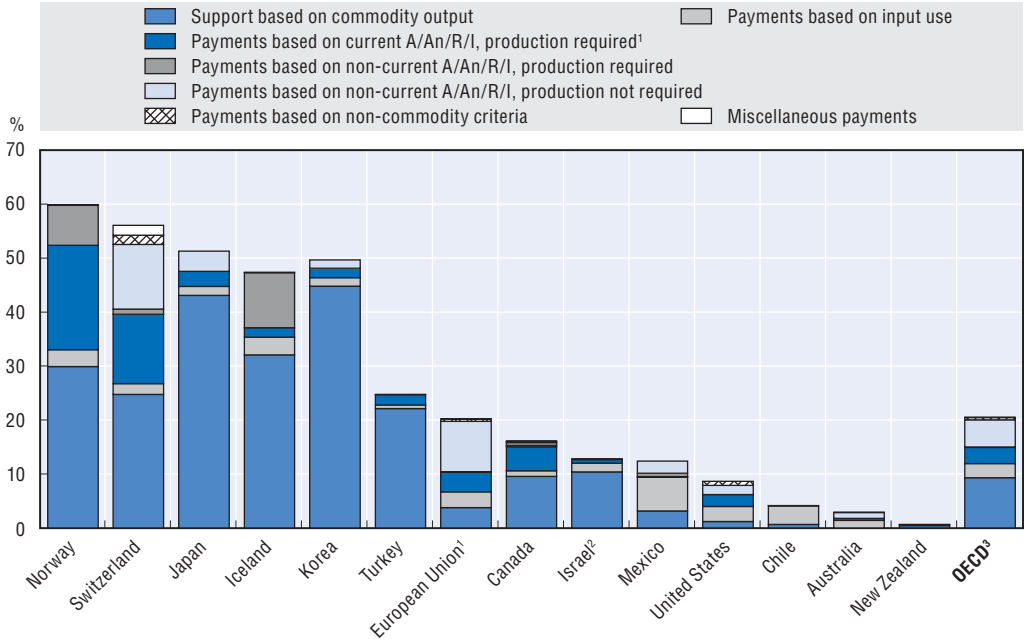
It is important to consider not only the levels, but also the composition of support. Assistance may be provided by supporting market prices, or by giving a subsidy to reduce the cost of inputs; support may take the form of a payment per hectare, per animal, or as a top-up to farmers' income. Support may be given under the condition that farmers are actually engaged in production, or without such a condition. These distinctions are important as support delivered in these various ways has different impacts on agricultural production, trade and agricultural incomes. Also, some forms of support are more suitable for targeting to specific objectives and constituencies. For example, to attain certain environmental goals, which are typically location-specific it is more feasible to target the relevant contributors if support is based on parameters that are more farm – or location specific, such as farming area, animals kept, or farm income. In contrast to blanket price support, these forms enable targeting the specific objective directly and tailoring the amount of outlay to the problem at hand. The PSE contains information about these different forms of support not only showing the total amount of policy transfers, but also classifying these according to how they are provided.

The composition of the PSE shows that OECD countries differ significantly by the degree to which they use various support measures (Figure 1.6 and Table III.5). Some countries continue to rely mostly on output-based support, which is potentially the most production and trade distorting. Such measures constitute 90% of the total PSE in ***Korea*** in 2009-11, 89%

in ***Turkey,*** 84% in ***Japan***, and 81% in ***Israel***. Countries such as ***Iceland*** provide in similar ways 68% of producer support***, Canada*** 59%, ***Norway*** 50%, and ***Switzerland*** 44%. The majority of this support is generated through border protection and domestic price regulation, and to a lesser extent through subsidies paid per tonne of output. In contrast, support provided in ***Chile*** and ***Mexico*** is focussed on farm inputs; subsidies to reduce the cost of inputs account for 84% of the Chilean PSE and 50% of the Mexican PSE. In ***Mexico***, such support is directed predominantly at the lowering of energy and insurance costs for farmers, as well as for investments. Amongst these, energy subsidies are the most distorting support, although they are provided within an overall support level which is low. Support to investments constitutes the major type of input-based support in ***Chile***, together with subsidies for various on-farm services; this support is destined mainly to smallholders. The use of support based on commodity output and on inputs in other OECD countries is more limited. They support producers predominantly through payments based on other parameters, such as area, livestock numbers, farm income or receipts (discussed in more detail below).

Figure 1.6. **Composition of Producer Support Estimate by country, 2009-11**

Per cent of gross farm receipts



A (Area planted), An (Animal numbers), R (Receipts), I (Income).

1. EU27 in 2009-2011.
2. The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
3. The OECD total does not include the non-OECD EU member states.

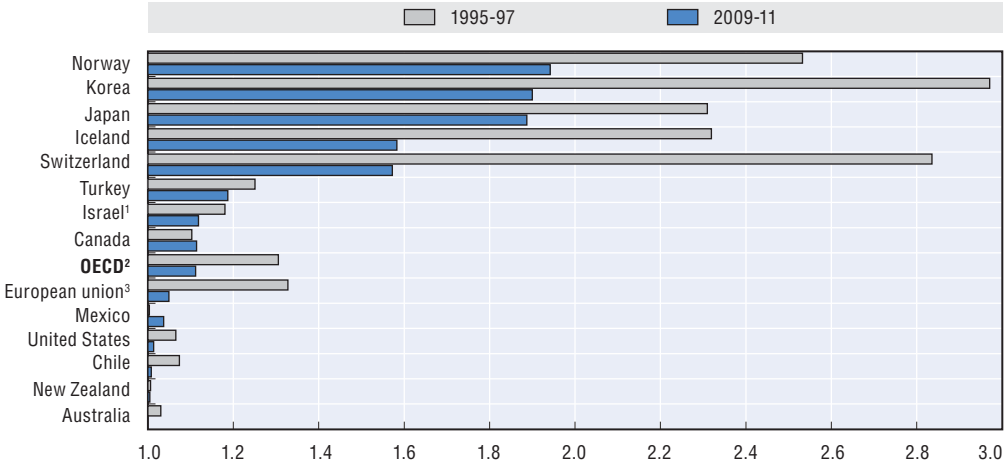
Source: OECD, *PSE/CSE Database*, 2012.

StatLink http://dx.doi.org/10.1787/888932652890

Most countries moved towards less distortive support by reducing agricultural protection…

Most distortive measures are reflected in the output price received by the farmer and measured by the producer Nominal Protection Coefficient (NPC). Agricultural protection levels have declined in almost all OECD countries (Figure 1.7, Table III.1 and Table III.2).

Figure 1.7. **Producer Nominal Protection Coefficient (NPC) by country, 1995-97 and 2009-11**



Countries are ranked according to NPC levels in 2009-11.

1. The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
2. EU15 for 1995-2003; EU27 from 2007.
3. Austria, Finland and Sweden are included in the OECD total for all years and in the EU from 1995. The Czech Republic, Estonia, Hungary, Poland and the Slovak Republic are included in the OECD total for all years and in the EU from 2004. Slovenia is included in the OECD total from 1992 and in the EU from 2004.

Chile and Israel are included in the OECD total from 1995. The OECD total does not include the non-OECD EU Member States.

Source: OECD, *PSE/CSE Database*, 2012.

StatLink http://dx.doi.org/10.1787/888932652909

Those with historically high price support have seen considerable falls in domestic market protection. In ***Korea*** and ***Switzerland***, domestic prices were almost three times the level of border prices in 1995-97, while they were less than double those levels in 2009-11. Prices in ***Japan*** and ***Norway*** have decreased from the levels of more than twice the border price in 1995-97 to slightly below those levels by 2009-11, while ***Iceland*** with a similar level of protection in the mid-1990s saw a more important reduction, with domestic prices exceeding world prices by 58% on average in 2009-11 (an NPC of 1.58). This apparent progress notwithstanding, domestic price distortions continue to be considerable in all these countries. Reform of market regimes for key agricultural commodities moved domestic prices in the ***European Union*** close to the border price levels, with the price differential between internal EU prices and world prices falling from 33% in 1995-97 to 5% in 2009-11. More importantly, producers in ***Australia***, ***Chile***, ***Mexico, New Zealand***, and the ***United States*** receive at present prices which on average are either fully or closely aligned with international levels.

… increasing the use of payments that are more decoupled from current production…

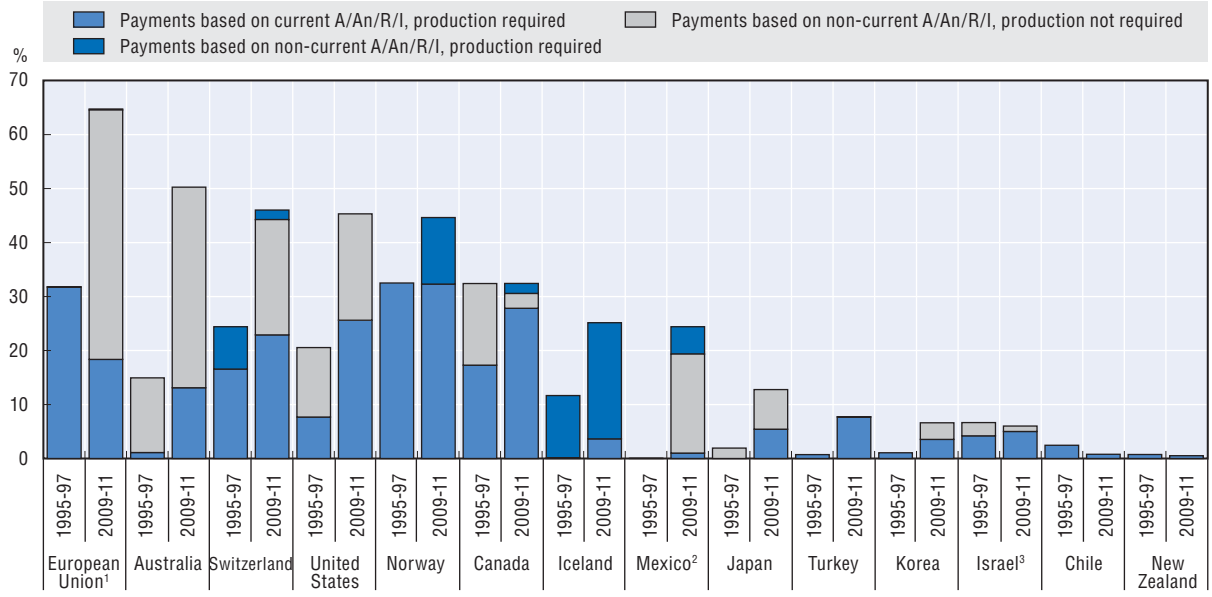
As OECD countries move away from price support, they have introduced other ways to channel support. There is a great deal of variability in the design of such measures. This concerns the payment base, which may be area, livestock numbers, farm income or receipts, as well as whether these parameters correspond to current or base (historic) levels. Furthermore, farmers may or may not be obliged to actually produce agricultural

commodities in order to become recipients of payments. All these distinctions capture particular characteristics of support that have different impacts on farm production and income. Payments based on non-current area, animal numbers, receipts, or income that are provided with no obligation to produce are more prominent today in almost all OECD countries.

The share of support in the form of payments based on area, animals, receipts, and income for the OECD area as a whole increased from 9% of the OECD PSE in 1986-88, to 19% in 1995-97 and to 39% in 2009-11 (Table III.5). Figure 1.8 shows that these changes took place in almost all OECD countries, with significant re-orientation in ***Australia*** and the ***European Union***, where such payments constituted respectively 50% and 65% of the total PSE in 2009-11. This re-orientation was also considerable in ***Mexico***, ***Switzerland*** and the ***United States*** with such support constituting around one-quarter of total support in these countries. ***Korea*** and ***Japan***, the countries that continue to rely largely on support based on commodity output, also introduced payments de-linked from commodities. Some important programmes (*e.g.* ***EU***'s Single Payment Scheme, ***US*** Direct Payments, PROCAMPO in ***Mexico***, area payments in ***Switzerland***, exceptional circumstance payments and environmental payments in ***Australia***) go even further in that they do not oblige farmers to produce in order to receive support.

Figure 1.8. **Use and composition of support based on area, animal numbers, receipts and income by country, 1995-97 and 2009-11**

Per cent of PSE



The countries are ranked according to the 2009-11 levels.

1. EU15 for 1995-2003; EU27 from 2007.
2. For Mexico, 1995-97 is replaced by 1991-93.
3. The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Source: OECD, *PSE/CSE Database*, 2012.

StatLink http://dx.doi.org/10.1787/888932652928

If producers want to receive support, they are increasingly obliged to contribute to improvements in environment, rural amenities, or better treatment of animals. In 2009-11, over one-third of support to OECD farmers had some kind of such condition, whereas in 1995-97 this share was only 10% (see also Chapter 2).

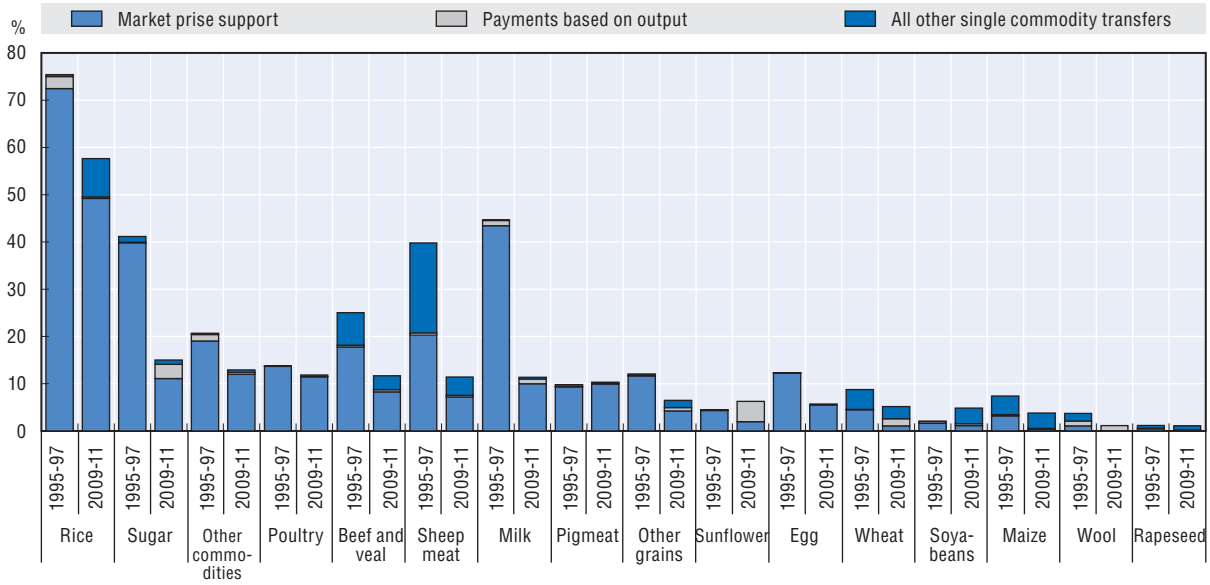
... and providing less support tied to specific commodities

The shift away from market price support and the introduction of payments decoupled to different degrees from commodity output increase the flexibility of producers in their choices of product mixes. For example, a payment tied to a specific commodity means that in order to receive payment a farmer must produce that commodity. Alternatively, payment may be provided to any commodity in a designated group (for example, any crop within a cereal group), or simply to any commodity without distinction. This progressively adds freedom to farmers who receive support in defining their production mix, thus strengthening the role of market signals in guiding their decisions.

The link between support and incentives to produce specific commodities has considerably weakened, and this happened mostly due to the fall in the market price support observed since the late 1980s. The Single Commodity Transfers (SCT) indicator measures support that is directed at specific commodities and creates commodity-specific production incentives (Figure 1.9, and Table III.9). As shown on Figure 1.9, these transfers consist predominantly of market price support and payments per tonne produced, while other categories of support are only marginally provided in commodity-specific forms, *e.g.* payments based on specific crop area or animal type. On aggregate, around 90% of total producer support in OECD countries was provided in the form of transfers to specific commodities in 1986-88, this proportion was 75% in 1995-97, and had declined to slightly over 50% by 2009-11.

Figure 1.9. **OECD: Single Commodity Transfers, 1995-97 and 2009-11**

Per cent of gross receipts for each commodity



Commodities are ranked according to % SCT levels in 2009-11.

Source: OECD (2012), *PSE/CSE Database*, 2012.

StatLink http://dx.doi.org/10.1787/888932652947

Rice was the only product in 2009-11 for which commodity-specific support accounted for more than one-half of gross receipts. For the majority of other commodities, in particular milk and sugar which in the past also strongly depended on specific support, SCTs have declined to levels that are around 10% of commodity receipts (and in some cases far below those levels).

However, reduced policy distortions in recent years are mostly due to high world prices

In assessing the changes in producer support in most recent years, it should be again noted that its level and composition mainly reflect market conditions in which the policies operate. As emphasised throughout this report, the period since the late 2000s has been marked by historically high agricultural prices. While prices fell right after the 2009 crisis, they rose again in 2010 and 2011. The declining level of support, in particular market price support, is not only the consequence of changes in the policy settings, but also of rising world prices. Price support programmes in many cases work countercyclical to markets and become inactive during high price periods. Should prices decrease from their current high levels, measures to support domestic prices and border protection could be activated once again and support would rise, although this effect may be less pronounced in countries which rely to a larger extent on support not linked to current market prices (*e.g.* the European Union with the Single Payment Scheme).

Support to general services for the sector continues to gain in importance

In addition to support provided to producers individually (the PSE), the agricultural sector is assisted through public financing of services such as agricultural research and development, training, inspection, marketing and promotion and public stockholding. The General Services Support Estimate (GSSE) measures the associated monetary transfers.

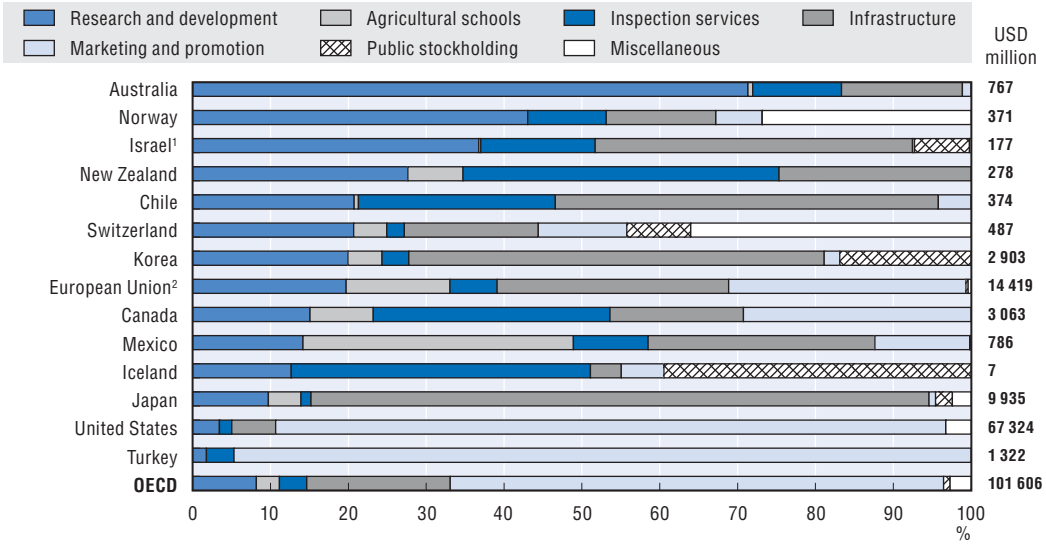
The expenditures on general services have been growing relatively steadily with the result that for the OECD as whole they nearly tripled in monetary terms in 2009-11 compared to 1986-88, and were 50% above the level in 1995-97. The share of GSSE in total support to agriculture (see below) rose from 12% in 1986-88, to 19% in 2005-07, and 26% in 2009-11 (Table III.3). This is a positive development as improvements in the sector's productivity and competitiveness are more likely to be achieved through investments in these areas. This will ultimately yield superior gains to agricultural producers and the rest of society than will production subsidies. However, it should be kept in mind that a rising share of GSSE in the total support to agriculture partly reflects a falling PSE.

The most significant orientation towards support for general services is observed in ***New Zealand*** where it accounted for over three-quarters of total transfers to the agricultural sector in 2009-11. This proportion is substantial in the ***United States*** and ***Chile,*** reaching in both countries around 50% of total support transfers, in ***Australia*** (40%), and ***Canada*** (31%). In all other OECD counties, the share of GSSE, although generally rising since the second half of the 1980s, constituted only between 5% and 16% in 2009-11.

OECD countries have different priorities in supporting general services (Figure 1.10 and Table III.7). Research and development was the largest supported general service in ***Australia, New Zealand*** and ***Norway*** in 2009-11. For ***Japan, Korea, Israel*** and ***Chile,*** infrastructure carries the largest weight, consisting mainly of expenditures for irrigation systems. Almost half of general services spending in ***Iceland*** was allocated to inspection services and stockholding in 2009-11. Marketing and promotion was predominant in the ***United States***, taking up 85% of total GSSE expenditures in 2009-11. These funds were spent

Figure 1.10. **Composition of General Services Support Estimate by country, 2009-11**

Percentage share in GSSE



Countries are ranked according to the percentage shares of Research and Development in 2009-11.

1. The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
2. European Union 27.

Source: OECD, *PSE/CSE Database*, 2012.

StatLink http://dx.doi.org/10.1787/888932652966

mostly to cover the administrative expenses and processing and retail share of the food assistance dollar. Around 90% of total GSSE in ***Turkey*** for 2009-11 related to the operation of state market agencies, including the coverage of losses incurred in market intervention procedures, duty losses, and equity injections to these agencies. In contrast, expenditures in ***New Zealand,*** the ***European Union, Canada***, and ***Mexico*** are distributed relatively evenly across various types of services.

Consumers of agricultural commodities have benefited from the reductions in price support...

Consumers contribute to producer support as they buy agricultural commodities on domestic markets at prices which are supported above the international levels. The Consumer Support Estimate (%CSE) expresses the monetary value of consumer costs to support agricultural prices in per cent of consumption expenditures (measured at the farm gate). When the %CSE is negative, it indicates an implicit tax imposed by policies that support agricultural prices. Consumers may be partly compensated, *e.g.* through direct budgetary subsidies to processors, various forms of food aid programmes, etc.

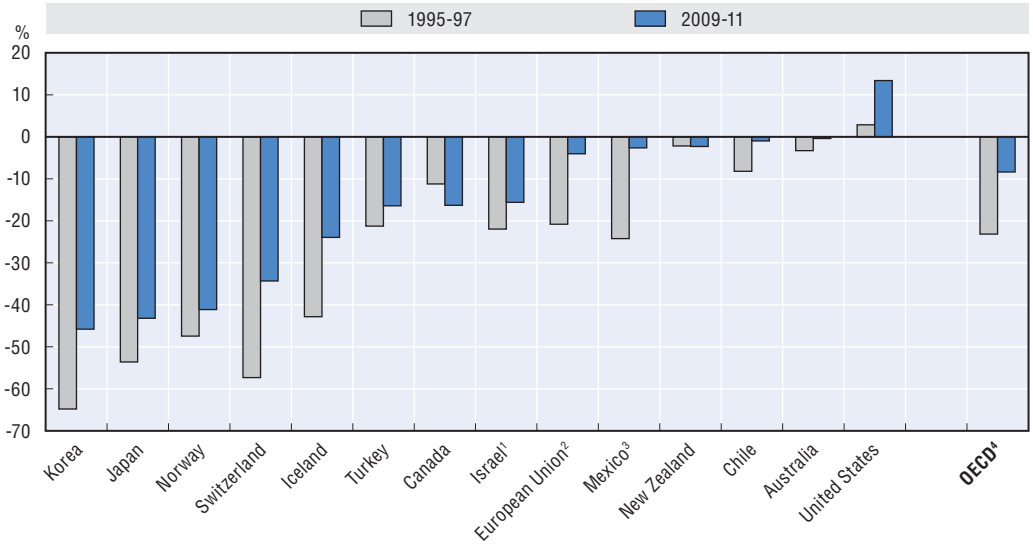
All OECD countries are, on aggregate, taxing their consumers, except the ***United States*** where this tax is offset by direct subsidies to consumers through domestic food aid programmes. This offsetting effect was even stronger in the most recent period, with the result that %CSE in the ***United States*** increased from 3% in 1995-97 to 13% in 2009-11. Other countries also provide various consumer subsidies, *e.g.* payments to processors and food assistance programmes in the ***European Union*** and ***Mexico***, a milk consumption subsidy in

Korea, consumer aid for wool in ***Iceland***, and flour and cereal foods subsidies in ***Norway***; but this assistance offsets the overall price taxation of consumers only to a small degree**.**

As the market price support for agricultural products decreased over the past decades, consumer contribution to agricultural support also fell, with the %CSEs becoming less negative (Figure 1.11). The most important reductions in the %CSEs since the 1990s have occurred in ***Switzerland***, ***Iceland***, ***Israel***, the ***European Union***, and ***New Zealand***. This was due to the fact that many of these countries made consistent reform efforts to shift away from policies intervening in market prices. ***Canada***, where the %CSE increased from minus 11% in 1995-97 to minus 16%, represents the exception to this general trend of decreasing consumer burden of agricultural support.

Figure 1.11. **Consumer Support Estimate by country, 1995-97 and 2009-11**

Per cent of consumption expenditure at farm gate



Countries are ranked according to 2009-11 CSE levels. A negative percentage CSE indicates an implicit tax on consumption.

Chile and Israel are included in the OECD total from 1995. The OECD total does not include the non-OECD EU Member States.

1. The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
2. EU15 for 1995-97; EU27 for 2009-11.
3. For Mexico, 1995-97 is replaced by 1991-93.
4. Austria, Finland and Sweden are included in the OECD total for all years and in the EU from 1995. The Czech Republic, Estonia, Hungary, Poland and the Slovak Republic are included in the OECD total for all years and in the EU from 2004. Slovenia is included in the OECD total from 1992 and in the EU from 2004.

Source: OECD, *PSE/CSE Database,* 2012.

StatLink http://dx.doi.org/10.1787/888932652985

Despite a reduction in the market price support, consumers in countries which largely rely on price to support agriculture continue to bear the high costs of agricultural support. As measured by the %CSE, additional costs of consumption incurred by consumers amounted to almost one-half of total consumption expenditures in ***Korea*** and ***Norway***, 43% in ***Japan***, one-third in ***Switzerland***, and almost one-quarter in ***Iceland*** in 2009-11.

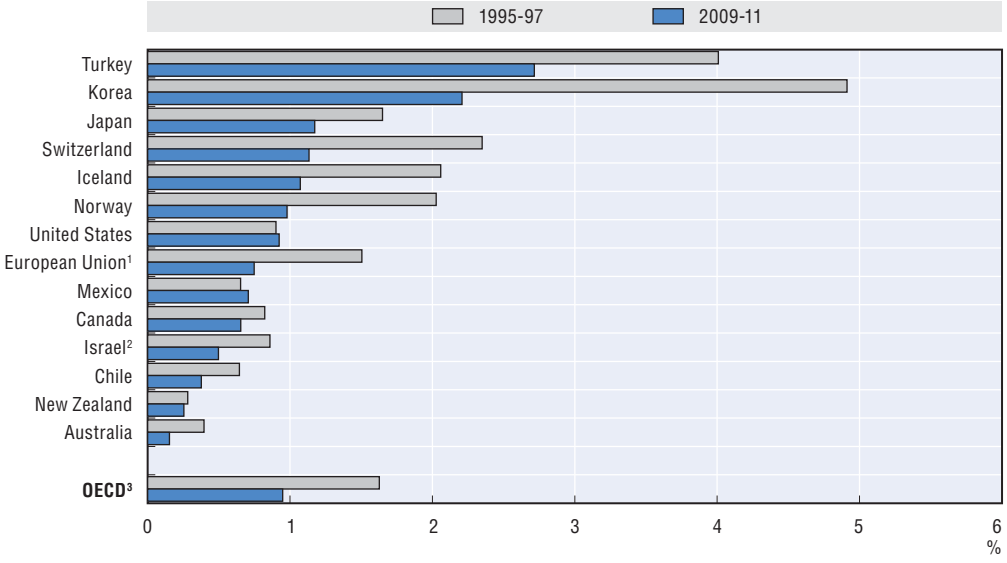
... while support relative to national income falls

The Total Support Estimate (TSE) is the broadest indicator of support, representing the sum of transfers to agricultural producers individually (the PSE) and collectively (the GSSE), as well as budgetary subsidies to consumers. The trend in the TSE can be more clearly evaluated on the basis of the %TSE, *i.e.* the TSE value expressed as a percentage of GDP (Figure 1.12 and Table III.4). The %TSE equalled 1.0% for the OECD as a whole in 2011, meaning that the total transfers arising from agricultural support policies accounted for 1% of OECD countries aggregate GDP.

In the long-term, the relative scale of total support to agriculture is consistently falling in the OECD area, with the %TSE declining from 3% on average in 1986-88 to 1.6% in 1995-97 and 0.9% in 2009-11. This declining trend is observed in all OECD countries, reflecting the shrinking importance of the agricultural sector in the overall economy. ***Turkey*** and ***Korea*** stand apart with the weight of agricultural support more than double the OECD average – 2.7% and 2.2% respectively in 2009-11 – despite the fact that these shares have substantially decreased since the 1995-97 period. For ***Turkey***, this mostly reflects the share that agriculture occupies in the overall economy, which was 9.4% of GDP in 2010. Thus, even a relatively lower level of agricultural support places a higher burden on ***Turkish*** economy than a much higher support in countries where agriculture represents a far smaller share, *e.g.* ***Norway***, ***Switzerland***, ***Korea*** or ***Japan***.

Figure 1.12. **Total Support Estimate by country, 1995-97 and 2009-11**

Per cent of GDP



Countries are ranked according to the TSE levels in 2009-11.

1. EU15 for 1995-2003; EU27 from 2007.
2. The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
3. Austria, Finland and Sweden are included in the OECD total for all years and in the EU from 1995. The Czech Republic, Estonia, Hungary, Poland, the Slovak Republic and Slovenia are included in the OECD total for all years and in the EU from 2004. Chile and Israel are included in the OECD total from 1995. The OECD total does not include the non-OECD EU member states.

Source: OECD, *PSE/CSE Database*, 2012.

StatLink http://dx.doi.org/10.1787/888932653004

The trajectories of support in the emerging economies differ from those in OECD countries

Agriculture policies in the key emerging economies monitored by OECD -Brazil, China, Russia, South Africa and Ukraine- demonstrate trends that differ from those observed in the OECD area. Following profound economic reforms in the 1980s and 1990s, previous agricultural regulation systems were dismantled or largely liberalised in these countries. In some, relative agricultural prices declined far below the international levels in the early post-reform period, with the result that agriculture faced considerable price taxation (or negative market price support). However, more recently, agricultural support levels in the emerging economies have tended to rise. This reflects improvements in the overall economic position of these counties, increasing availability of budgetary resources, policy priorities turning more towards agricultural and rural development, and recently, a strengthened emphasis on food security concerns which these countries tend to view mostly from the self-sufficiency angle (Box 1.5).

Box 1.5. **Agricultural support trends in emerging economies**

The *OECD Monitoring and Evaluation Report* covers selected emerging economies every second year. While the current 2012 edition does not include these countries, this box provides a short overview of agricultural support in Brazil, China, Russia, South Africa and Ukraine, as presented in the 2011 edition. These countries play a major role in feeding the global population and in world agricultural trade. Their total value of agricultural production exceeded USD 1 trillion in 2010 and was almost equal to the OECD total. China alone represented almost three-fourths of that total. The 2013 edition will cover developments in these five countries, and will also include Indonesia and Kazakhstan, for which OECD will finalise comprehensive agricultural reviews in 2012 and 2013 respectively.

Agricultural support in the majority of the monitored emerging economies tends to evolve in a direction opposite to that observed in OECD countries. Support levels increased in the majority of these countries compared to 1995-97, but from levels that were far below the OECD average, or even negative. Market price support and input subsidies remain the principal ways to provide support to farmers. Market price support rose most importantly in China and Russia. In China it is mainly provided through tariffs, Tariff Rate Quotas (TRQs) and state trading, combined with minimum guaranteed prices for rice and wheat. In Russia, while policies tax crops through export restrictions, livestock commodities and sugar are to a growing extent protected through import tariffs and TRQs. Ukraine has almost the same characteristics as Russia, but some commodities, in particular grains, are heavily taxed, which offsets support provided to livestock commodities and sugar, resulting in an overall modest level of support. While support in Brazil and South Africa is low, market price support constitutes more than half of the total support in these countries.

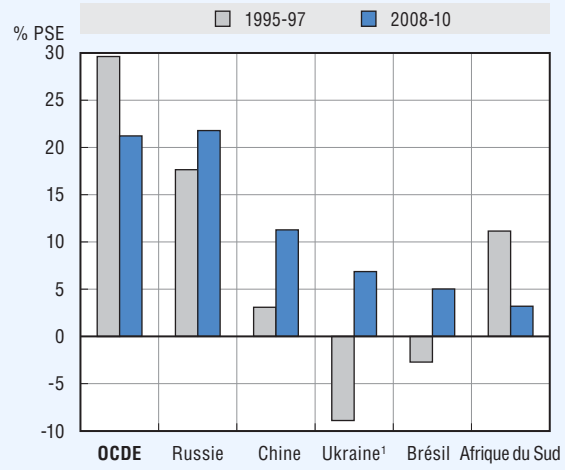
Some emerging economies also increased budgetary support to producers. Direct payments to grain farmers in China have been constantly rising since their introduction in 2004. Other crop producers have also been increasingly covered by direct payments paid per unit of land. Russian and Ukrainian farmers are supported to a growing extent through subsidised inputs and interest rates. In Brazil, farmers benefit mostly from subsidised interest rates. Support to land reforms in South Africa, especially to new settlements and smallholders, is a key component of farm support. Expenditures on such items as infrastructure, and research and development have been growing in all emerging economies covered by the 2011 report.

The level of farm support in emerging economies used to be far below the OECD average in the mid-1990s, but has been trending upwards; in Russia, at 22%, it exceeded the OECD average in 2008-10 (Figure 1.3). The only exception is South Africa where the level of support has been falling and was the lowest among the monitored emerging economies at 3% in 2008-10. In Brazil and Ukraine, farm policies moved from a net average taxation of the farm sector to positive support, but at relatively low levels. The increase in support in China was most pronounced in recent years and at 11% exceeds half the OECD average.

Box 1.5. **Agricultural support trends in emerging economies** *(cont.)*

Figure 1.13. **Emerging Economies: Producer Support Estimate by country, 1995-97 and 2008-10**

Per cent of gross farm receipts

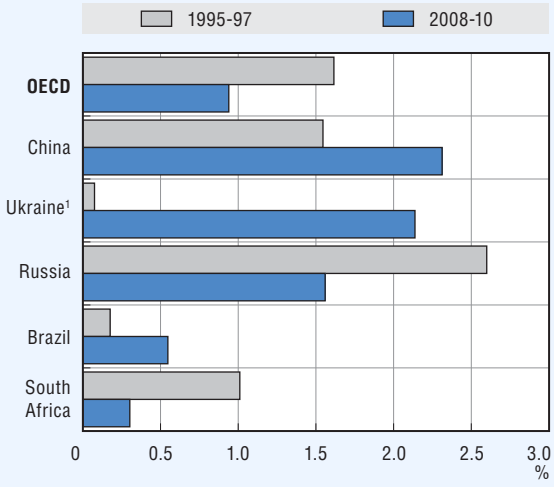


1. For Ukraine, 1995-97 is replaced by 1996-97.

StatLink http://dx.doi.org/10.1787/888932653023

Figure 1.14. **Emerging Economies: Total Support Estimate by country, 1995-97 and 2008-10**

Per cent of GDP



StatLink http://dx.doi.org/10.1787/888932653042

Strong GDP growth rates in emerging economies attenuate the impact of growing support levels on the share of the total support in GDP. However, even in the case of China with its impressive GDP growth, the %TSE strongly increased and was at 2.3% in 2008-10. It is the highest level among emerging economies and 2.5 times higher than the OECD average. This share has increased sharply in Ukraine and has fallen in Russia, but in both countries it is significantly above the OECD average. In Brazil, the %TSE increased, but from a low base, and remains low. In South Africa, this share fell and is the lowest among emerging economies (Figure 1.14).

Source: OECD *PSE/CSE Database*, 2012; OECD (2011a).

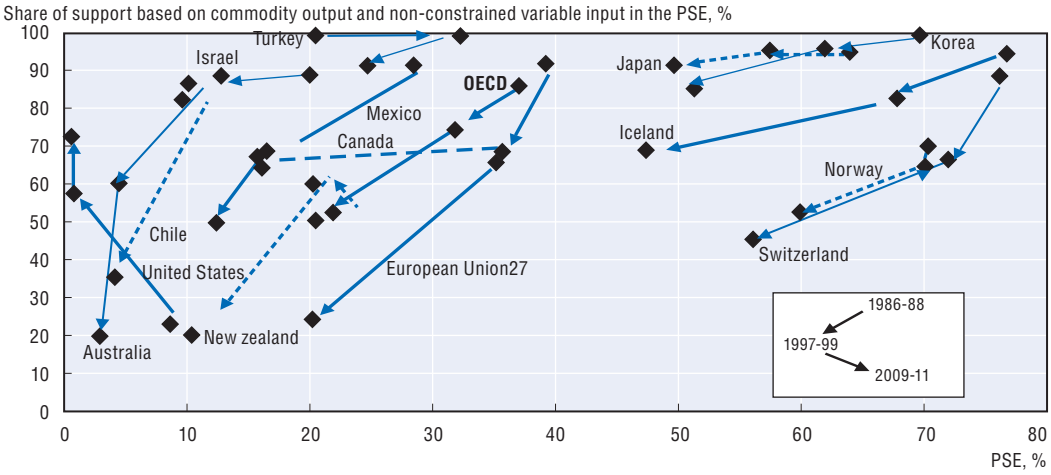
1.4. Assessment of reforms

Progress in agricultural policy reform can be assessed by examining how the level of support and its composition have changed over time and by estimating the impact of support on production decisions and on farm income. The former is revealed by policy indicators in the *PSE Database*, while the latter requires impact indicators from an economic model, like the OECD Policy Evaluation Model (PEM).

Less and better support…

The last two decades of agricultural policy reform have led to less production and trade distorting policies, which are reflected in important changes in the level and the composition of agricultural support. The support level is shown by the %PSE and the composition of support by the share of the potentially most production and trade distorting categories in the PSE (market price support, payments based on output and payments based on non-constrained variable input use). Figure 1.15 juxtaposes these two dimensions of support, highlighting three periods: 1986-88, 1997-99 and 2009-11. The movement in the graph towards the south-west direction reveals progress in both

Figure 1.15. **Changes in level and composition of producer support, per country**



The level of support is presented by the percentage PSE. The composition of support is presented by the share in gross farm receipts of Market Price Support, Payments based on output and Payments based on non-constrained variable input use.

1. For Mexico, the change is measured between 1991-93, 1996-98 and 2009-11.
2. EU12 for 1986-94 including ex-GDR from 1990; EU15 for 1995-2003; EU25 for 2004-06 and EU27 from 2007.
3. For Chile, changes are given only between 1997-99 and 2009-11.
4. For Israel, changes are given only between 1997-99 and 2009-11. The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Source: OECD, *PSE/CSE Database,* 2012.

StatLink http://dx.doi.org/10.1787/888932653061

dimensions. For the OECD area as a whole progress has been made both in bringing down the level of support and in the introduction of less distorting forms of support; the level of support was reduced by nearly half between 1986-88 and 2009-11, while the share of the most production and trade distorting support was reduced from 86% to 50%. A slight acceleration of the reform process has occurred since 1997-99, to some extent helped by the strong upward trend in world commodity prices.

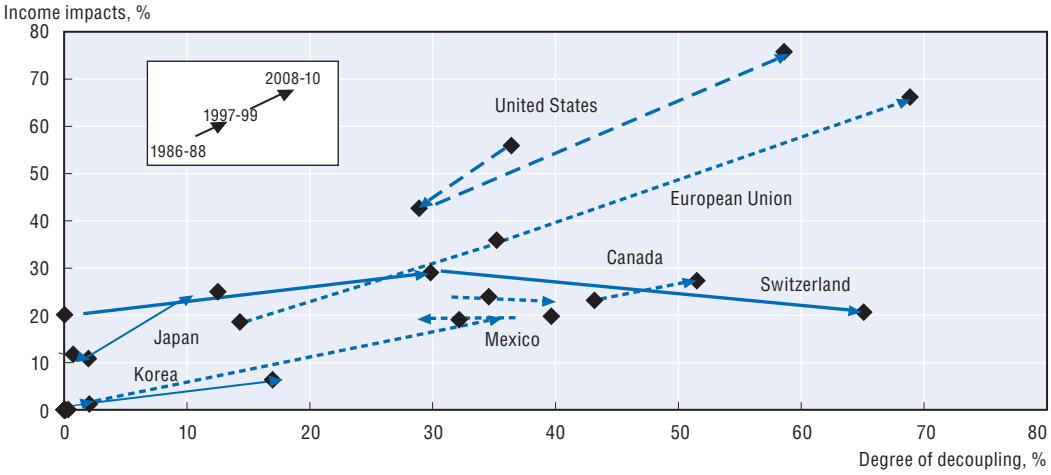
Support in ***New Zealand*** has remained close to zero since the 1990s. ***Australia*** and ***Chile*** have followed similar reform paths leading to very low levels of support and significant improvement in its composition. The ***European Union***, ***Mexico*** and the ***United States*** have made substantial reforms to improve the composition of support, while also reducing the level; this is most striking in the EU. ***Canada*** reduced the level of support, but hardly changed its composition. ***Norway*** and ***Switzerland*** have made progress in reducing the share of most distorting support to about half of total support, but the level of support, although reduced, remains the highest in the OECD area. ***Iceland*** has reduced the level of support, rather than changing its composition. ***Korea*** and ***Japan*** have also reduced their level of support starting from very high levels, but improvements in the composition remain small. Finally, little change is observed in support levels in ***Turkey*** and ***Israel***, and both countries maintain high shares of potentially distorting support.

... implies supporting farm incomes with fewer production distortions...

The Policy Evaluation Model (PEM) is used as one of the tools to estimate the impacts of reforms in OECD countries and has developed a set of indicators to track the impact of

the reform progress (Annex 1.A1)[2]. Figure 1.16 maps the average policy impacts on production and income. The key distinction between the two figures is that Figure 1.15 reflects the policy effort, while Figure 1.16 shows the estimated impact of those efforts on farm incomes and output.

Figure 1.16. **Changes in degree of decoupling and income impact, 1986-2010**



The degree of decoupling is calculated from the production impact (risk, wealth or expectation effects not considered). The degree of decoupling of zero means that the production impact of the policy set is as if all support were from highly distorting MPS. An income impact of zero means that the overall policy set has an income impact as if all supports were made through MPS. See Annex 1.A1 for more details.

1. The analysis represents only those countries, commodities and policies modelled in PEM
2. For Mexico the first period is 1991-93.

Source: OECD Policy Evaluation Model.

StatLink http://dx.doi.org/10.1787/888932653080

Figure 1.16 plots two PEM impact indicators. The first one, the degree of decoupling, measures the extent to which the average production impact of support has been reduced. The second indicator measures the impact of the policy set on farm income, or income transfer efficiency. Movements to the north-east of the graph imply smaller production distortions and stronger farm income impact of a policy set. All seven countries in the figure made progress over time in terms of the average impact of their policies, increasing the degree of decoupling and improving the income transfer efficiency. The largest progress in decoupling was made by the ***European Union***, the ***United States*** and ***Switzerland***. The largest improvements in income transfer efficiency of the policy set occurred also in the ***European Union*** and the ***United States***. ***Mexico*** made progress in the first period. In ***Canada,*** there has been less progress, particularly in so far as income transfer efficiency is concerned. For ***Japan*** and ***Korea***, the improvement in the degree of decoupling and income transfer efficiency occurred in the recent period from 1997-99.

... and provides an opportunity to address current policy priorities

There is evident progress across the OECD area towards agriculture support that is less distorting and more efficient in transferring income to farm households. Additional attention could now focus on addressing the policy priorities expressed by Ministers of Agriculture meeting at the OECD in 2010. High commodity prices can threaten food security of many countries, while volatile prices increase the attention on risk

management tools and policies with an efficient distribution of public and private responsibilities. Climate change introduces new challenges, and land, water and biodiversity resources are under growing stress. Incentives and disincentives need to be well aligned, and a supportive regulatory and institutional system should encourage investment and innovation to increase productivity. Coherence with other policies (macroeconomic, structural, social, environmental and others) and emerging economic and market realities requires more attention.

An appropriate response to today's opportunities and challenges would require that agricultural policies focus on core future priorities and shift away from broad farm income support to support better designed to achieve these priorities.

The current outlook of relatively high commodity prices in the medium term implies good prospects for crop producers and, to a lesser extent, for livestock producers who are more affected by the high input costs. Fiscal consolidation across OECD countries in response to the recent economic crisis also provides an incentive to prioritise efforts. This environment is propitious for creating a new momentum in OECD countries to better align policy objectives with explicit policy priorities specific to each country. The new agricultural policy frameworks currently undergoing consultations in several OECD countries could provide an opportunity for a path breaking re-design of agricultural policy.

Notes

1. The relationships between productivity growth and sustainability are discussed in OECD work on Green Growth (OECD, 2011b).
2. The PEM provides a stylised representation of agricultural markets and policies in the participating countries. It covers 7 OECD countries or regions (Canada, the European Union, Japan, Korea, Mexico, Switzerland, the United States) and models six commodity markets (wheat, coarse grain, oilseeds, rice, milk and beef) and input market, and it represents policies according to the PSE classification. It is a partial equilibrium model that measures impacts in the medium term. Therefore, the model estimates the impacts of a policy set in a specific year, assuming that the impact occurs within a 3 to 5 year period and that no other policy change or market shock occur. OECD (2011b) presents the most updated documentation of the PEM, including the method of calculating the policy impact indicators.

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ANNEX 1.A1

Measuring the impact of policy reform: PEM-based policy impact indicators

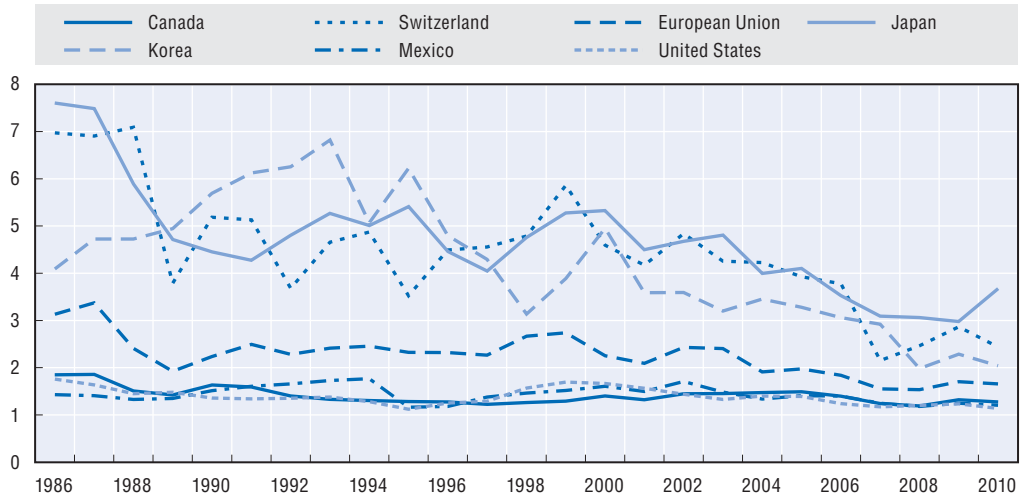
The PSE is an important resource in monitoring and evaluating the changes in agricultural policy over time, but by itself can measure only policy effort, and not its impact. The OECD has been developing the Policy Evaluation Model (PEM), which provides a stylized representation of production, consumption, and trade of aggregates of major cereal and oilseeds crops, milk, and beef production in seven OECD countries (including the European Union as a whole). The PEM measures relative price effects, but it is not designed to capture risk, welfare or expectations effects (OECD, 2006). The OECD has been using the PEM to simulate the market and welfare effects of PSE policies in various OECD reports.* Recently, the OECD invested in its capability to convert the whole PSE measures into indicators of policy performance which are comparable across countries and over time (OECD, 2011b).

The method consists of calculating indices of the level of Market Price Support (MPS) that replicates the production, trade and farm income effect of the full set of policies in a country. In other words, a level of MPS is calculated for each country and year that would result in exactly the same effects on production, trade and income, respectively, as the policy set actually observed. An advantage of this approach is that the resulting indicator is a measure of the net, joint impact of both the level and composition of all policies in the PSE. For cross-country comparisons, these indices can be expressed in *ad valorem* form (that is, as a percentage of the value of production at the world price), which is comparable to the existing PSE measurements of the level of support and the price protection: the Nominal Assistance Coefficient and the Nominal Protection Coefficient.

Figure 1.A1.1 represents the evolution of the production-impact index for seven OECD countries. The trends show a consistent reduction of production distortions of policies for most countries over time. This reduction in the production impact of the policy support package is due to both a lower level of support and a shift in composition in favour of less

* Since 1998, the OECD has been developing the PEM as a policy evaluation tool with close interaction with member countries (*i.e.* through a series of experts meetings). It has been used in a number of country studies (such as *Agricultural and Fisheries Policies in Mexico* (2006), *Evaluation of Agricultural Policy Reforms in Korea* (2008), *Evaluation of Agricultural Policy Reforms in Japan* (2009), *Evaluation of Agricultural Policy Reforms in the United States* (2011), *Evaluation of Agricultural Policy Reforms in the European Union* (2011)) as well as thematic reports (such as *Market Effects of Crop Support Measures* (2001), *Dairy Policy Reform and Trade Liberalization* (2005), *Role of Compensation in Policy Reform* (2007) and *Long Term Trends in Agricultural Policy Impacts* (2011),

Figure 1.A1.1. **Production-impact *ad valorem* index by country, 1986-2010**



Note: Results for Mexico and Korea are significantly affected by exchange rate movements over the study period that makes drawing conclusions about the overall trend difficult.

Source: OECD Policy Evaluation Model.

StatLink http://dx.doi.org/10.1787/888932653099

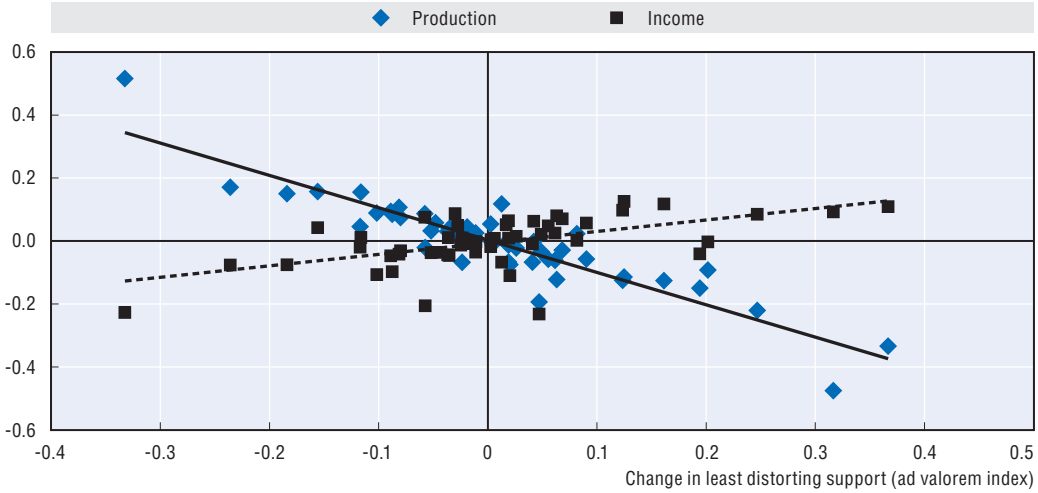
distorting policies. The income-impact indexes are driven to opposite directions by the reduction in the level of support and the by the increasing share of more transfer efficient forms of support.

In order to graph progress in the impacts of reform in Figure 1.A1.2, average impact ratios are calculated from these indices. The ratio between the production impact index and the PSE level measures the average degree of coupling; the degree of decoupling of policies in a given country is calculated as one minus this ratio. If the policy set has the same high production impact as if all support was made through MPS, the production ratio would be equal to one. The income impact in the figure is calculated as one minus the ratio between the income impact index and the PSE. If the policy set has the same income impact as the MPS, the set of policies would have low income transfer efficiency, a ratio equal to one and the income impact would be zero. Figure 1.16 plots these indicators of the degree of decoupling and the income impacts of policy sets in seven OECD countries.

The progress in decoupling and income transfer efficiency is to a great extent made though re-instrumentation of the policy set towards less distorting support: direct payments with more freedom for farmers to decide. While the trends in support and its effects over time are clear, there is considerable short-term variability. To estimate the impact of shifts towards least distorting support on production and income, a simple regression analysis is undertaken to explain the changes in PEM impact indicators with the changes in PSE policy indicators. A joint regression of the changes in the level of support (NAC) and the level of the least distorting support is made on the changes in production and income impact indices, all measured in *ad valorem* terms. Figure 1.A1.2 shows the estimated relationship between the composition of support and the impact on production and income, controlling for the changes in the level of support. The values on the horizontal axis can be interpreted as shifts towards least distorting support. The estimated relationship confirms a clear positive effect across time and across countries; the shift to the potentially least distorting forms of support is associated with an increase in the impact on farm income and with a reduction in the production distortions.

Figure 1.A1.2. **Estimated impacts of change in least distorting support on production and income, 1986-2010**

Change in production /income- impacts *ad valorem* index



This figure shows the relationship between change in *ad valorem* index of the level of least distorting support and change in production and income-impact *ad valorem* indices. Figure excludes the estimated impacts of the change in the level of support on *ad valorem* production and income impact indices.

1. The analysis represents only those countries, commodities and policies modelled in PEM
2. Changes in least distorting support and production and income impact *ad valorem* indices are calculated by average of every three year periods between 1986 and 2010.

Source: OECD Policy Evaluation Model.

StatLink http://dx.doi.org/10.1787/888932653118

ANNEX 1.A2

Definition of OECD indicators of agricultural support

Nominal indicators used in this report

Producer Support Estimate (PSE): the annual monetary value of gross transfers from consumers and taxpayers to agricultural producers, measured at the farm gate level, arising from policy measures that support agriculture, regardless of their nature, objectives or impacts on farm production or income. It includes market price support, budgetary payments and budget revenue foregone, *i.e.* gross transfers from consumers and taxpayers to agricultural producers arising from policy measures based on: current output, input use, area planted/animal numbers/receipts/incomes (current, non-current), and non-commodity criteria.

Market Price Support (MPS): the annual monetary value of gross transfers from consumers and taxpayers to agricultural producers arising from policy measures that create a gap between domestic market prices and border prices of a specific agricultural commodity, measured at the farm gate level. MPS is also available by commodity.

Producer Single Commodity Transfers (producer SCT): the annual monetary value of gross transfers from consumers and taxpayers to agricultural producers, measured at the farm gate level, arising from policies linked to the production of a single commodity such that the producer must produce the designated commodity in order to receive the payment. This includes broader policies where transfers are specified on a per-commodity basis. Producer SCT is also available by commodity.

Group Commodity Transfers (GCT): the annual monetary value of gross transfers from consumers and taxpayers to agricultural producers, measured at the farm gate level, arising from policies whose payments are made on the basis that one or more of a designated list of commodities is produced, *i.e.* a producer may produce from a set of allowable commodities and receive a transfer that does not vary with respect to this decision.

All Commodity Transfers (ACT): the annual monetary value of gross transfers from consumers and taxpayers to agricultural producers, measured at the farm gate level, arising from policies that place no restrictions on the commodity produced but require the recipient to produce some commodity of their choice.

Other Transfers to Producers (OTP): the annual monetary value of gross transfers from consumers and taxpayers to agricultural producers, measured at the farm gate level, arising from policies that do not require any commodity production at all.

Consumer Single Commodity Transfers (consumer SCT): the annual monetary value of gross transfers from (to) consumers of agricultural commodities, measured at the farm gate level, arising from policies linked to the production of a single commodity. Consumer SCT is also available by commodity.

Consumer Support Estimate (CSE): the annual monetary value of gross transfers from (to) consumers of agricultural commodities, measured at the farm gate level, arising from policy measures that support agriculture, regardless of their nature, objectives or impacts on consumption of farm products. If negative, the CSE measures the burden (implicit tax) on consumers through market price support (higher prices), that more than offsets consumer subsidies that lower prices to consumers.

General Services Support Estimate (GSSE): the annual monetary value of gross transfers to general services provided to agricultural producers collectively (such as research, development, training, inspection, marketing and promotion), arising from policy measures that support agriculture regardless of their nature, objectives and impacts on farm production, income, or consumption. The GSSE does not include any payments to individual producers.

Total Support Estimate (TSE): the annual monetary value of all gross transfers from taxpayers and consumers arising from policy measures that support agriculture, net of the associated budgetary receipts, regardless of their objectives and impacts on farm production and income, or consumption of farm products.

Ratio indicators and percentage indicators

Percentage PSE (%PSE): PSE transfers as a share of gross farm receipts (including support in the denominator).

Percentage SCT (%SCT): is the commodity SCT expressed as a share of gross farm receipts for the specific commodity (including support in the denominator).

Share of SCT in total PSE (%): share of Single Commodity Transfers in the total PSE. This indicator is also calculated by commodity.

Producer Nominal Protection Coefficient (producer NPC): the ratio between the average price received by producers (at farm gate), including payments per tonne of current output, and the border price (measured at farm gate). The Producer NPC is also available by commodity.

Producer Nominal Assistance Coefficient (producer NAC): the ratio between the value of gross farm receipts including support and gross farm receipts (at farm gate) valued at border prices (measured at farm gate).

Percentage CSE (%CSE): CSE transfers as a share of consumption expenditure on agricultural commodities (at farm gate prices), net of taxpayer transfers to consumers. The %CSE measures the implicit tax (or subsidy, if CSE is positive) placed on consumers by agricultural price policies.

Consumer Nominal Protection Coefficient (consumer NPC): the ratio between the average price paid by consumers (at farm gate) and the border price (measured at farm gate). The Consumer NPC is also available by commodity.

Consumer Nominal Assistance Coefficient (consumer NAC): the ratio between the value of consumption expenditure on agricultural commodities (at farm gate) and that valued at border prices.

Percentage TSE (%TSE): TSE transfers as a percentage of GDP.

Percentage GSSE (%GSSE): share of expenditures on general services in the Total Support Estimate (TSE).

Box 1.A2.1. **Definitions of categories in the PSE classification**

Definitions of categories

Category A1, Market price support(MPS): transfers from consumers and taxpayers to agricultural producers from policy measures that create a gap between domestic market prices and border prices of a specific agricultural commodity, measured at the farm gate level.

***Category A2, Payments based on output*:** transfers from taxpayers to agricultural producers from policy measures based on current output of a specific agricultural commodity.

***Category B, Payments based on input use*:** transfers from taxpayers to agricultural producers arising from policy measures based on on-farm use of inputs:

- ***Variable input use*** that reduces the on-farm cost of a specific variable input or a mix of variable inputs.
- ***Fixed capital formation*** that reduce the on-farm investment cost of farm buildings, equipment, plantations, irrigation, drainage, and soil improvements.
- ***On-farm services*** that reduce the cost of technical, accounting, commercial, sanitary and phyto-sanitary assistance and training provided to individual farmers.

***Category C, Payments based on current A/An/R/I, production required*:** transfers from taxpayers to agricultural producers arising from policy measures based on current area, animal numbers, revenue, or income, and requiring production.

***Category D, Payments based on non-current A/An/R/I, production required*:** transfers from taxpayers to agricultural producers arising from policy measures based on non-current (*i.e.* historical or fixed) area, animal numbers, revenue, or income, with current production of any commodity required.

***Category E, Payments based on non-current A/An/R/I, production not required*:** transfers from taxpayers to agricultural producers arising from policy measures based on non-current (*i.e.* historical or fixed) area, animal numbers, revenue, or income, with current production of any commodity not required but optional.

***Category F, Payments based on non-commodity criteria*:** transfers from taxpayers to agricultural producers arising from policy measures based on:

- ***Long-term resource retirement*:** transfers for the long-term retirement of factors of production from commodity production. The payments in this subcategory are distinguished from those requiring short-term resource retirement, which are based on commodity production criteria.
- ***A specific non-commodity output*:** transfers for the use of farm resources to produce specific non-commodity outputs of goods and services, which are not required by regulations.
- ***Other non-commodity criteria*,** transfers provided equally to all farmers, such as a flat rate or lump sum payment.

***Category G, Miscellaneous payments*:** transfers from taxpayers to farmers for which there is a lack of information to allocate them among the appropriate categories.

Note: A (area), An (animal numbers), R (receipts) or I (income).

Box 1.A2.1. **Definitions of categories in the PSE classification** *(Cont.)*

Definitions of labels

***With or without current commodity production limits and/or limit to payments*:** defines whether or not there is a specific limitation on current commodity production (output) associated with a policy providing transfers to agriculture and whether or not there are limits to payments in the form of limits to area or animal numbers eligible for those payments. Applied in categories A – F.

***With variable or fixed payment rates*:** Any payments is defined as subject to a variable rate where the formula determining the level of payment is triggered by a change in price, yield, net revenue or income or a change in production cost. Applied in categories A – E.

***With or without input constraints*:** defines whether or not there are specific requirements concerning farming practices related to the programme in terms of the reduction, replacement, or withdrawal in the use of inputs or a restriction of farming practices allowed. Applied in categories A-F. The payments with input constrains are further broken down to:

- payments conditional on compliance with basic requirements that are mandatory (*with mandatory*);
- payments requiring specific practices going beyond basic requirements and voluntary (*with voluntary*).
  - Specific practices related to environmental issues;
  - Specific practices related to animal welfare;
  - Other specific practices.

***With or without commodity exceptions*:** defines whether or not there are prohibitions upon the production of certain commodities as a condition of eligibility for payments based on non-current A/An/R/I of commodity(ies). Applied in Category E.

***Based on area, animal numbers, receipts or income*:** defines the specific attribute (*i.e.* area, animal numbers, receipts or income) on which the payment is based. Applied in categories C – E.

***Based on a single commodity, a group of commodities or all commodities*:** defines whether the payment is granted for production of a single commodity, a group of commodities or all commodities. Applied in categories A – D.

Decomposition indicators

Decomposition of PSE

Per cent change in PSE: per cent change in the nominal value of the PSE expressed in national currency. The per cent change is calculated using the two most recent years in the series.

Contribution of MPS to per cent change in PSE: per cent change in nominal PSE if all variables other than MPS are held constant.

Contribution of price gap to per cent change in the PSE: per cent change in nominal PSE if all variables other than gap between domestic market prices and border prices are held constant.

Contribution of quantity produced to per cent change in the PSE: per cent change in nominal PSE if all variables other than quantity produced are held constant.

Contribution of budgetary payments (BP) to per cent change in PSE: per cent change in nominal PSE if all variables other than BP are held constant.

Contribution of BP elements to per cent change in PSE: per cent change in nominal PSE if all variables other than a given BP element are held constant. BP elements include *Payments based on output, Payments based on input use, Payments based on current A/An/R/I, production required, Payments based on non-current A/An/R/I, production required, Payments based on non-current A/An/R/I, production not required, Payments based on non-commodity criteria* and *Miscellaneous payments.*

Decomposition of Price gap elements

Per cent change in Producer Price: per cent change in Producer Price (at farm gate) expressed in national currency. The per cent change is calculated using the two most recent years in the series.

Per cent change in the Border Price: per cent change in Border Price (at farm gate) expressed in national currency. The per cent change is calculated using the two most recent years in the series.

Contribution of Exchange Rate to per cent change in Border Price: per cent change in the Border Price (at farm gate) expressed in national currency if all variables other than Exchange Rate between national currency and USD are held constant.

Contribution of Border Price expressed in USD to per cent change in Border Price: per cent change in the Border Price (at farm gate) expressed in national currency if all variables other than Border Price (at farm gate) expressed in USD are held constant.

More detailed information on the indicators, their use and limitations is available in the *OECD's Producer Support Estimate and Related Indicators of Agricultural Support: Concepts, Calculation, Interpretation and Use* (the PSE Manual) available on the OECD public website.

Agricultural Policy Monitoring and Evaluation 2012
OECD Countries

PART I

Chapter 2

Fostering innovation and productivity growth in agriculture

This chapter includes a discussion of how policy makers in OECD countries and emerging economies can pursue the global challenge of improving productivity growth sustainability by improving innovation systems and agricultural policies. Developments in agricultural productivity growth and resource use are first presented to outline the issue. The different ways innovation systems, agricultural policy, farm structure and other factors affect agricultural productivity and sustainability are then discussed. Suggestions are made to strengthen innovation systems, and to improve agricultural policies, in order to foster agricultural productivity growth efficiently and sustainably. The need to improve policy coherence is stressed in the conclusion.

Increasing productivity is a key objective of agricultural policies in many countries. It is an important means by which to improve the efficiency and the competitiveness of the agri-food sector. In countries with a comparative advantage in agriculture, it may also significantly strengthen the sector's contribution to economic growth.

At the global level, more food, fibre, fuel and feed are needed to meet the demands of a growing and richer population for more abundant and diverse diets, as well as for the development of bio-based, non-food products. Meeting these demands sustainably will require further increases in agricultural productivity and production systems must be improved to ensure more efficient use of available, finite natural resources. Higher productivity growth is also needed to increase production to better smooth supply shocks, which are expected to become more frequent due to climate change or resource limits more generally.

The challenge is to increase agricultural productivity growth sustainably, without imposing greater strain on natural resources, in a context of growing competition between agriculture and other uses for finite land and water resources, and uncertainties associated with climate change. This will require changes in production methods, including the adoption of technological and other innovations, at farm-level and in the agri-food sector. There are many factors, including agricultural policy, that influence the adoption of innovation, the choice of production practices, and in particular the balance between productivity growth and sustainability.[1] Moreover, while the concept of sustainable productivity growth encompasses many objectives of agricultural policy and innovation systems, it is not necessarily the only one.

In response to these concerns, G20 leaders committed in the 2011 Cannes Declaration to sustainably increase agricultural production and productivity.[2] They "agree to further invest in agriculture, in particular in the poorest countries, and bearing in mind the importance of smallholders, through responsible public and private investment." They "decide to invest in research and development of agricultural productivity." Early in 2012, Mexico, as G20 President, invited international organisations to examine practical actions that could be undertaken to sustainably improve agricultural productivity growth, in particular on small family farms. In response to this request, twelve organisations prepared a report entitled "Sustainable Agricultural Productivity Growth and Bridging the Gap for Small Family Farms".[3]

This chapter aims to help policy makers in OECD countries and emerging economies pursue the global challenge of improving productivity growth sustainability by improving innovation systems and agricultural policies. It focuses on institutional, economic and policy aspects. The first section outlines the issue by describing developments in agricultural productivity and resource use.[4] The second section discusses how innovation systems, agricultural policy, farm structure and other factors affect agricultural productivity and sustainability. The third section suggests how innovation systems could

be strengthened to foster agricultural productivity growth efficiently and sustainably, while the fourth section focuses on agricultural policy. The need to improve policy coherence is stressed in the concluding section.

2.1. Agricultural productivity and sustainability: Trends and differences

Since the post-war period, there has been a strong growth in agricultural productivity driven largely by technological progress (OECD, 2011a). Together with the expansion of the resource base, this has enabled agriculture to provide food for a rapidly growing global population. This has, however, increased pressure on natural resources, raising concerns about the sustainability of past and future productivity growth, and the ability of the sector to respond to food security and climate change challenges sustainably. Moreover, improvements to productivity do not necessarily lead to increased production. They could result in reduced input use and lower environmental pressure whilst production remains broadly static or reduces.

Productivity measure: Trends and diversity

In recent years, efforts have been made to assess agricultural productivity performance at the global level using various partial and total factor productivity measures, building on existing databases and other information. Total factor productivity (TFP) – the ratio of output to input – is the most comprehensive measure of productivity as it reflects the efficiency to turn all inputs into outputs, whatever the input mix. TFP measures can be usefully complemented by partial factor productivity indicators, which shed light on how productivity growth is achieved. Higher partial factor productivity does not necessarily lead to higher TFP. For example, labour productivity, measured as output per person, increases with the adoption of labour saving technologies (*e.g.* machines) or with employment opportunities outside the sector that helps to reduce hidden unemployment. In the first case, TFP might not increase, while it will in the second case. As they compare volumes of outputs and inputs, most productivity indicators do not reflect quality or sustainability changes. They thus need to be complemented by other indicators, *e.g.* agri-environmental, or qualitative considerations. Higher land productivity (*e.g.* crop yields) has often resulted from more intensive use of variable inputs such as water, fertilisers and pesticides, but innovative practices and technologies, such as improved varieties, irrigation drip, no-till or integrated pest management, allow to save on these input applications while maintaining or increasing output per hectare (OECD, 2011b).

According to the most recent estimates by Fuglie (2012), total factor productivity (TFP) in developed countries grew at an average rate well above 1% per year in the 1970s and 1980s, and at faster rates of 2.2% in the 1990s and 2.4% in the 2000s (Table 2.1).[5] In developing countries, the annual growth rate of TFP averaged 2.2% in the last two decades, compared to around 1% in the 1970s and 1980s. TFP in transition economies has been recovering at an annual growth rate of 2.3% in the 2000s, following periods of decline or slow growth. At the global level, TFP growth tends to accelerate and to converge across major world regions at around 2% per year.

The picture is more complex when looking at individual countries or sub-regions (Fuglie, 2010, 2012). In recent decades, some large countries, like Brazil, China, Indonesia, Russia and Ukraine, have achieved much higher growth rates than the average of their neighbours (3 to 5%), while TFP has decreased in neighbouring countries. China's high performance, in particular, hides the more modest performance of the rest of Asia (Alston

et al., 2010). With long-run TFP annual growth rates below 1%, Sub-Saharan Africa lags behind, but several countries like Cameroon, Kenya or Mali have achieved an annual TFP growth rate of 2-3% in the 2000s, mostly attributable to policy changes during the 1990s (Yu and Nin-Pratt, 2011). Their performance is comparable with the growth rates in East and South Asia and Latin America during the same period (Table 2.1).

Although this does not seem to be a general trend, TFP growth rates have declined in the last decade in some OECD countries with already high productivity levels, such as Australia, Canada, Korea and Mexico (Table 2.2).[6] Some studies also include the United States in this group (Alston *et al.*, 2010).[7] Experts have mentioned several possible explanations: bad weather conditions; policy changes such as the decoupling of support from current production and more stringent environmental regulation; and lack of innovation. In Australia, it is estimated that TFP growth rates have slowed down irrespective of recent bad climatic conditions (Sheng, 2011). One of the reasons given in Alston *et al.* (2010) for the slowdown in Australian TFP is a declining growth rate in expenditures for agricultural R&D.

Table 2.1. **Developments in global and regional Total Factor Productivity**

Annual growth rates by period (%)

	1961-70	1971-80	1981-90	1991-2000	2001-09
All developed countries	**0.99**	**1.64**	**1.36**	**2.23**	**2.44**
All developing countries	**0.69**	**0.93**	**1.12**	**2.22**	**2.21**
North Africa	1.32	0.48	3.09	2.03	3.04
South-Saharan Africa	0.17	–0.05	0.76	0.99	0.51
Latin America – Caribbean	0.84	1.21	0.99	2.30	2.74
Asia (except West Asia)	0.91	1.17	1.42	2.73	2.78
West Asia	1.21	2.21	0.95	1.70	1.34
Oceania	–0.14	0.47	–0.73	0.54	1.33
Transition countries	**0.57**	**–0.11**	**0.58**	**0.78**	**2.28**

Note: Estimated using FAOSTAT data. The average annual growth rate in series Y is found by regressing the natural log of Y against time, i.e. the parameter B in ln (Y) = A + Bt.
Source: Fuglie (2012).

In many OECD countries, labour productivity has increased faster than land productivity as labour was shed out of the sector. This has also been the case in Latin America and China, which recorded strong growth in both land and labour productivity (about 4.5% annual growth rate in China over 1990-2005, around 3% in Latin America). This contrasts with the rest of Asia and Africa, where labour productivity has increased less than land productivity, at rates of around 1% annually. At the global level, if China's performance is excluded there is evidence that the annual growth rate in land productivity is slowing down, from 1.9% in 1961-90 to 1.2% in 1990-2005 (Alston, 2010; OECD, 2011a).

Over the period 1961-2000, non-ruminant TFP growth has been very high in most regions of the world and it is projected to remain strong or become even stronger in the future (Ludena *et al.*, 2007).[8]In developed countries, TFP growth has been the highest in the crop sector, the lowest in the ruminant sector, and average in the non-ruminant sector. But TFP growth in the ruminant sector has been higher in developed countries than in most other regions. At the country-level, TFP growth has been measured for specific agricultural sub-sectors using farm-level data. For example, Nossal and Sheng (2010) found that Australian crop farms achieved higher TFP growth than cattle, sheep or mixed farms

Table 2.2. **Developments in Total Factor Productivity in OECD countries and emerging economies**

Annual growth rates by period (%)

	1961-70	1971-80	1981-90	1991-2000	2001-09
Australia[1]	0.63	1.65	1.27	2.85	0.55
Canada	1.41	–0.36	2.67	2.55	2.14
Chile	1.70	2.20	1.09	1.71	2.58
Estonia	1.40	0.19	–0.69	1.29	4.70
Northwest Europe	0.85	1.48	1.55	1.80	2.75
Southern Europe	1.97	2.03	1.30	2.42	3.04
Israel	5.65	2.74	0.95	2.41	2.57
Japan	2.42	2.17	1.11	1.51	2.43
Korea	1.83	4.28	2.81	4.04	2.86
Mexico	2.65	2.17	–1.98	3.19	2.19
New Zealand[2]	1.47	1.39	1.84	3.20	3.14
Norway	0.92	0.91	1.18	0.56	2.37
Switzerland	0.43	1.06	0.06	1.74	2.02
Turkey	0.75	1.54	0.99	1.50	1.78
United States	1.21	1.80	1.21	2.17	2.26
Brazil	0.19	0.53	3.02	2.61	4.04
China	0.93	0.60	1.69	4.16	2.83
India	0.49	1.00	1.33	1.11	2.08
Indonesia	1.75	1.40	0.59	0.99	3.68
Russia	0.88	–1.35	0.85	1.42	4.29
South Africa	0.34	1.15	2.71	2.79	3.01
Ukraine	0.41	–0.18	1.12	–0.07	5.35

Note: Estimated using FAOSTAT data. The average annual growth rate in series Y is found by regressing the natural log of Y against time, *i.e.* the parameter B in ln (Y) = A + Bt.

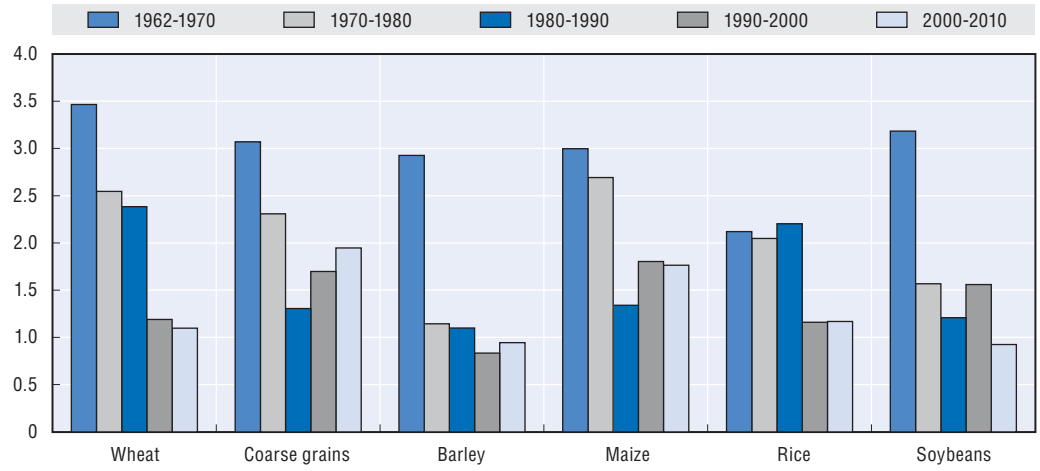
1. Australian official figures on productivity growth are calculated by sub-sector.
2. Official figures published by Statistics New Zealand show TFP increasing in the late 1980s and then declining from the late 1990s onwards especially over the last decade.

Source: Fuglie (2012).

over 1978-2007, but were the most affected by recent declines, while the beef industry was more resilient.[9] Most recent figures show that between 1977/78 and 2009/10, TFP annual growth rates were 1.6% for cropping; 1.1% for mixed crop–livestock; 1.4% for beef, 0.5% for sheep, and 0.3% for the dairy industry. In recent years, the gap between the TFP growth rates of the cropping and livestock industries has been narrowing.

Similar to TFP growth, developments in crop yields (production per ha) are contrasted across countries and regions, but also across individual crops. At the global level, the yields of major crops doubled or tripled between 1961 and 2010 (Table 2.A1.1). While crop yields continue to grow, the average global rates of growth in yield of most of the major cereals were lower in the last two decades than they were in the post-war period (Figure 2.1). Since the 1980s, growth in wheat and rice yields fell from 2.4-2.2% to slightly over 1%. Maize yields showed growth of slightly less than 2% over the last decade. Maize yields grew at a 1.8% annual rate, compared to around 3% in the 1960s and 1970s, while barley yields grew less than 1% per year. The annual growth rate of soybean yields has decreased from 1.6% in the 1970s and the 1990s to less than 1% in the 2000s. On average, coarse grains yields increased faster in the last two decades than in the 1980s, probably due to changes in aggregate composition over time (Table 2.A1.1).

Figure 2.1. **Annual growth rates in world crop yields (%)**



Note: Time series are de-trended, by decade, using a Hodrick–Prescott filter.
Source: FAOSTAT.

StatLink http://dx.doi.org/10.1787/888932653137

The levels and growth in the yields of major crops are contrasted across countries (Tables 2.A1.2 to 2.A1.5). Cereals yields vary from less than 1 tonne per hectare in central Africa to over 9 tonnes per hectare for maize in North America and Western Europe, and rice in North Africa, with the highest yields for wheat and barley of about 6-7 tonnes per hectare on average being recorded in Western European countries such as France and Germany (Table 2.A1.2). In the European Union, cereal yields increased until 1998 and have since fluctuated around a flatter trend (OECD, 2011a). Annual growth rates of cereal yields are generally higher in emerging economies than in OECD countries, in particular for maize (Tables 2.A1.3 to 2.A1.5).

While the yield of major crops has been extensively scrutinised, work on animal production is less prominent. OECD (2011c) reports higher yield growth rates in milk production than in cereal production in EU member states.

While there is no widespread evidence of a global decrease in productivity growth rates, slow or lack of progress in some developing countries is of concern and requires action. As productivity growth is now the main driver of production growth at the global level,[10] it is crucial to strengthen the capacity of the sector to achieve the productivity growth needed to meet future demand in a sustainable manner, and the ability to create and adopt innovations needed to sustainably improve productivity growth further.[11]

Trends in resource use and availability

Agriculture is a significant user of some natural resources, in particular water and land, and needs to improve the sustainability of its resource use. Table 2.3 summarises the relative importance of OECD agriculture in its use of natural resources and contribution to environmental pressures (OECD, 2012e). Trends in resource use and constraints are then outlined and when appropriate and feasible, related to changes in policy and production. More analysis would be needed to relate changes in resource use and quality to changes in productivity.

Over the last half century, **land** area used in agriculture has increased in developing countries, but declined in developed countries. Competition for urban, industrial,

Table 2.3. **OECD Agriculture's use of natural resources, farm inputs and contribution to water and air emissions of importance to the environmental performance of agriculture, 2007-09**

Percentage of OECD agriculture in total:	OECD average (%)	Minimum – Maximum (%)
Land area	35	2-72
Water use	45	< 1-87
Pesticide use (sales)	*circa* 70	*circa* 65-75
Energy consumption	2	< 1-6
Water pollutants, *of which:*		
Nitrates in surface water	. .	< 30-80
Nitrates in groundwater[1]	. .	< 45-> 70
Nitrates in coastal water	. .	< 2-> 30
Phosphorus in surface water	. .	< 20-> 70
Phosphorus in coastal water	. .	< 30-> 50
Ammonia emissions	90	71-98
Methyl Bromide use in total ozone depletion potential	75	. .
Greenhouse gas emissions, *of which:*	8	3-49
Nitrous Oxide emissions	70	. .
Methane emissions	40	. .
Carbon dioxide	1	. .

. .: not available.
1. Exceeding recommended drinking water threshold limits.
Source: OECD Agri-environmental Indicator Database, www.oecd.org/tad/env/indicators. Reported in OECD (2012e).

environmental and recreational uses has been traditionally strong in many regions. Despite growing agricultural land use at the global level, as much as 5 to 10 million hectares of agricultural land, representing around 0.3-0.6% of all agricultural land, are lost each year to severe degradation through overuse, poor land management, and nutrient mining[12] (FAO, 2009; Foresight, 2011), with varying degrees of irreversibility.

Over the last decade, agricultural land area has decreased in most OECD countries, except Chile, Finland, Sweden, Canada, Estonia and Turkey (OECD, 2012e). In several EU countries and Japan, production has also decreased, possibly lowering environmental pressure on land through less intensive use. In many OECD agricultural exporting countries, such as Israel, Mexico, New Zealand and the United States, production has increased on a decreasing land area, mainly through higher input use (fertilisers, pesticides, water and energy).

Water is an important resource for agriculture, with large impacts on land and agricultural productivity. At the global level, agriculture accounts for around 70% of the world's total freshwater withdrawal (FAO, 2011). Cities and industries compete intensely with agriculture for the use of water and an increasing number of countries or regions within countries are reaching high levels of water stress and pollution (OECD, 2011g; OECD, 2012b).

At the OECD level, agriculture accounts for about 45% of all freshwater withdrawal (Table 2.3), but these shares vary considerably across countries and, in some, can reach 90%. Use of freshwater resources by agriculture grew slightly over the 1990s, but declined by –0.5% per year over the 2000s (OECD, 2012e). However, agriculture abstracts an increasing share of its water supplies from groundwater and some countries are under water stress. Changes in area irrigated have reflected changes in water use, increasing over the 1990s and decreasing slightly over the 2000s. Reflecting improvements in irrigation technologies and management practices, as well as agricultural and water policy reforms,

efficiency of water application on irrigated land continued to improve over the 2000s but at a slower rate than in the previous decade. The largest improvements are recorded in Australia, where major policy reforms affecting agriculture included changing water property rights, creating water trading markets, and increasing water charges to farmers (OECD, 2010a). Israel's water policy reforms led to increased water prices paid by irrigators, and thus reductions in water application and improvements in irrigation technologies and management (OECD, 2010c).

Agriculture is often a major source of **water pollution**, from nutrients, pesticides, soils and other contaminants, leading to significant social, economic and environmental costs (Table 2.3) (OECD, 2012f). OECD agri-environmental indicators show that water quality across OECD countries has been either stable or deteriorating, in most cases over much of the last decade, compared to some easing of pressure from agriculture on water systems over the 1990s (OECD, 2012e). For a considerable number of countries, the level of nitrates, phosphorus and pesticides found in agricultural monitoring sites[13] exceeds national water threshold limits. However, the downward trend in nutrient surpluses and pesticide use over the past ten years for many OECD countries would suggest that pressure from agriculture on water systems has eased. OECD agricultural production continued to increase in the 1990s, but remained stable in the 2000s, with reductions in the nitrogen and phosphorus balance per hectare in both periods.

Much of the slowing of the rates of soil erosion on agricultural land has resulted from the increasing adoption of nutrient management practices encouraged by the decoupling of support from production and input related support (Figure 1.15) (OECD, 2012e); agri-environmental measures across many countries; and, in some countries, the introduction of a link between the provision of support payments and the requirement to meet a number of conditions related to environmental performance (cross compliance). In the United States, slowing rates of soil erosion are due primarily to adoption of conservation practices (conservation tillage, in particular) and retirement of highly erodible land.

Overall, OECD pesticide use diminished by 0.8% per annum over the period 2000-09, which contrasts with the small per annum increase over the 1990s (OECD, 2012e). Much of declining use of pesticides over the last decade was accounted for by the EU15 and the United States. For a growing number of countries, crop production has been increasing at a faster rate since 2000 than pesticide use. The apparent improvements in pesticide use efficiency for a growing number of OECD countries can be explained by a combination of factors which includes: the overall decoupling of support from production and input related support (Figure 1.15); the use of new pesticide products used in lower and more targeted doses; the expansion in organic farming; pesticide taxes; and the use of payments to encourage the adoption of pest management practices.

There is a large potential to reduce the amount of pesticides and nutrients in agriculture without reducing crop yields. In some intensive farming systems, up to 50% of available nutrient inputs (inorganic and organic nutrients) are not utilised by crops or pastures, leading to significant pollution from nutrient run-off (OECD, 2012f). The opposite is the case in large parts of the developing world, where crop farming leads to a net extraction of nutrients from the soil (OECD, 2012b). In Africa for example, shorter – or non-existent – fallow periods and poor cultivation practices, combined with low use of inorganic fertilisers and organic manure, have all resulted in reduced levels of soil fertility, reduced soil organic matter, and increased occurrences of acidified soils.

Biodiversity underpins agriculture and food security through the provision of genetic material needed for crop and livestock breeding. It also provides other important ecosystem services to agriculture such as pollinisation. The 20th century saw a great loss of biodiversity through habitat destruction, mainly due to deforestation (UN, 2001). Maintenance of biodiversity, *e.g.* through provision of natural habitat, pest predator habitat, shelter for pollinisation insects or wind shelter belts, is crucial for sustainability and resilience of farming systems as it builds the capacity to absorb shocks and continue to function within a changing set of circumstances. Agricultural biodiversity is largely created, maintained, and managed by humans through a range of farming systems from subsistence to those using a range of biotechnologies and extensively modified terrestrial ecosystems. As a major land user in most OECD countries, agriculture has a direct impact on species' habitats and indirect impacts on the existence of the species themselves (OECD, 2012e).

Farmland bird population is an indicator used to track the condition of farmland habitats.[14] In the OECD area, farmland bird populations declined continuously over the period from 1990 to 2008, but the decrease in bird populations was less pronounced over the 2000s compared to more rapid reductions in the 1990s (OECD, 2012e). Moreover, for many countries the decrease in farmland bird populations from 1990 to 2008, was much less pronounced than had occurred over the period from the mid-1960s to the early 1990s. This is partly associated with efforts beginning in the early 1990s to introduce agri-environmental schemes aimed at encouraging semi-natural land conservation on farms (*e.g.* field margins, buffer strips near rivers, and wetlands); changes in farm management practices, such as increasing the area under conservation tillage, which has increased feed supplies for birds and other wild species in many countries; reduction in pesticide use for many countries lowering toxic effects on birds and their food supply (*e.g.* worms, insects); and changes in land use. Despite these positive improvements toward bird conservation on farmland across many OECD countries, the further intensification of agriculture and removal of natural and semi-natural habitats in many regions of the OECD, continues to exert pressure on bird populations and other flora and fauna associated with farming. It is also noticeable that bird species dependent on other habitats, notably forestry, have not experienced the same rate of decline as farmland bird species

Climate change is expected to impose additional constraints on agriculture, but also some opportunities, as it will affect land and water availability (IPCC, 2007; Müller *et al.*, 2011; OECD, 2010d). In the near term, climate variability and extreme weather shocks are projected to increase, affecting all regions with negative impacts on yield growth and food security particularly in sub-Saharan Africa and South Asia in the period up to 2030 (Burney *et al.*, 2010). Agriculture (including deforestation) accounts for about one-third of greenhouse gas emissions; for this reason, it must contribute significantly to climate change mitigation (IPCC, 2007). While crops can be adapted to changing environments, the need to reduce emissions will increasingly challenge conventional, resource-intensive agricultural systems (Royal Society, 2009). In OECD countries, agricultural emissions of ammonia and greenhouse gases (GHG) have decreased in the 2000s, while they were stable or increased in the 1990s (OECD, 2012c). The environmental efficiency gains in reducing the level and rate of release of agricultural GHG emissions over the past decade, as with ammonia, can be primarily linked to the uptake of improved technologies and farm management practices, as well as incentives to lower emissions provided by a range of policies introduced by OECD countries such as regulations on livestock housing to limit

GHG emissions, and payments for biodigesters to limit methane emissions. Increasing numbers of farmers are adopting technologies (*e.g.* changing livestock feed composition to reduce methane emissions) and practices that are helping to reduce emissions, such as precision fertiliser application (lowering nitrous oxide emissions).

2.2. Some factors determining agricultural productivity

Many factors explain the large disparities in productivity across regions and farms, including the structural characteristics of the farm and its natural, market and policy environment (OECD, 2011a). Examining the relationship between these factors and productivity will help define paths to higher productivity growth at the farm, national and global levels.

The need for innovation

The relation between innovation and productivity is complex. At the farm level, theory identifies three ways to TFP growth: 1) technological progress, which reflects advances in technology adopted by early innovators, the best performing farms that push the production frontier up; 2) technical efficiency increase, which reflects later adoption of technology by individual farms, allowing them to move towards the production frontier; and 3) scale efficiency increase (economies of scale) represented by a movement along the production frontier due to a change in farm size (OECD, 2011a). This means that the productivity of farms can be improved to a certain extent through economies of scale and the adoption of more technically-efficient production systems. Innovation, however, concerns other aspects of production and marketing systems than technology, such as farm practices and organisation. It can also lead to quality improvements that are not necessarily transmitted into higher productivity. It should also be noted that productivity is not the sole objective of innovation systems, which are more broadly concerned with economic, environmental and social sustainability.

If at farm-level, innovation is not the only way to achieve higher productivity, long-run productivity growth for the sector as a whole requires continuous innovation (OECD, 2011a).[15] At national level, the agricultural sector will experience an increase in productivity if the least productive farms exit the sector, if the most productive farms push out the productivity frontier, or if less productive farms move closer to the productivity frontier.

Estimates of the rates of return to agricultural R&D suggest a very high social value of agricultural R&D. Annual internal rates of return of investments on agricultural R&D estimated in the literature range between 20% and 80% (Alston, 2010). In the United States, the value of the productivity gains is estimated at least ten times higher than the value of the expenditures, regardless of the measurement method or the assumption about the shape and length of the R&D lag distribution, inter-regional or inter-institutional spillovers, or the roles of private R&D or extension (Alston *et al.*, 2010b). In Fuglie (2012) research capacity was found to be the primary constraint on productivity growth, while extension/education capacity was a binding constraint at very low levels of this variable. Once some minimal capacity in extension/education was achieved, it was research capacity that differentiated low TFP growth and high TFP growth countries.

In recent years, innovation systems have responded to the demand articulated by policy-makers, users and society as a whole, and developed and promoted innovations that allow for more sustainable use of resources, such as no-till farming, new crop varieties with

higher yield potential and/or greater resistance to or tolerance of biotic and abiotic stresses, more efficient irrigation, water management systems, sensors for nutrient status in crops, remote sensing and Geographic Information Systems (GIS) to improve and monitor land use, and Short Message Service (SMS) messaging for enhancing advisory services to farmers.

Policies and regulations

Policies and regulations affect agricultural productivity in many ways. They influence directly farmers' choice of product and production methods and willingness and capacity to invest, adopt innovations, and achieve economies of scale. They may also affect farm productivity indirectly through their impact on markets and farm structural change.

Improving agricultural productivity and competitiveness is an important objective of agricultural policy in many countries, but evidence on the link with policy support, and of specific policies, on productivity growth is limited.[16] Most studies reviewed in Latruffe (2010) find a negative correlation between support to agricultural producers and technical efficiency. However, there are varying results regarding the link between support, and productivity and technological change. For example, support may be positively correlated with technological change as extra income might help farmers overcome their credit constraints and invest in new technology, but the relationship with efficiency change is not straightforward (Serra *et al.*, 2008). As discussed above, the link between specific agricultural support policies and farm productivity depends on the type of measure (*e.g.* direct payment or investment support) and the way it is implemented.

Farm structural characteristics

Larger farms are generally found the most productive as they can to some extent achieve economies of scale, benefit from access to output and input markets, and suffer less from hidden unemployment than very small farms (Latruffe, 2010).[17] But there are also diseconomies of scale. Large, specialised farms may be less resilient than smaller family farms less dependent on external labour and capital. However, smaller family farms have les borrowing capacity than their larger counterparts for investment and expansion. No clear relationship is found between technical efficiency and factor intensity indicators, such as capital-labour or land-labour ratios. Regarding the level of indebtedness, some researchers report that this has a positive impact on technical efficiency, suggesting that farmers who are indebted need to meet their repayment obligations and, therefore, are motivated to improve their efficiency. In terms of productivity change, borrowing may help farmers to invest in new technology.[18]

The impact of human capital has been widely investigated. A farmer's age or experience is not clearly related to technical efficiency. Education is generally found to have a positive effect on technical efficiency, but gender is usually not found to affect technical efficiency in developed countries. In developing countries, however, women might have lower access to farm inputs.

Market conditions

There are many two-way links between agricultural productivity and markets with agricultural market conditions affecting productivity in various ways. As Porter (1990) underlines, the presence of sophisticated and demanding buyers is important in creating and sustaining competitive advantage. Strong demand and higher output prices may attract investment in agriculture by high performers,[19] but lower output prices may push

for technical efficiency improvements to remain profitable, as long as credit is available, or lead to the exit of less productive farmers. Input markets are equally important as they will affect the level and mix of input use. When energy, water and fertiliser prices in developed countries fail to account for externalities of their use, this can lead to overuse.

Past investments in agriculture and R&D have resulted in strong productivity gains. These have contributed to the declining trend in agricultural commodity prices, which may have then discouraged investment in agriculture and agricultural research in some countries. This trend has been reversed in recent years and agricultural prices are projected to remain higher than in the past decade as global demand for agricultural commodities is expected to continue to rise (OECD, 2012c). Stronger and more diversified demand comes from population growth – world population is expected to grow from 7 billion in 2011 to 9.1 billion by 2050 -, but also from income growth and the development of non-food markets. Income growth increases the propensity to consume food and to a more diversified diet that includes more meat and higher value-added products. The latter pushes the price of feed crops further up. This reinforces pressure on natural resources as meat production requires more land and water resources than crops. Growth in demand also comes from development of bioenergy and other non-food uses of agricultural production (OECD, 2012a). Higher agricultural prices and opportunities in differentiated markets should foster investments in agriculture in countries with a competitive advantage in the sector, leading to productivity growth.

Natural environment

Differences in performance across farms may be explained by the characteristics of the natural environment in which they operate (*e.g.* climate, soil quality, altitude or slope). They are usually found to have a significant impact on technical efficiency (Latruffe, 2010). For example, high quality soils are associated with high technical efficiency.[20] Climate and climatic events are also important determinants. For example bad weather (heat stress) is found to be the main determinant of the slowing of cereal yields in France (Brisson *et al.*, 2010). They find that genetic progress has not declined, and suggest other agronomic factors may play a role, in particular the decline of legumes in crop rotations.

Resource availability

Differences in the availability of certain resources will affect partial factor productivity. Relative factor availability is a major factor to explain these differences in yield, with land productivity being higher in countries where land is relatively scarce relative to labour, and *vice versa* (Hayami and Ruttan, 1985). This explains largely differences in wheat yields between Western Europe and North America, for similar levels of TFP. The quality of the resource will also matter, *e.g.* soil quality. Water availability is also a major constraint.

2.3. Improving Agricultural Innovation Systems

The case for an Agricultural Innovation Systems approach

Agricultural knowledge systems display a large diversity corresponding to different country contexts. At present, they are in transition from the traditional linear and top-down approach – from research to innovation to adoption – to an innovation systems approach, which is more reactive and interactive, and where agents contribute together to finding innovative solutions, while avoiding duplication of effort. This movement is illustrated in Table 2.4, which displays the main features of various agricultural knowledge systems, from the narrowest to the broadest definition.

Table 2.4. **Defining features in relation with the agricultural innovation systems**

Defining feature	NARS	AKS	AKIS	AIS	NAIS
Actors	Research organisations, agricultural universities, extension service and farmers	Researchers, advisors and educators of Agriculture Knowledge Institutions, under the control of the Ministry of Agriculture	Farmer, research, extension and education	Wide spectrum of actors (research, extension, education, farmers, NGOs, industry, consultants, consumers, etc.)	Economic actors that generate and use knowledge
Outcome	Technology invention and technology transfer	Technology embedded in products	Technology adoption and innovation	Different types of innovation	Different types of innovation
Approach	Using science to create new technologies	Diffuse knowledge and develop new skills	Accessing agricultural knowledge	New uses of knowledge for social and economic change	Using and managing innovation at the national level
Mechanism for innovation	Technology transfers	Knowledge transfer through agricultural extension and education	Knowledge and information exchanges	Interaction an innovation among stakeholders	Interaction among the users
Role of policy	Resource allocation, priority setting	Diffuse knowledge to increase productivity	Linking research, extension and education	Enabling innovation	Foster co-operation between actors and enable a framework for innovation
Nature of capacity strengthening	Strengthening infrastructure and human resources	Teaching farmers new skills	Strengthening communication between actors in rural areas	Strengthening interactions between actors, institutional development and change to support innovation; creating and enabling environment	Strengthening interactions between all economic actors at a national level
Resources	Infrastructure and human resources	Infrastructure and human resources	Interaction platforms, *e.g.* networks	Interaction platforms, *e.g.* networks	Knowledge-based interaction platforms
Degree of market integration	Nil	Low	Medium	High	High

Note: NARS: National Agricultural Research System; AKS: Agricultural Knowledge System; AKIS: Agricultural Knowledge and Innovation System; AIS: Agricultural Innovation System; NAIS: National Agricultural Innovation System.
While this table presents AIS as including more actors than AKIS, the two terms are sometimes used interchangeably to refer to the broader approach.
Source: Adapted from Deschamps, L. in OECD (2012c, Section 6).

The "innovation system" concept embraces not only science suppliers, but involves the interactions of individuals and organisations processing different types of knowledge within particular social, political, policy, economic and institutional contexts (OECD, 1999; World Bank, 2006). The OECD Innovation Strategy (OECD, 2010b), however, recognises that science remains a key driver of innovation. In the agricultural context, while R&D remains an important component of agricultural innovation systems (AIS), and technological progress a major source of productivity growth, there is a growing recognition of the role of other actors – farmers, agricultural training and education, extension services, upstream and downstream industries, consumers, civil society, and information brokers – and of the need to strengthen the inter-linkages within the system (OECD, 2012c).

Moving to an AIS approach would involve improving strategic thinking and interactions between research, training and education, extension services, farmers, the industry, and other actors. Stronger co-ordination would help to focus on priority areas, address the fragmentation of research institutions in some countries, strengthen links between agricultural and other fields of research which increasingly influence agricultural innovation, and facilitate the adoption of multidisciplinary approaches needed to tackle emerging issues. It is also expected to improve the synergy between public and private research, clarify their respective roles, and ensure appropriate funding.

While countries and international organisations generally acknowledge the benefits of moving towards an innovation system approach, and experiences so far have been positive, this move is taking place at a different pace across countries.[21]

Overview of agricultural education, R&D and extension systems

Public **R&D** mainly takes place in research institutes under the ministry in charge of agriculture or in charge of science, technology and innovation, and in universities. Some agriculture-related research is also carried out in agencies attached to other fields, such as environment or health. The role of the ministry in charge of agriculture varies by countries. In some countries, like Canada, France, Denmark and Japan, it defines, co-ordinates, evaluates and funds the agricultural innovation strategy, while in others it executes a strategy defined and managed by the agency in charge of innovation, such as the National Innovation Council in Chile, the National Council of Science and Technology in Mexico, or the Ministry of Science and Innovation in New Zealand, in collaboration with relevant ministries. In other countries, specific agencies under the ministry in charge of agriculture supervise agricultural research and innovation (*e.g.* the Council of Agricultural Sciences at the Ministry of Agriculture in Estonia). In Brazil, the System of Agricultural Research and Innovation organises, co-ordinates and implements research. A semi-autonomous federal agency (public corporation) under the Ministry of Agricultural and Food Supply, Embrapa dominates agricultural R&D (Lopes, M. in OECD, 2012c). In Indonesia, the Agricultural Research Committee does strategic planning, while the Indonesian Agency for Agricultural R&D is in charge of research (Subagyono, K. in OECD, 2012c).

Public funding for agricultural research institutes is often national (federal), while research carried out in universities may be partly or totally funded by regional governments (*e.g.* United States). Public funds generally cover operational costs and basic research, as well as part or all costs of project-based research. Public research institutes also receive funding from other sources, including charitable foundations, user fees, industry contracts, or producer levies. In many countries, public funds are increasingly granted for projects conducted in various types of government and non-government organisation, often with matching funds from other stakeholders, whether through competitive processes or not. Public-Private Partnerships (PPP) usually fund projects with relatively short-terms prospects for marketable results. While in most countries there are funds earmarked for agricultural projects, agriculture competes with general innovation projects for public funding in Chile and New Zealand. Box 2.1 describes several mechanisms used to select, carry out and fund research and innovation projects with multiple partners. Agricultural input industries account for about 45% of total agricultural R&D and are the major source of new crop varieties, crop protection chemicals, and livestock and animal breeds. Private R&D is concentrated in a relatively small number of large multinational firms with global R&D and marketing networks (Fuglie *et al.*, 2011).

Higher education is dominated by public, often regional, universities, which may receive some private funding. In some countries, there are both agricultural universities and agricultural departments in general universities. Public universities are generally under the umbrella of the ministry of education. In France and the Netherlands, higher education agricultural colleges are funded by the ministry in charge of agriculture. In many countries, more applied agricultural education is taking place in public and private, technical schools.

Box 2.1. **Common approaches to financing innovation**

Consortia are formal arrangements that bring together diverse partners around a specific and common problem requiring research investment, jointly define R&D strategies, arrange for financing, and implement the subsequent research-innovation project. Most consortia have a lead organisation, and each partner has a specific role and commits resources. Contributions from a range of actors, including private enterprises, cover various aspects of R&D (demand identification, R&D investment, technology transfer and adoption). Consortia are often funded through competitive grants (which match funds to resources mobilised by partners) for a limited period.

Competitive research grants are a common mechanism for funding basic, strategic, and applied research through competition based on scientific peer review. The aim is to focus scientists' efforts on high-priority research areas or new fields of expertise, improve the relevance and quality of agricultural research, promote research partnerships, and leverage research resources (from the public or private sector). Funds for competitive grant schemes usually come from the public sector and are managed by a public or semi-autonomous organisation.

Matching grants are used for financing near-market technology generation, technology transfer and adoption, or business-related innovation, often by including multiple stakeholders. Matching grants require a financial commitment from the beneficiaries (farmers, entrepreneurs) and therefore may be more effective than competitive research grants to enhance the dissemination and use of knowledge and technology. They are also better suited for funding overall innovation and for activities requiring private sector engagement (*e.g.* PPP). Both competitive research grants and matching grants involve short- to medium-term funding arrangements.

Public-private partnerships (PPPs) between public research and the private sector (*e.g.* producer organisations and the agri-food industry) are used to fund and carry out R&D activities. PPPs involve a contract between the different partners, which defines the purpose and the sharing of costs (*e.g.* funding, risk) and benefits (*e.g.* IPR).

Source: World Bank (2010 and 2012).

Extension systems display a wide diversity across countries or regions. They are generally operating at sub-national level, and include very diverse actors: government agencies, education institutions, upstream and downstream industries, Non-Governmental Organisations (NGOs), consultants and farmers' organisations. They provide an increasing number of services ranging from technical and financial advice to implementation of policy. For example, Produce Foundations in Mexico were established to implement the *Allianza* programme. In the European Union, the Farm Advisory Service was introduced to help farmers implement cross-compliance. It is co-funded at EU and national levels. Table 2.5 identifies four main types of institutions and funding systems, which can co-exist in some countries. Some extension systems are totally financed by public funds and managed by the state, often through regional organisations. There are totally private systems (*e.g.* in the Netherlands or New Zealand) where farmers pay for a service and choose the service provider on a commercial basis. There are mixed systems where services are provided by state institutions and private consultant firms and farmers pay part or the whole cost. Finally, there are systems co-managed by farmers organisations (*e.g.* France and Finland), with funding from the government, farmers organisations and individual farmers (Laurent *et al.*, 2006).

Table 2.5. **Advisory services in OECD countries**

	Main institutions	Source of funds	Countries
State-run	Public organisations at regional and national level	Wholly financed from public funds	Belgium, Italy, Greece, Slovenia, Sweden, Germany's Southern regions, Spain, Portugal, Luxembourg, Japan, United States
Public Private Service	Increasingly provided by private consultant firms	Farmers partly or wholly pay for services; centralised and decentralised	Canada, Ireland, Czech Republic, Poland, Slovak Republic, Hungary, Estonia, Australia, Chile
Farmers Organisations	Farmers' organisations	Membership fees and payments by farmers	Austria, France[1], Denmark, Finland, North-West regions of Germany, Norway
Commercial	Commercial firms or private individuals	Payment through project implementation or grants	England, Netherlands, North-East regions of Germany, New Zealand

1. Advisory services are provided primarily by the Chamber of agriculture, which are public establishments managed by representatives from the sector and funded by an additional tax on undeveloped land (50%), by contracts with different levels of governments and by clients.

Source: Adapted from Laurent *et al.* (2006), using response to OECD questionnaire (*www.oecd.org/agriculture/policies/innovation*).

General trends in Agricultural Innovation Systems institutions

In recent years, many countries have reviewed their agricultural knowledge systems and moved away from supply-driven innovation towards a demand-driven AIS approach, in response to concerns about: lack of adoption of innovation by farmers; the ability of AIS to meet emerging and pressing challenges; budget pressures; and issues related to the acceptance of innovation by consumer and civil society.

Mechanisms to develop a **strategy**, set priorities and co-ordinate agricultural research have been strengthened, and sometimes made more inclusive. In Australia, for example, a National Primary Industries R&D and Extension Framework was defined in 2009 with all stakeholders (National and State governments, CSIRO, Research and Development Corporations, Council of Deans), under the auspices of the Primary Industries Ministerial Council. The Indian Council of Agricultural Research plans, co-ordinates and promotes agricultural innovation. It has established a Directorate of Knowledge Management in Agriculture within the ministry in charge of agriculture to ensure agricultural knowledge access for all. In South Africa, the Agricultural Research Council (ARC) was created in 1990 through the amalgamation of 15 government specialised institutes and in 1992, it was formally separated from the Department of Agriculture (DoA) and established as a publicly owned and funded agency charged with basic research, technology development and technology transfer (OECD, 2006a). At the international level, the Consultative Group on International Agricultural Research (CGIAR) established a number of institutions in 2009, including a Consortium to provide leadership to the CGIAR systems and co-ordinate activities among the 15 member centres and other partners within the framework of the CGIAR Research Programmes (OECD, 2012c, Section 8). The Global Forum for Agricultural Research (GFAR) and the Global Conference on Agricultural Research for Development (GCARD) also play a growing role in international co-operation.

Mechanisms to **monitor and evaluate** national AIS are being developed and implemented. In Australia and Brazil, net returns of R&D agencies are published annually. Independent reviews and evaluation of impacts are being carried out regularly for Embrapa activities in Brazil and on an *ad hoc* basis in Chile and Mexico. In Indonesia, the Assessment Institute for Agricultural Technology (AIAT) assesses research results, monitors implementation and reports feed-back from users. In Japan, the ten-year programme plan

includes targets to facilitate assessment. The Collaborative Working Group on Agricultural Innovation and Knowledge Systems (CWG-AKIS) of the Standing Committee on Agricultural Research (SCAR) has carried out a preliminary analysis of Agricultural Knowledge Systems in a number of European countries (EU-SCAR, 2012). However, lack of data, targets and systematic evaluation of national AIS makes it difficult to compare performances across countries. Research agencies, services and researchers are generally evaluated on a regular basis and discussion is on-going on the criteria used to evaluate them. They are often based on academic merits (*e.g.* number of publication in top journals) and this does not encourage more applied research and development activities, or non-core activities such as information dissemination and networking. The development of project- or output-based research, which is more prone to evaluation, has spread the culture of evaluation in the system.

Institutional changes have generally aimed at increasing **co-ordination** at national level both within the AIS and between the AIS, other related domains and the general innovation system. Some countries have merged or strengthened links between agricultural R&D and higher education institutions. Examples are: Denmark around the Universities; France with mixed technological units at the local level and the Agreenium research consortium which groups agricultural research agencies and agricultural colleges (schools); the Netherlands which merged applied research and university into Wageningen UR; Flanders with the Platform for Agricultural Research founded in 2004; and Turkey with the Agricultural Research Advisory Board which brings together parts of the agricultural ministry, relevant science departments of universities, farmers' organisations ,and Chamber of professional organisation (EU SCAR, 2012).

Agricultural R&D remains mainly funded by public expenditure, while the private sector is increasingly involved in R&D activities that have high potential market returns, such as biotechnology. The public research mandate has been broadened to include environmental, food and other issues, in particular in developed countries, reducing funds available for productivity-oriented research. While primary agriculture used to be the main focus of linear systems of agricultural knowledge systems, more attention is now given to innovation along the food chain and to non-technological innovations, *e.g.* institutional or marketing innovations.

Among mechanisms to fund research, partnerships between public research and the private sector are being developed, including with local industries. To avoid duplication of efforts, mobilise extra funding and better understand users' demands, governments have encouraged public research to engage into **Public-Private Partnerships (PPP)** for specific projects. The cost of research infrastructure (*e.g.* gene sequencing) is increasing and collaboration is attractive to overcome investment constraints. These partnerships have been favoured by a strengthening of Intellectual Property Rights (IPRs), but also by the increasing share of public funds dedicated to "output-driven" projects replacing, to a still limited extent in most cases, funding granted on a permanent basis to research institutions. For example, most public expenditures on agricultural R&D in New Zealand now goes to Primary Growth Partnerships schemes, with 50-50 matching funds from the industry. Government expenditure for these partnerships has tripled between 2010 and 2011 (*OECD PSE/CSE Database*, 2012). In Australia, a significant proportion of government expenditure on rural R&D is conducted through research and development corporations. They were established in 1989 as a co-investment model under which an agricultural industry, and in particular individual farm business, agrees to contribute to

R&D for the long term benefits of the sector. From 2008 to 2009, these R&D corporations spent a total of AUD 470 million on R&D, of which around 45% was matched by public funds. Australian Co-operative Research Centres (CRC) are also partnerships, with particular emphasis on applied research. They account for 6% of government expenditures on agricultural R&D accounted for in the *PSE/CSE Database*. Chile also places a large emphasis on PPP and competitive funding for agricultural R&D. In the Netherlands, Innovation Network aims to develop new ideas and ground-breaking innovations by working on projects with an extensive network of parties (EU SCAR, 2012, Box 5.15). European Technology Platforms provide a platform for stakeholders, led by industry, to define research priorities and action plans on a number of technological areas (EU SCAR, 2012, Box 5.16). European Innovation Partnerships were created in 2010 to act as a framework bringing together major EU activities and policies and covering the whole spectrum from research to market. The European Innovation Partnership on Agricultural Productivity and Sustainability was launched in February 2012 (Chapter 7). The EU SOLINSA project was launched in 2011 to identify barriers to the development of Learning and Innovation Networks for sustainable agriculture (LINSA).[22]

International and cross-country co-operation is also being strengthened. The reform of the CGIAR, in particular the creation of a consortium, aims to strengthen its ability to co-ordinate activities within the 15 member centres and other partners within the framework of the GCIAR Research Programmes (CRPs). In addition, partnerships have become broader, funding has increased, and research agendas are now more results-oriented. A number of networks have recently been created to improve international co-operation, *e.g.* Global Research Alliance on Agricultural Greenhouse Gases and the Knowledge-Based Bio Economy (KBBE) Forum in 2009 (Fallon, K. in OECD, 2012b); and regional co-operation, *e.g.* INNOVAGRO for Latin America in 2011 (Deschamps, L. in OECD, 2012b).

The 2011 G20 Action Plan[23] includes the creation of the International Research Initiative for Wheat Improvement (Wheat Initiative) to improve productivity through R&D. This initiative is mainly science driven and aims to better coordinate international research on wheat genetics, genomics and agronomy related to wheat, both bread and durum wheat. The Action Plan also supports the Tropical Agriculture Platform (TAP), which aims to foster the generation, sharing and utilisation of agricultural technologies and practices for smallholders in developing countries.

The Chair of the G20 Conference on Agricultural Research for Development, held in Montpellier on 12-13 September 2011, recognised that the Global Conference on Agricultural Research for Development (GCARD), which first met in Montpellier in March 2010 at the initiative of the Global Forum for Agricultural Research (GFAR) and the Consultative Group for International Agricultural Research (CGIAR), has a key role to play in developing greater international coherence of agricultural science policies and promoting their implementation. It welcomed the principle of a Global Agricultural Foresight Hub to support the development of a neutral platform, linking international, regional and national levels.[24]

Developments in extension services include a decentralisation of public services and the emergence of private actors (Laurent and Labarthe, 2011). Lesser government involvement in the delivery of **extension** services has permitted the emergence of other intermediaries in this area. Innovation brokers have emerged in some countries. They articulate the demands of farmers for research and help them to access technology, or are

associated with creating linkages in value chains (Hall, A.; Klerkx, L. in OECD, 2012c). In addition, efforts have been made to improve the **sharing of information and knowledge**, using Information and Communication Technology (ICT), *e.g.* the Knowledge Platform for Rural and Marine Affairs in Spain and Agricultural Technology Information Centres in India, described in OECD (2012c, Sections 10 and 11).

At the same time, agricultural education has been neglected in many countries and is less attractive to young people, although there have been exceptions such as France. Insufficient human capital in the sector, and growing disconnection between farmer knowledge and research and extension, often result in lack of adoption of innovation by farmers.

Trends in R&D and extension funding

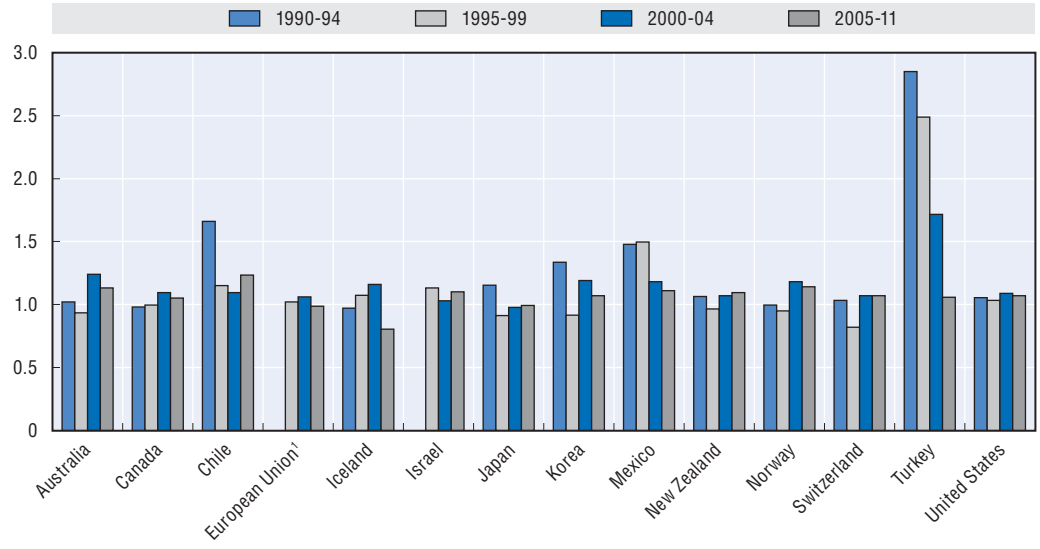
OECD R&D indicators and the *PSE/CSE Database* can help shed light on efforts in agricultural R&D across countries and over time. As measured by R&D indicators,[25] government R&D expenditure on agriculture accounts for above 1% of agricultural GDP in most OECD countries and reaches 4% in the United States. Although government expenditure on agricultural R&D grows slowly in some large OECD countries (0.2% per year in the United States, 0.5% in Japan in the 2000s), or decreases (*e.g.* in Australia), it continues to increase as a percentage of agricultural GDP in most OECD countries (OECD, 2011a). In the *PSE Database*, government expenditures on agricultural R&D only refer to agriculture, and usually exclude forestry and fisheries. In some countries, however, they include parts of expenditures on agricultural statistics. As a result, the two data sources are very difficult to compare. As measured in the *PSE/CSE Database*, government expenditures on agricultural R&D continue to increase in all OECD countries but often at a lower annual growth rate in the second part of the 2000s than in the first part. In two-third of the countries or regions, they are higher in the late 2000s than in the late 1990s (Figure 2.2).

Government expenditures on agricultural R&D in developing countries is generally lower as a percentage of agricultural GDP than in OECD countries, but there is a wide diversity across countries in terms of percentages and their developments (OECD, 2011a). In all low- and middle-income country regions as a whole, public expenditure on agricultural R&D increased from the 1980s, but there are important variations across countries within regions. Public R&D expenditures on agriculture in low-and middle income countries are generally lower as a percentage of agricultural GDP than in OECD countries, and there is wide diversity across countries. In East Asia and the Pacific, China accounted for about two-thirds of total public agricultural R&D spending in the low- and middle-income countries in 2002. China's agricultural research spending accelerated rapidly during the 1981–2007 period, especially since the turn of the millennium (FAO, 2012). In Sub-Saharan Africa, after a decade of stagnation in the 1990s, investment in agricultural research rose more than 20% between 2001 and 2008. However, most of this growth occurred in only a handful of countries (Beintema and Stads, 2011).

In developing countries, funding is often dependent on foreign aid and granted for time-limited projects; this may hamper the development of national R&D institutions and capacity building. However, research in some developed and emerging economies have spill-over effects and technology is being transferred to developing countries. An important challenge is to make research results better adapted to local conditions and to foster the adoption of technologies able to improve productivity growth sustainably in diverse conditions.

Figure 2.2. **Government expenditures on agricultural R&D**

Annual % growth rate, by period, based on USD-PPP 2005



1. EU15 from 1995 to 2003; EU25 from 2004 to 2006; and EU27 from 2007 to 2011. For the European Union, 2000-03 instead of 2000-04; and 2007-11 instead of 2005-11.

Source: OECD, *PSE/CSE Database*, 2012.

StatLink http://dx.doi.org/10.1787/888932653156

While government expenditure is the main source of funding for agricultural R&D, private sector investment has increased but generally focuses on high value and market-oriented production systems. Greater protection of intellectual property, rapid progress in molecular biology and the integration of global output and input markets have generated strong incentives for the private sector to invest in R&D. At the same time, the involvement of private research in natural resource management and in maintaining biodiversity is limited, with the exception of a few public-private partnership initiatives.

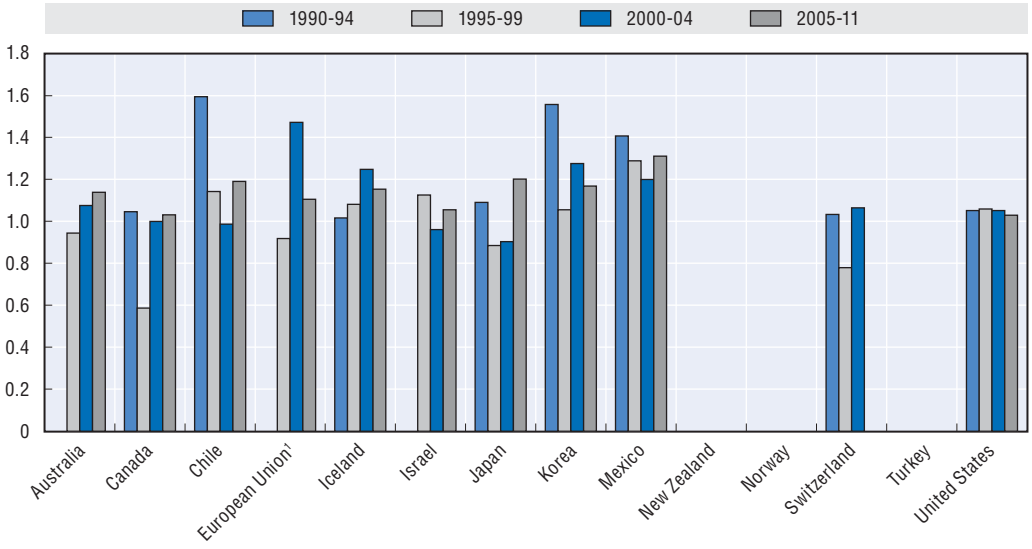
Government expenditures on **extension services** in OECD countries, where they exist, continued to increase at an annual growth rate of 1% or more (USD-PPP 2005). This rate slowed down in the European Union, Iceland, Korea and the United States in the second part of the 2000s compared to the first part, but increased in Australia, Chile, Israel, Japan and Mexico (Figure 2.3). The share of extension expenditures in the total of R&D and extension expenditures varies a lot by country, reflecting differences in government involvement (Figure 2.4). This share has increased in the European Union, Iceland, Japan, Korea and Mexico, remained stable in the United States and decreased in Australia, Chile, Israel, and Switzerland, following reforms of the system or the higher emphasis on R&D, and remained zero in Norway and the Netherlands.

Fostering national Agricultural Innovation Systems

There is no "one size fits all" design for an efficient national AIS, but sharing information on the performance of different systems would provide useful insights. Improvements to the institutional design of national AIS would include strengthening strategic planning and monitoring mechanisms; better integrating all public and private partners; making the system more responsive to users' demand and encouraging co-innovation; improving the collection and sharing of information; strengthening

Figure 2.3. **Government expenditures on extension services**

Annual % growth rate, by period, based on USD-PPP 2005



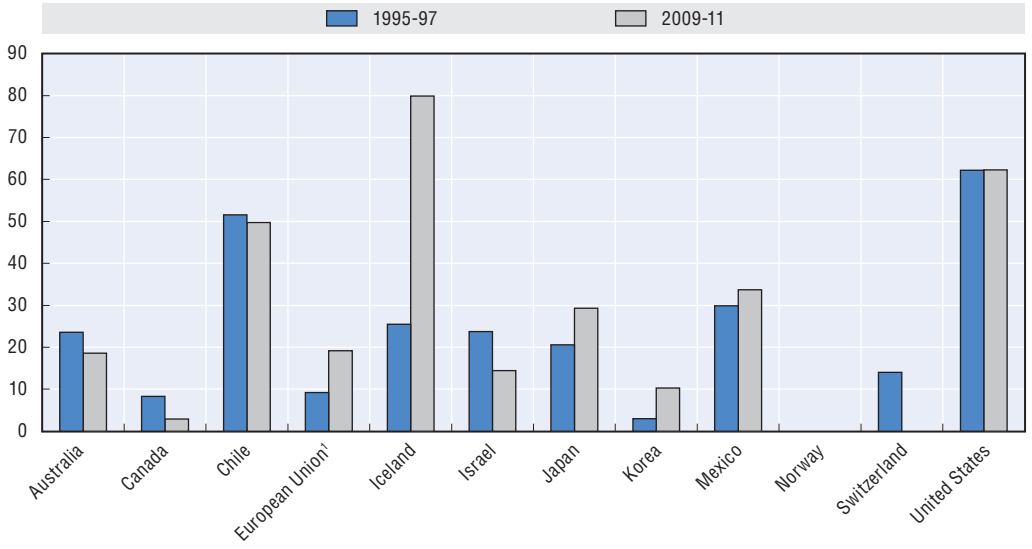
1. EU15 from 1995 to 2003; EU25 from 2004 to 2006; and EU27 from 2007 to 2011. For the European Union, 2000-03 instead of 2000-04; and 2007-11 instead of 2005-11.

Source: OECD, *PSE/CSE Database,* 2012.

StatLink http://dx.doi.org/10.1787/888932653175

Figure 2.4. **Share of government expenditures on extension services**

As a % of total government expenditure on R&D and extension



1. EU15 in 1995-2003; and EU27 in 2009-11.

Source: OECD, *PSE/CSE Database,* 2012.

StatLink http://dx.doi.org/10.1787/888932653194

agricultural education and extension systems; and improving IPR and Sanitary and PhytoSanitary (SPS) regulations. Co-ordination is also needed between the national, regional and international levels, in particular to identify areas with regional or global public good characteristics.

Strengthening strategic planning and monitoring mechanisms

The governance of national AIS can be improved both with better integration within the general innovation strategy, and with stronger co-ordination of the various AIS actors and related policies. This would improve policy coherence, create synergies and avoid duplication of efforts. Better integration in innovation systems is important as agricultural innovation is increasingly linked with innovation in other fields of expertise. It also helps identify priorities in the economy as a whole. AIS in various countries are more or less fragmented, and it is important to have a co-ordination body in place. Whether it is an independent agency, a government body or a department in a ministry, it should involve a wide range of stakeholders and consultations. Clear strategic priorities should be defined to guide public and private investments.

Mechanisms to monitor and evaluate the performance of innovation systems and policies should be strengthened. The evaluation process could start within agencies and be complemented by outside, independent evaluation at regular intervals. As is often the case for specific programmes and projects, strategic plans should to the extent possible include targets and indicators of performance. It is important to improve the information base and analytical capacity required to assess the performance of AIS and identify future needs. Efforts should focus on developing indicators and methods to benchmark AIS performance.[26] The Report of International Organisations for the G20 on sustainable agricultural productivity growth recommends the strengthening of "*efforts at the national, regional and global levels to identify, assess, prioritize, monitor and evaluate investments in Agricultural Innovation Systems and identify the necessary resources to support the Agricultural Science and Technology Indicators (ASTI) initiative to a) collect and maintain a comprehensive database on expenditures on agricultural innovation; b) develop tools and methods to assess the performance and impact of innovation systems.*"

AIS policy should also clarify the respective roles of the public and private sectors and seek to build partnerships. While private research is generally active in areas with short-term and/or large market returns, public resources are expected to focus on areas with strong public good elements and long-term benefits, *e.g.* more fundamental research, research on longer term issues such as climate change, provision of information, and areas where international spillovers are important.[27] A challenge for governments is to find a balance between funds for basic research and funds for output-driven research, and between stable funding and project-based funding. Competitive grants for selecting projects help improve relevance and efficiency.

Improving and sharing information

There is a growing need for information on a widening range of areas, such as weather, climate change, biodiversity, agronomic, environmental and climatic conditions, production practices and innovation, land, water and other input use, markets, economic situation, policies and regulations. Improving agricultural and innovation information systems in terms of coverage, consistency, timeliness and access would help guide 1) decisions by producers regarding the adoption of innovation; 2) policy makers, analysts and more generally AIS in identifying problems and establishing priorities based on evidence and analysis; and 3) AIS in focusing on current and future demands. In addition to national and international statistical agencies, many private and public sources need to be mobilised, *e.g.* input firms, genebanks, or administrative data. The monitoring and evaluation of agencies, policies and projects can also generate useful information.

Information systems should, in particular, facilitate the sharing of information between farmers, industry, policy makers, and other AIS actors. ICT has proven very useful in this regard (web-based databases and advice, market information accessible on cell-phones). "Brokers" of information can play an important role in helping policy makers and AIS actors interpret increasingly complex information. There is also a growing need to share databases and infrastructures for research and experimentation.

Reinforcing linkages within national AIS

Reinforcing linkages between AIS components – research, development, extension, farmers, the industry, NGOs and others – would help connect research to demand; create synergies, and increase the impact of scarce human and financial resources in many countries. Research outcomes would be more adapted to demand if farmers are involved at early stages of problem definition through to contributing to finding solutions. Partnerships would also facilitate pluridisciplinary approaches that are increasingly needed to solve problems.

Policies should enable national and international partnerships, leverage skills and resources, diversify funding, and result in improved products and practices that meet the needs of the entire agri-food system. In all cases, new competencies related to communication, ICT, intellectual property rights, participatory planning, facilitation of partnerships-teamwork would help. Evaluation systems of individual researchers and research team should evolve to encourage partnerships and recognise communication and networking activities needed to work successfully.

"Bridging organisations", such as extension services, farm or trade associations, consultant firms or NGOs can help improve the demand articulation for innovations. However, research partnerships could move from participatory research and use of competitive research grants towards wider alliances and R&D consortia. In a market-oriented context, the strategic focus for institutional partnerships in the research system is expected to shift towards more resource leveraging and research linkages to producer organisations, agricultural input or processing industries, and supermarkets. This takes place usually within the framework of public-private partnerships (PPPs) and in the form of consortia (see below). Various networks also contribute to bring together various AIS actors.

Some governments have moved towards more formal consolidation of AIS institutions, such as merging or the creation of a superstructure or regional associations to strengthen links between research and education, or between different fields of research. Encouraging some specialisation to avoid duplication of efforts, in particular to focus on region-specific issues, should help exploit economies of scale and scope in innovation. The creation of centres of excellence that concentrate available resources, or the creation of issue-driven specialised initiatives, such as on climate change, can help focus energies.

Improving private sector engagement at national level

Private sector engagement in agricultural R&D is broadening to areas with medium to longer-term returns, and its role in mobilising resources, complementing public sector efforts and generating demand-driven outcomes needs to be taken into account in government innovation strategies.

Innovation policies should include incentives for private sector engagement in agricultural R&D. As discussed below, Intellectual Property Rights (IPR) protection plays an

important role in this regards. It should also provide incentives for public research to engage in public-private partnerships, in particular in terms of funding mechanisms, institutions, regulation, capacity-building, and evaluation of research.

Significant efforts in capacity-building are required for effective public-private partnerships to take place with respect to advanced science and technology, complex regulatory systems, sophisticated markets and market infrastructure, and international trade considerations. Reforming innovation institutions and mechanisms may require a re-definition of the relationship between public and private researchers and their "clients". This would be useful in this regards to draw on successful experiences to develop guidelines, in particular concerning the sharing of costs and benefits.

In addition to consortia, competitive grants and matching funds (defined earlier in Box 2.1), more innovative funding mechanisms, such as tax incentives, venture capital, and advance market mechanisms, could be used. Over two-thirds of OECD members and many developing countries have tax incentives for R&D. Available evidence on the effectiveness of R&D tax credits is mixed, but they can be an effective mechanism to overcome market failures resulting in underinvestment in private R&D (Hall and van Reenen, 2000).

Agricultural pull-mechanisms reward successful innovations *ex post*, as compared to push mechanisms which fund potential innovations *ex ante*. Examples of models for pull mechanisms are described in Box 2.2. Pull programmes are financially attractive because no resources are spent until the desired product is developed and approved by regulators. They can be structured so that total expenditure depends on adoption rates that create strong incentives for researchers to select appropriate projects and focus on developing products that farmers will want to use. Pull-mechanisms ought to focus on a specific market failure and development solution, embedded in agricultural innovation systems in terms of regulatory environment.[28]

Box 2.2. **Models for pull mechanisms**

Standard prizes reward achievements in a technology development contest. It can be designed either as a winner-takes-all prize or one that also rewards the runners-up.

Proportional prize structures reward innovations in proportion to their impact. Such mechanisms could offer a fixed per-unit reward that depends on the total benefits achieved, so that the total award is flexible. For instance, a fixed payment per hectare planted in a new seed variety, where the total reward paid out would depend on adoption provides incentives to fund research aimed at improving the variety and adapting it to local conditions.

Advance market commitments (AMCs) offer a public-sector subsidy payment for goods and services that the AMC's intended beneficiaries want to buy. This increases the market size and makes returns more certain for producers. In exchange, the industry commits to providing the product at a sustainable long-term price for an agreed period after public support ends.

Source: World Bank (2012).

Improve the system of intellectual property rights (IPR), where there is need

Protection of intellectual property rights (IPRs) is an important factor influencing the performance of agricultural innovation systems. The challenge for IPR regulations is to

provide incentives for private investment in innovation, without compromising the sharing of knowledge and further innovation. Through adequate IPR protection, rights-holders can exclude competitors from use of an innovation for a limited period of time or, in the case of open innovation approaches, promote access and sharing.

The strengthening of IPR protection in recent decades has also been associated with an increase in private sector investment in agriculture-related research and development and a surge in innovation leading to improved plant varieties, agricultural chemicals, and production technologies (*e.g.* OECD, 2011b). In part due to the incentives provided via IPR, many of these innovations have moved rapidly into commercial use. In some cases, the strengthened IPR regime has led to new collaboration via pooling of intellectual property, as was the case with development of a nutritionally enhanced strain of rice known as golden rice (OECD, 2011h). At the same time, some concerns have emerged with respect to some aspects of the present approaches to IPR protection in agriculture. Fragmented ownership of intellectual property with respect to research inputs (technologies and materials such as genes), may hamper the innovation process or result in industry concentration to consolidate ownership of intellectual property (Blakeney, 2011). The threat of litigation may hamper scientific freedom to operate or may lead to liability for farmers using protected innovations such as biotech crops (Wright and Shih, 2010; McGloughlin, 2012).

Of particular importance for agricultural productivity, the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) provides that patents shall be available – with a few exceptions – in all fields of technology for inventions that are new, non-obvious and useful.[29] An exception concerns plant varieties, which may be excluded and protected via a *sui generis* system such as the one provided under the convention of the International Union for the Protection of New Varieties of Plants (UPOV), or by any combination of those two options. In addition, in some cases, national law and regional or international accords afford IPR protection beyond the TRIPS minimum standards (*e.g.* availability of protection for new plant cultivars via patents and plant variety protection laws).

There are a variety of options available that may improve the system of IPR protection to provide further incentives for private investment in innovation without compromising the sharing of knowledge and further innovation. Some of these issues can be addressed by use of best practices in regulation and innovation policy frameworks such as with respect to collaborative approaches, public-private partnerships, or licensing of genetic inventions (*e.g.* OECD, 2011h and 2006b). The administration of the patent system is also important in terms of delivery of quality patents that provide an appropriate degree of protection (Dons, H. in OECD, 2012c).[30] The sharing of information on genetic resources would facilitate research in this area as well as adoption.

Strengthening public and private extension and advisory services

Extension and advisory services are critical to facilitate farmer access to technology and knowledge. To enhance national extension systems, a strategy would be to establish and strengthen a demand-driven, pluralistic and decentralised advisory service that mixes both public and private providers.

Extension and advisory services need to respond to demands from an increasingly diverse farm population on a wide range of topics. They need to provide a combination of market-oriented services with other services, such as group organisations, access to

technology and knowledge, policy implementation and project design to access private and public funds. In coherence with the AIS approach, the participation of farmers in defining problems and finding solutions would help to improve relevance. A challenge for extension systems is to adapt the service to different types of users and local circumstances. In a competitive system, extension officers also need to build trust with their clients. Attracting well-qualified advisors with diverse and flexible skills is a challenge. Supporting the provision of ICT tools would facilitate access to market, price, policy and weather information needed to guide producer decisions and help offer specific kinds of extension advice.

Making agricultural education and training more attractive and relevant

Revisiting agricultural education and training is required to improve the skills, understanding and innovative capacity of farmers, and to train agricultural specialists, scientists and service providers who can engage with other actors and implement the AIS approach. Making agricultural education attractive to young people is important to foster future productivity growth, but improving the profitability of the sector is essential to attract well-qualified new entrants.

Agricultural universities, faculties of agriculture, vocational and technical colleges, and farmer training centres all play a role in creating human capital needed to strengthen the sector. Aside from technical knowledge (*e.g.* production, processing, agribusiness, biotechnology), graduates require professional skills, such as leadership, communication, facilitation, and organisational capabilities that are crucial for performing in an AIS.

Important reforms include reforming curricula and teaching methods to better match modern labour market needs and building capacity, and stakeholder partnerships for technical education and training. Reinforcing the links between research, education and extension systems would help in this regards, with full participation of all actors in the innovation dynamics.

Management of sanitary and phytosanitary systems

Regulatory issues of particular importance for agricultural innovation include IPR (elaborated below), health and food safety regulations, and bio-safety regulations. Poor choices in regulatory policy settings or inappropriate application of tools may delay scientific advancements, prevent technology transfer and impose crippling transaction costs on organisations.

In developing an appropriate SPS regulatory environment, including implementation provisions, experience has shown that technology neutral, science-based approaches are most effective and least market distorting provided that care is taken to ensure agricultural specificities are taken into account. A variety of innovative approaches can help reduce the regulatory cost burden for governments. These include use of public private partnerships based on "best practices" in the way the SPS regulatory framework is managed, including the interface between private voluntary standards and compulsory compliance regulation. In general, the achievement of regulatory objectives mainly relies on adequate national practices supported by on-going harmonization towards best international practices, with the contribution, if necessary, of well-targeted capacity building in developing countries, including through mechanisms like the Standards and Trade Development Facility (STDF).

In this regard, the "three sisters", OIE (animal health), IPPC (plant health) and CAC (food safety), that are referenced in the WTO SPS agreement play an important role as standard setting organisations and early warning and response mechanisms. In complementing international harmonisation, regional co-operation can be a fruitful way to share practices.

Strengthening co-operation at international level

Fostering sustainable agricultural productivity growth has become an international priority. It has been, in particular, a topic for G20 discussion. AIS at national and international levels are mobilised to tackle the issue, *i.e.* generate innovations that can lead to improvement in productivity growth and sustainability and are adapted to the diversity of farming systems across the globe. International co-ordination of efforts is required to balance costs and benefits of individual countries' contributions. The CGIAR system is well placed to undertake scientific R&D in partnership with national and regional AIS, encompassing a wide range of diverse needs and circumstances. Regional or theme-based networks and fora will also play an important role. It may be useful to identify all these efforts and evaluate their potential contribution.

Good co-ordination with international, regional and national research networks is important for countries to improve the performance of their AIS and to maximise international spill-overs. Enhancing the cross-border technology transfer potential of the international R&D architecture is pivotal to increasing productivity growth and addressing issues that are transnational, such as transboundary diseases, climate change, water scarcity, and price volatility in global markets, or that require investment beyond one country. The Global Research Alliance on Greenhouse Gases, for example, is a low/no cost approach to cross-country collaboration on research that help to address climate change challenges.[31]

Collaboration is increasingly needed in agricultural research, in particular when infrastructure costs are high. Moreover, in some countries with limited research capacity, scarce resources could focus on better taking into account local specificities. Regional initiatives facilitate the transfer of innovations, technologies and practices as the involved countries have more in common (South-South co-operation). Emerging economies are increasingly playing a leading role in this regard.

A prerequisite for better co-ordination would be to facilitate the exchange of information on the state of science and innovation and on-going efforts. Exchanges of experience on the performance of various institutional mechanisms for research and innovation would also help reinforce the global AIS.

Key issues for improving Agricultural Innovation Systems

At a time when agriculture needs to respond to multiple demands and public funding is limited, it is essential for countries to better co-ordinate their research agenda. They should collectively identify areas with global public goods characteristics and global spill-over effects that require international concerted efforts; areas where synergies exist at the regional level; and areas of national or sub-national interest. A better articulation between research and innovation at the international, regional, national and sub-national levels would limit duplication of efforts and ensure that no important area is left behind. The potential for innovation transfer should also be taken into account at all levels when defining priorities.

Revisiting the respective roles of the public and private sectors would also improve the performance of the AIS. Traditionally, public funds are expected to fund research which is not taken up by the private sector. Strengthening the participation of the private sector in agricultural research and innovation is essential to meet future demands. Innovative financing mechanisms are thus needed to provide incentives to engage the private sector in innovation with "public goods" characteristics and long-term benefits (such as climate change), and to ensure a socially-optimal sharing of costs and benefits.

2.4. The policy challenge

Agriculture is a sector where government intervention is pervasive, but the objectives, instruments and resulting support vary by commodity, country and over time. Agricultural policy includes measures that generate direct transfers to producers such as price support, input subsidies and area or income payments, as well as measures for the development of public services, infrastructure and institutions, which benefit farmers indirectly (general services). There is a wide diversity in the level and composition of support across countries (Chapter 1).

Trends in agricultural policies

Policy reform in OECD countries has reduced support levels, and the impact of support on commodity markets (Chapter 1). All other things equal, the relative decoupling of support from current production and input use is expected to have resulted in some extensification and contribute to maintaining in business farmers who would have otherwise left, but it has reduced distortions in the sector, as was intended. More stringent environmental regulations, the granting of payments conditional on the respect of regulations or the adoption of environmentally-friendly production practices (Figure 2.5), and the development of other measures, such as market-based instruments, collective action and technical assistance, have improved the integration of environmental issues in farmers' decision-making since the early 1990s and the environmental performance of agriculture in OECD countries (OECD, 2012e). However, the extent to which this may have affected productivity is not clear. In developing and emerging economies, budgetary support focuses on subsidies to variable inputs and to farm, irrigation, transport and marketing infrastructure.

In the OECD area, the emphasis on general services varies by country, as well as the priorities for government expenditures in this area. Expenditures on infrastructure, in particular for irrigation, are particularly important in Japan, Korea, Israel and Chile (Chapter 1). In emerging economies, investments in infrastructure are key components in most cases.

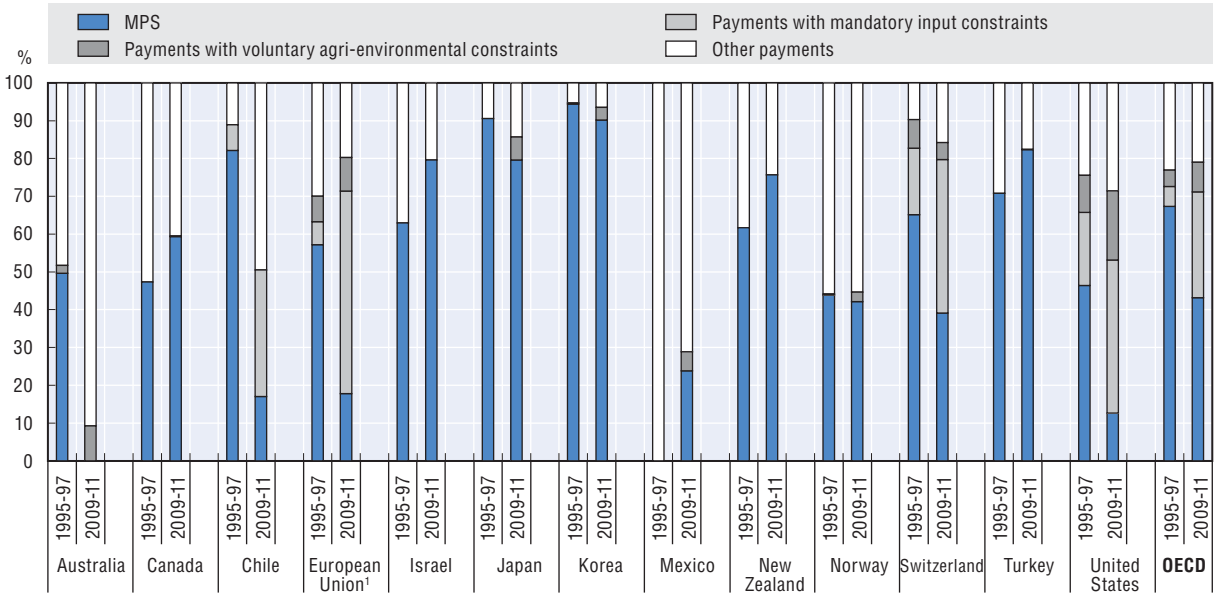
Agricultural policies fostering productivity growth sustainably

The first step to an agricultural policy more conducive to productivity growth and sustainability is to improve understanding and measurement of impacts. Sustainable productivity growth is not the only agricultural policy objective but understanding the impact of various measures will help design a more sustainable productivity-friendly policy mix.

This would involve revisiting policies that hamper productivity growth, innovation, structural change and the functioning of output and input markets, and implementing measures to foster innovation, productivity, sustainability and competitiveness. An important role for the government would be to facilitate the development of **information systems** for producers to make informed choices on the production systems and

Figure 2.5. **Payments with constraints on production practices**

Per cent of total support to producers (PSE)



1. EU15 in 1995-97 and EU27 in 2009-11.

Source: OECD, *PSE/CSE Database,* 2012.

StatLink http://dx.doi.org/10.1787/888932653213

technologies that can achieve highest productivity in a sustainable way in their circumstances. This would require sustaining and improving efforts to collect at the national and international levels, information needed to make evaluation possible.

Improving the agricultural **trade and market environment** to make it conducive to investment in agriculture fostering productivity growth would imply reducing substantially trade and production distorting measures, improving market access, and disciplining export measures. It would also be important to removing impediments to the functioning of **input markets,** including land, labour, credit, fertilisers, pesticide, water and energy, to facilitate access to inputs and structural change. Regulations clarifying property rights on land would facilitate access to credit, and when monetary titles are attributed, it would allow for the development of markets to rent and buy land.[32] Trading of production and payments entitlements would facilitate structural change and economies of scale, leading to higher productivity. Rural development policy that improve **rural and marketing infrastructure**, in particular transport infrastructure, would also facilitate the functioning of input and output markets: it would lower transport costs for purchased inputs and agricultural products, improve access to input and consumer markets and thus increase investment in agriculture needed to foster productivity growth. Among other general services to agriculture, the provision of ICT services is important as it allows better access to information on markets and technologies, among other things.

Once impediments to market functioning are removed and general services provided, **agricultural policy measures** may be considered to address remaining market failures, for example in credit markets, contingency markets, in particular for the management of catastrophic risk, or the remuneration of positive externalities. These measures should avoid hampering the future development of market solutions (OECD, 2002).

Broad-based measures are in most cases unlikely to be effective and efficient in improving productivity growth as the combination of inputs and outputs achieving higher productivity sustainably is likely to depend on local or individual structural, climatic and agronomic circumstances. Governments are therefore encouraged to move away from general income support that prevents competition and slows structural adjustment, and from support that encourages a specific commodity across the board, *i.e.* irrespective of its productivity performance at the local level or the generalised use of a specific input, in favour of specific measures to foster innovation, productivity, sustainability and competitiveness. Targeted income support might, however, help farmers overcome credit constraints and invest in technology, but it may also slow structural adjustment (see for example OECD, 2008; 2011b). Policies that facilitate structural adjustment could be envisaged to facilitate economies of scale, attract new entrants and thus foster productivity growth.

Input subsidies should be temporary and regularly assessed, not to impede the development of private markets (OECD, 2012d). It would be more technology neutral to facilitate access to credit for the purchase of variable inputs as support to a specific input may encourage an input mix that will not necessarily be economically or environmentally sustainable. Similarly, credit support may be useful for farmers to invest in productivity and sustainability enhancing technology in case of identified failure in credit markets.

Effective **risk management** strategies are needed to foster investment in agriculture and facilitate the adoption of innovation. An effective policy framework for producer risk management should give due consideration to the full range of policies that affect farm risk and to the distinction between risks that a farm household can efficiently manage and those that require public support. Effective tools for risk management will be all the more important to ensure investments are made and innovations adopted as agricultural markets are expected to be more volatile in the future.[33] Government policies should take a holistic approach to risk management, assessing all risks and their relationship to each other, and avoiding focussing on a single source of risk such as prices, and should not provide support to deal with "normal" risk. Governments can help farmers to assess and manage risks by providing information and training. Facilitating good "start up" conditions – information, regulation and training – should be the primary role of the government in the development of market-based risk management tools such as futures, insurance and marketing contracts. Agricultural risk management policies should focus on catastrophic risks that are rare but cause significant damage to many farmers at the same time. Contingency plans should define in advance the procedures, responsibilities and limits of the policy response. Subsidised insurance is one way of providing disaster assistance, but it tends to crowd out the development of private insurance markets and has not been successful in preventing additional *ad hoc* assistance being granted after the event (OECD, 2011e, 2011f).

To ensure the long-run **sustainability** of agriculture and the maintenance and enhancement of the underlying natural resource base – soil, water and biodiversity – a range of policy instruments should be employed that clearly target both the positive and negative environmental impacts of agriculture. Education, training and information initiatives, tailored to the specificities of local situations, can be helpful in many cases. Regulations and taxes should be systematically employed to preclude, or strongly discourage, negative environmental impacts (the "polluter pays principle"). Markets, such as the widely discussed carbon emissions and sequestration schemes, should be created where it is practical to do so. Government payments should be introduced where there is a

clear demand for a good or service that is not remunerated by the market and where market creation is not feasible. In designing such payments, it is important to target explicitly the desired outcome to the extent feasible. Policy measures should also help the sector adapt to climate change impacts, to mitigate greenhouse gases from agriculture, or to enhance carbon sequestration. This is, in particular, the case of many agri-environmental policies, such as those encouraging improved manure management to reduce run-off into water courses, adoption of anaerobic digesters, improved grazing land and livestock management, protection of fragile lands and restoration of degraded land, low or no-till systems that reduce soil erosion, afforestation of land for soil protection, flood/drought control or conserving biodiversity, and which can also have benefits in reducing GHG emissions. In addition, R&D on improved crop breeding and animal genetics and feeding systems can help to mitigate emissions and to facilitate adaptation to the impacts of climate changes.

Improving **water management** in agriculture would concern five broad areas of action: 1) create incentives to signal to farmers (and other water users and consumers) the value of water and the cost of pollution; 2) invest in water infrastructure to foster more efficient farming practices and systems; 3) enable innovation to promote improved water management in agriculture; 4) strengthen institutions and governance to support efforts enhancing food and water security; and 5) build resilience to address long-term concerns with food and water security (OECD, 2010a, 2012f).

The challenge for policy makers is to prioritise objectives and find a mix of policy instruments that balances the different aspects of sustainable productivity growth and other objectives in different contexts.

2.5. Strengthening policy coherence

The entire policy and institutional environment affects agricultural productivity, sustainability and efficiency, from macroeconomic, structural, competition and trade policies to innovation, rural development and agricultural policies. Improving policy coherence is essential, in particular between agricultural, agri-food, innovation, trade, aid and development, and rural development policies. Clear strategic orientations for the agri-food sector and agricultural innovation systems (AIS) are needed for investment in the development and implementation of technologies and production systems allowing faster and more sustainable productivity growth and competitiveness. Incentives to improve productivity will yield better results if the economic and regulatory environment is conducive to investment, with clear property rights and enforcement mechanisms, and if marketing and trade channels are competitive. Rural development policies leading to better infrastructure and employment opportunities facilitate the integration of farmers and their family in rural labour markets and consumer markets, and thus foster improved labour and agricultural productivity.

Agricultural policy has various objectives, such as income support or stabilisation, raising productivity and competitiveness, and improving the environmental and social sustainability of agriculture. As the development and implementation of innovation adapted to agricultural challenges takes time, policy makers need to give a longer term perspective on the orientation of agricultural policies to farmers and other AIS actors, to allow for the development of innovations consistent with the objectives of agricultural policies.

Notes

1. The relationships between productivity growth and sustainability, and possible synergies, are discussed in OECD work on Green Growth (OECD, 2011b).
2. *www.g20-g8.com/g8-g20/g20/english/the-2011-summit/declarations-and-reports/g20-cannes-summit-declarations-and-reports.1553.html*.
3. The report was coordinated by the FAO and the OECD, and is a collaborative undertaking by Bioversity, CGIAR Consortium, FAO, IFAD, IFPRI, IICA, OECD, UNCTAD, UN High Level Task Force on the Food Security Crisis, WFP, World Bank, and WTO.
4. The 2012 OECD-FAO Agricultural Commodity Outlook (OECD, 2012a) provides a forward looking assessment of developments in productivity growth, resource use and commodity markets.
5. Fuglie uses data published by FAOSTAT to calculate TFP growth as the difference between output growth and input growth. The aggregate volume of output is Agricultural Gross Production in constant 2004-2006 USD, smoothed over time (see note to Table 2.1). The aggregate volume of inputs is calculated as the average of land, livestock, machinery, fertiliser and feed use, weighted by the shares of these inputs in agricultural production available in the literature.
6. Piesse and Thirtle (2010) note that an absolute increase in productivity translates into a smaller percentage change when initial levels are already high.
7. Annual variations in agricultural production and differences in data and measurement method may explain differences in TFP estimates.
8. Using FAOSTAT data to calculate Malmquist indices, Ludena *et al.* (2007) calculate TFP growth for the crop, ruminant and non-ruminant sectors at the global and regional levels. They decompose TFP changes into technological change and technical efficiency, defined in the following section.
9. Other examples are noted in Latruffe (2010) and summarised in Tables A.2 and A.3 of OECD (2011a).
10. Fuglie (2012) estimates that TFP accounted for three-quarters of global output growth in 2001-09, compared to less than 7% in 1961-70 when it was mainly driven by increases in land and other input use. In OECD exporting countries, growth in output is almost all due to TFP growth, not to higher input use.
11. The 2012 OECD-FAO Agricultural Commodity Outlook report (OECD, 2012a) presents projections of TFP and yields and estimates the impact of a 20% reduction in the yield gap, *i.e.* the difference between potential and actual yields, in developing countries.
12. Depletion of nutrients in soil due to unsustainable farming techniques.
13. Sites where most pollution is likely to come from agriculture.
14. Farmland bird population, however, can also be affected by other factors such as climate change, urban spread and transport infrastructure.
15. Innovation is defined in the Oslo manual as the introduction of new or significantly improved goods or services, or the use of new inputs, processes, organisational or marketing methods (Eurostat-OECD, 2005).
16. There is little empirical evidence of the impact of specific policies and regulations on productivity, but Latruffe (2010) reports a few examples. In addition, most studies estimate correlations rather than causality.
17. Using evidence from the literature on developed and emerging economies, Latruffe (2010) discusses the relationships between farm productivity and a number of farm characteristics: farm size, factor intensity, product specialisation, production and marketing practices, structure of the land, labour and capital (rented/own), and the characteristics of farm labour.
18. The OECD Network for Farm-Level Analysis is investigating the relationships between some farm structural characteristics and productivity indicators.
19. Higher prices also create incentives to raise production by using more inputs. This can lead to higher yields but not necessarily higher TFP, in particular if more marginal land is brought into production.
20. But farms in disadvantaged areas can achieve market competitiveness through low land costs or through lower labour and other input costs.
21. A World Bank report on Agricultural Innovation Systems presents a number of positive experiences in developed and developing countries (World Bank, 2012).

22. *www.solinsa.net/*.

23. Available at *http://agriculture.gouv.fr/IMG/pdf/2011-06-23_-_Action_Plan_-_VFinale.pdf*.

24. The presidency summary can be found at: *www.agropolis.org/news/G20_Conference_ Agriculture Research_Development.php*.

25. Agriculture includes crop, livestock, hunting, forestry and fishing.

26. The Agricultural Science and Technology Indicators (ASTI) initiative compiles and analyses primary data on institutional developments, investments, and capacity trends in agricultural R&D in low- and middle-income countries (www.asti.cgiar.org). OECD R&D indicators include public and private expenditures on R&D, number of staff and patents, but information on the agricultural sector, which follows the same definitions as in the ASTI initiative, is often incomplete.

27. The private sector is, however, increasingly interested in technology transfer in emerging and developing economies.

28. The Agricultural Pull Mechanism Initiative (AGPM), to be launched in 2012 by the G20, convenes experts across a variety of fields and collaborates with a diverse set of stakeholders, including governments, private companies, non-governmental organisations, and civil society organisations. It has developed a short list of potential pilot concepts and has formulated the architecture for the underlying pull mechanisms to overcome some of the constraints for the creation of an innovation that will generate wider social benefits.

29. The TRIPS Agreement covers patents, copyright and related rights, trademarks, undisclosed information (including trade secrets), geographical indications, industrial designs and topographies of integrated circuits.

30. This means that the patents awarded should be clearly defined with a scope in line with the nature of the invention and not overly broad.

31. *www.globalresearchalliance.org*.

32. The Voluntary Guidelines on Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security were adopted in May 2012 by the UN Committee on World Food Security. The report by International organisations for the G20 encourages country-level implementation of these guidelines as a means for strengthening governance on issues related to land tenure, as appropriate.

33. The Policy Report on Price Volatility in Food and Agricultural Markets prepared by International organisations for the 2011 G20 suggests policy responses to tackle this issue. *www.oecd.org/document/20/0,3746,en_2649_37401_48152724_1_1_1_37401,00.html*.

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ANNEX 2.A1

Background material

Table 2.A1.1. **Developments in world crop yields, 1961-2010**

	1961-63	2008-10	1962-70	1970-80	1980-90	1990-2000	2000-10
	Tonnes per hectare		Average of annual percentage growth rate, by decade				
Original time series							
Wheat	1.1	3.0	3.8	2.7	3.0	1.3	0.9
Coarse Grains	1.4	3.5	2.7	2.2	1.7	1.7	1.8
Barley	1.4	2.7	3.6	1.6	2.6	1.0	0.9
Maize	2.0	5.2	2.2	2.6	1.4	1.8	1.6
Rice	1.9	4.4	2.8	1.9	2.6	1.1	1.1
Soybeans	1.1	2.4	3.2	1.3	1.0	1.7	1.5
De-trended time series[1]							
Wheat			3.5	2.5	2.4	1.2	1.1
Coarse Grains			3.1	2.3	1.3	1.7	1.9
Barley			2.9	1.1	1.1	0.8	0.9
Maize			3.0	2.7	1.3	1.8	1.8
Rice			2.1	2.0	2.2	1.2	1.2
Soybeans			3.2	1.6	1.2	1.6	0.9

1. Time series were de-trended using a Hodrick–Prescott filter.
Source: FAOSTAT.

Table 2.A1.2. **Differences in yields across regions, 2008-10**

Tonnes/hectare

	Wheat	Barley	Maize	Rice	Soybeans
Africa	**2.4**	**1.3**	**2.0**	**2.6**	**1.2**
Eastern Africa	2.0	1.5	1.5	2.5	1.1
Middle Africa	1.6	0.7	1.0	0.9	0.6
Northern Africa	2.5	1.2	6.3	9.5	2.9
Southern Africa	2.8	2.6	4.4	2.6	1.9
Western Africa	1.5	2.4	1.8	2.0	1.1
Americas	**2.9**	**3.2**	**7.0**	**5.2**	**2.7**
Northern America	3.0	3.4	9.8	7.7	2.8
Central America	5.1	2.4	3.0	3.8	1.8
South America	2.6	2.7	4.3	4.7	2.6
Asia	**2.9**	**1.7**	**4.5**	**4.4**	**1.4**
Central Asia	1.5	1.3	5.5	3.2	1.8
Eastern Asia	4.7	3.6	5.4	6.5	1.7
Southern Asia	2.6	1.8	2.4	3.5	1.1
South-Eastern Asia	1.9	1.8	3.7	4.1	1.4
Western Asia	2.3	1.6	5.5	6.1	3.4
Europe	**3.8**	**3.4**	**6.1**	**6.1**	**1.7**
Eastern Europe	2.7	2.5	4.6	5.1	1.4
Northern Europe	6.4	4.7	4.9		
Southern Europe	3.4	2.9	7.4	6.6	3.0
Western Europe	7.4	6.3	9.4	5.5	2.7
Oceania	**1.6**	**1.8**	**6.7**	**6.4**	**2.0**
World	**3.0**	**2.7**	**5.2**	**4.4**	**2.4**
Maximum	7.4	6.3	9.8	9.5	3.4
Minimum	1.5	0.7	1.0	0.9	0.6
StD	0.8	0.6	1.2	1.0	0.3

Source: FAOSTAT.

Table 2.A1.3. **Developments in wheat yields in OECD countries and emerging economies, 1961-2010**

Average of annual percentage growth rate, by decade[1]

	1962-1970	1970-1980	1980-1990	1990-2000	2000-2010
Australia	–0.3	0.6	2.4	0.9	–1.4
Canada	4.7	0.1	2.6	1.5	2.1
Chile	2.0	–0.5	3.8	4.0	1.7
European Union[2]	3.6	3.8	2.5	0.8	0.9
Israel	3.6	4.8	5.6	35.4	26.0
Japan	11.5	1.5	2.0	1.5	0.7
Korea	0.9	2.6	1.7	0.4	0.3
Mexico	8.3	3.3	0.7	1.7	1.2
New Zealand	–1.2	2.4	2.8	4.0	3.3
Norway	2.0	2.8	0.2	3.2	–0.3
Switzerland	4.7	2.1	1.7	0.8	–0.3
Turkey	2.9	4.0	1.0	–0.2	1.7
United States	2.2	1.6	2.1	1.3	0.8
Brazil	2.4	1.3	4.4	1.7	3.2
China	7.5	5.9	4.3	2.0	2.2
Russia	. .	. .	. .	. .	2.5
South Africa	4.0	3.2	3.3	4.5	2.4
Ukraine	. .	. .	. .	. .	1.2

1. Time series were de-trended using a Hodrick–Prescott filter.
2. Evolving EU.

Source: FAOSTAT.

Table 2.A1.4. **Developments in maize yields in OECD countries and emerging economies, 1961-2010**

Average of annual percentage growth rate, by decade[1]

	1962-1970	1970-1980	1980-1990	1990-2000	2000-2010
Australia	1.6	2.3	3.3	2.5	0.6
Canada	1.0	1.0	1.3	1.3	2.3
Chile	4.0	1.8	7.2	2.4	1.1
European Union[2]	5.6	3.5	1.5	1.4	1.4
Israel	2.4	4.1	7.4	–0.7	6.3
Japan	0.7	–1.4	0.0	0.4	0.0
Korea	10.9	10.6	2.2	–0.9	1.9
Mexico	1.8	3.0	2.3	2.5	2.7
New Zealand	5.9	1.7	1.2	1.1	0.7
Norway	. .	. .	. .	. .	. .
Switzerland	2.4	2.4	2.0	0.5	0.5
Turkey	2.4	3.8	5.0	1.4	5.3
United States	3.0	2.0	1.4	1.7	1.6
Brazil	0.9	1.6	2.4	3.7	3.3
China	5.7	4.4	3.6	1.4	1.0
Russia	. .	. .	. .	. .	3.6
South Africa	2.9	2.6	–0.3	2.7	6.0
Ukraine	. .	. .	. .	. .	4.3

1. Time series were de-trended using a Hodrick–Prescott filter.
2. Evolving EU.

Source: FAOSTAT.

Table 2.A1.5. **Developments in rice yields in OECD countries and emerging economies, 1961-2010**

Average of annual percentage growth rate, by decade[1]

	1962-1970	1970-1980	1980-1990	1990-2000	2000-2010
Australia	0.5	–1.1	2.4	1.0	0.6
Canada	. .	. .	. .	. .	. .
Chile	..	..	. .	. .	. .
European Union[2]	–0.7	0.8	1.1	1.4	0.4
Israel	. .	. .	. .	. .	. .
Japan	1.5	0.5	0.3	0.5	0.3
Korea	1.9	2.7	0.5	0.4	0.7
Mexico	2.1	2.5	1.8	1.3	0.3
New Zealand	. .	. .	. .	. .	. .
Norway	. .	. .	. .	. .	. .
Switzerland	. .	. .	. .	. .	. .
Turkey	0.9	0.9	0.5	1.4	3.8
United States	2.0	0.5	1.7	1.1	1.2
Brazil	–1.3	0.1	3.2	3.9	3.7
China	3.5	2.9	2.8	1.0	0.5
Russia	. .	. .	. .	. .	4.8
South Africa	. .	. .	. .	. .	. .
Ukraine	. .	. .	. .	. .	4.4

1. Time series were de-trended using a Hodrick–Prescott filter.
2. Evolving EU.

Source: FAOSTAT.

PART II

Country chapters

PART II

Chapter 3

Developments in agricultural support in the OECD area

This chapter contains the information concerning the short and long-term developments of the level and structure of support in the OECD area.

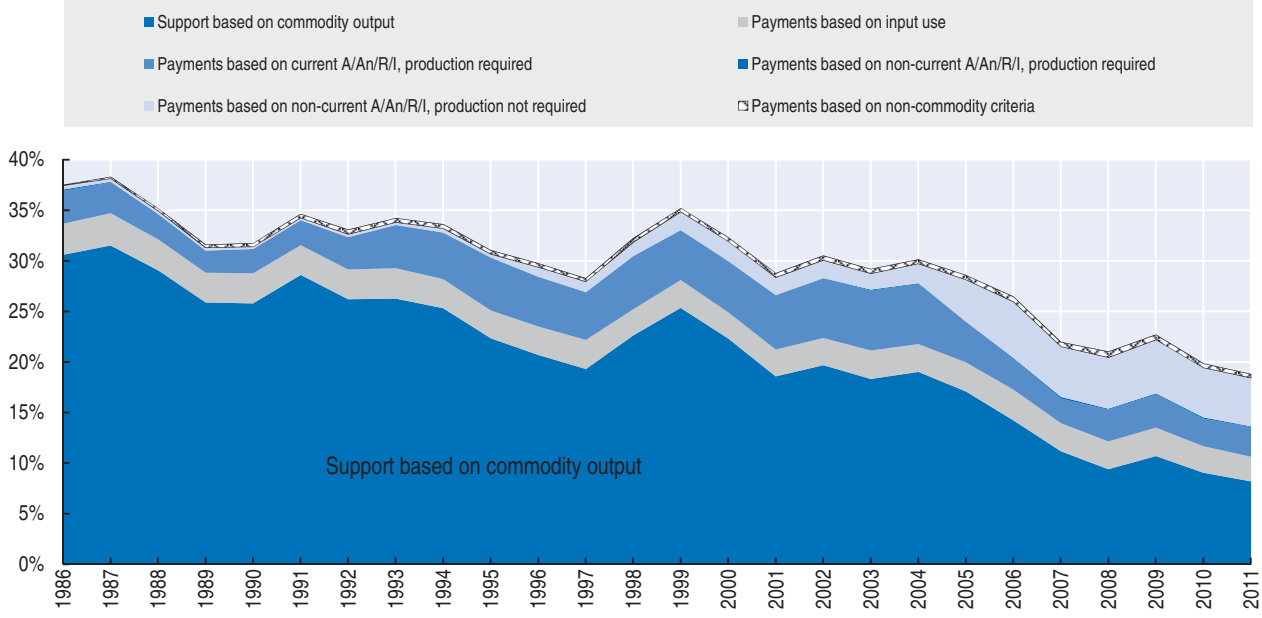
This chapter provides an overview of developments in agricultural support in the OECD area as a whole as measured by the OECD indicators of agricultural support. The main drivers behind the changes in support levels between 2010 and 2011, and a more detailed analysis and evaluation of policy developments and support across OECD countries, are provided in Chapter 1 (Part I) and in the following country chapters.

The level and composition of agricultural support in the OECD area

Support to agriculture in the OECD area, as measured by the %PSE, has been declining continuously: from around 40% at the beginning of the analysed period to around 20% in the most recent years. The way support is delivered to farmers is also evolving and this is captured by the composition of the PSE among the various categories (Figure 3.1).

Figure 3.1. **OECD: Composition of Producer Support Estimate, 1986-2011**

Percentage share in PSE



Source: OECD, *PSE/CSE Database*, 2012.

StatLink http://dx.doi.org/10.1787/888932653232

Over the long term, the main movement across the OECD has been a gradual reduction of support based on commodity output, mainly Market Price Support (MPS). Support based on commodity output, comprising market price support and payments based on output, is considered one of the most production and trade distorting forms of support, together with unconstrained payments based on variable input use. At the other end of the spectrum, there are payments based on parameters that are not linked to current production. Such

payments can be based on non-current area, animal numbers, receipts or income and do not require production in order to receive the payment or are based on non-commodity criteria. These have grown only in most recent years, from a 1% share of the PSE in 1986-88 and 3% in 1995-97 to the second largest category of support representing around one quarter of support in 2009-11. At the same time, the payments based on current areas and animal numbers were reduced. (Figure 3.1, Tables 3.1, 3.2).

Box 3.1. **Use of PSE in evaluating annual changes in agricultural supportfor the OECD area as a whole**

The PSE, the total monetary value for the estimated policy transfers to producers, is expressed in the local currency of each country. It is converted into a common currency (USD, EUR) to allow aggregation into total PSE for the OECD area as a whole. Consequently, the year-on-year variation in the total level of transfers denominated in a common currency will result from both changes in the level of transfers measured in each national currency and exchange rate movements against the currency used for the aggregation.

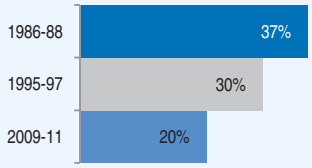
The OECD total value of agricultural policy transfers to producers, as measured by the nominal PSE, increased slightly when expressed in USD – to USD 252 billion in 2011 from USD 241 billion in 2010 (Table 3.1). When expressed in Euros, the OECD total PSE remained almost unchanged – at EUR 182 billion in 2010 and EUR 181.5 billion in 2011 (Table 3.2). How can these varying results expressed in different currencies be interpreted, when the PSE is expressed in different currencies?

Exchange rate developments are the reason for the different movements, and consequently the best way to compare levels of support in the OECD as whole (as in individual countries) is the %PSE, which expresses the value of policy transfers as a share of gross producer receipts. The latter represent the market value of agricultural output to which are added transfers to producers from taxpayers. The %PSE solves the problem of exchange rate choice because the same exchange rates are used to convert both the denominator and the numerator into a single currency. Consequently, the %PSE is the same regardless of the currency used (Tables 3.1 and 3.2). Since the %PSE is a relative measure, it also provides a sense of the importance of policy-induced transfers in the sector and is also appropriate for comparisons among OECD countries and in time (as it eliminates the effect of inflation).

Development of support to agriculture

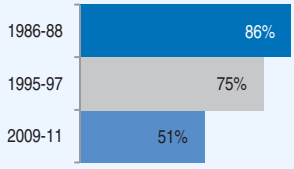
PSE as % of receipts (%PSE)

Support to farmers in the OECD area measured by the %PSE declined from 37% in 1986-88 to 20% in 2009-11. This reduction was mainly driven by reduction in the MPS. In the most recent years the % PSE continued to decline from 23% in 2009 to 20% in 2010 and 19% in 2011.



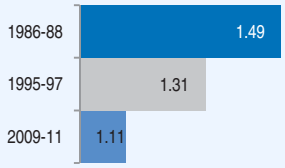
Potentially most distorting support as % of PSE

While the share of potentially most distorting forms of support in the PSE (support based on output and variable input use – without input constraints) has decreased, it still accounts for more than half of total support.



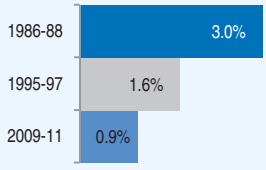
Ratio of producer price to border price (NPC)

The level of price distortions has also been reduced as prices received by farmers in 1986-88 were almost 50% higher than those on world markets (NPC) while prices received in 2009-11 were 11% above the world market prices.

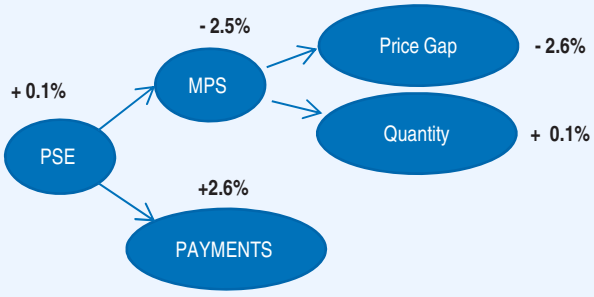


TSE as % of GDP

Total support was 3% of GDP in 1986-88, declining to less than 1% by 2009-11. The share of expenditures on general services (GSSE) to total support (TSE) has increased, from 13% of TSE in 1986-88 to 26% in 2009-11.

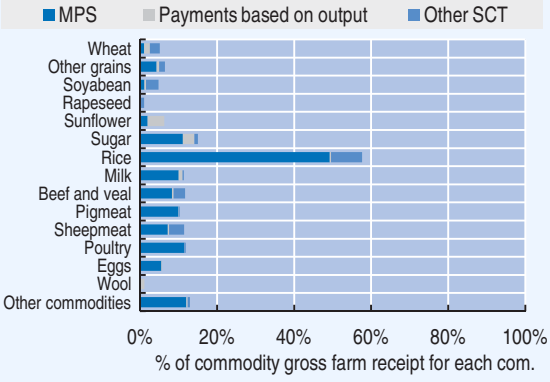


Decomposition of change in PSE, 2010 to 2011



The level of support was almost unchanged in 2011, as the decline in the MPS was offset by increased budgetary payments.

Transfer to specific commodities (SCT), 2009-11



Single commodity transfers (SCT) represented 52% of the PSE in 2009-11 (compared with 88% in 1986-88). The share of the SCT on commodity gross farm receipts was highest for rice at around 60%, for all other commodities it was below 20%.

Table 3.1. **OECD: Estimates of support to agriculture**

USD million

	1986-88[3]	1995-97	2009-11	2009	2010	2011p
Total value of production (at farm gate)	**592 135**	**771 656**	**1 076 744**	**960 112**	**1 077 859**	**1 192 261**
***of which:** share of MPS commodities, percentage*	72	71	66	68	65	65
Total value of consumption (at farm gate)	**559 442**	**758 157**	**1 062 942**	**949 188**	**1 057 020**	**1 182 618**
Producer Support Estimate (PSE)	**239 401**	**253 189**	**247 736**	**249 521**	**241 264**	**252 424**
Support based on commodity output	196 569	177 741	112 536	117 455	109 954	110 199
Market Price Support	183 968	170 707	106 956	112 135	104 931	103 803
Payments based on output	12 601	7 034	5 579	5 320	5 023	6 396
Payments based on input use	20 196	24 049	31 814	31 076	31 724	32 642
Based on variable input use	9 763	11 004	12 637	11 924	12 400	13 586
with input constraints	743	417	479	352	564	521
Based on fixed capital formation	6 869	7 385	10 491	10 678	10 324	10 471
with input constraints	1 235	743	2 158	2 221	2 271	1 980
Based on on-farm services	3 563	5 661	8 686	8 474	8 999	8 585
with input constraints	439	1 056	1 215	1 198	1 204	1 242
Payments based on current A/An/R/I, production required[1]	18 735	41 777	36 066	35 923	33 137	39 138
Based on Receipts / Income	2 052	1 435	4 493	4 476	4 280	4 724
Based on Area planted / Animal numbers	16 683	40 342	31 573	31 447	28 857	34 414
with input constraints	3 719	15 476	23 032	25 046	20 218	23 831
Payments based on non-current A/An/R/I, production required	533	459	1 182	1 030	1 458	1 058
Payments based on non-current A/An/R/I, production not required	2 080	6 626	60 578	58 179	59 543	64 011
With variable payment rates	181	639	286	293	175	389
with commodity exceptions	0	0	171	225	45	242
With fixed payment rates	1 899	5 988	60 292	57 886	59 369	63 623
with commodity exceptions	1 561	4 917	27 542	25 712	27 764	29 151
Payments based on non-commodity criteria	1 077	3 135	5 158	5 355	5 151	4 967
Based on long-term resource retirement	1 076	2 951	3 630	3 991	3 654	3 246
Based on a specific non-commodity output	1	183	1 287	1 100	1 272	1 490
Based on other non-commodity criteria	0	1	240	264	226	231
Miscellaneous payments	211	-599	403	503	297	408
Percentage PSE	**37**	**30**	**20**	**23**	**20**	**19**
Producer NPC	**1.49**	**1.31**	**1.11**	**1.13**	**1.11**	**1.09**
Producer NAC	**1.59**	**1.42**	**1.26**	**1.29**	**1.25**	**1.23**
General Services Support Estimate (GSSE)	**37 045**	**65 518**	**101 606**	**91 489**	**101 825**	**111 504**
Research and development	3 552	5 656	8 283	8 094	8 171	8 583
Agricultural schools	972	1 871	3 005	2 660	3 027	3 328
Inspection services	1 045	1 547	3 570	3 402	3 653	3 654
Infrastructure	10 448	23 191	18 617	18 891	17 391	19 568
Marketing and promotion	13 164	27 442	64 562	54 879	66 078	72 728
Public stockholding	5 872	3 518	849	858	799	890
Miscellaneous	1 994	2 293	2 721	2 705	2 706	2 752
GSSE as a share of TSE (%)	**12.5**	**19.1**	**26.1**	**24.3**	**26.5**	**27.4**
Consumer Support Estimate (CSE)	**-159 908**	**-170 431**	**-84 842**	**-90 558**	**-82 899**	**-81 070**
Transfers to producers from consumers	-169 191	-167 090	-100 724	-107 957	-98 256	-95 958
Other transfers from consumers	-22 225	-30 321	-24 412	-19 254	-25 775	-28 209
Transfers to consumers from taxpayers	19 870	24 759	39 825	36 130	40 522	42 821
Excess feed cost	11 638	2 221	469	523	609	276
Percentage CSE	**-30**	**-23**	**-8**	**-10**	**-8**	**-7**
Consumer NPC	**1.52**	**1.35**	**1.14**	**1.15**	**1.13**	**1.12**
Consumer NAC	**1.42**	**1.30**	**1.09**	**1.11**	**1.09**	**1.08**
Total Support Estimate (TSE)	**296 316**	**343 466**	**389 167**	**377 140**	**383 612**	**406 749**
Transfers from consumers	191 416	197 411	125 136	127 211	124 030	124 167
Transfers from taxpayers	127 126	176 376	288 443	269 184	285 356	310 790
Budget revenues	-22 225	-30 321	-24 412	-19 254	-25 775	-28 209
Percentage TSE (expressed as share of GDP)[2]	**2.97**	**1.63**	**0.95**	**0.96**	**0.93**	**0.95**

Note: p: provisional. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
MPS is net of producer levies and Excess Feed Cost. MPS commodities: see notes to individual tables in Chapter 2.

1. A (area planted), An (animal numbers), R (receipts), I (income).
2. TSE as a share of GDP for 1986-88 for the OECD total excludes the Czech Republic, Estonia, Hungary, Poland and the Slovak Republic as GDP data is not available for this period.
3. The OECD total for 1986-88 includes all countries except Chile, Israel and Slovenia, for which data is not available.

Source: OECD, *PSE/CSE database*, 2012.

StatLink http://dx.doi.org/10.1787/888932654315

Table 3.2. **OECD: Estimates of support to agriculture**

EUR million

	1986-88[3]	1995-97	2009-11	2009	2010	2011p
Total value of production (at farm gate)	**536 394**	**625 221**	**787 448**	**691 089**	**813 831**	**857 425**
***of which:** share of MPS commodities, percentage*	72	71	66	68	65	65
Total value of consumption (at farm gate)	**506 393**	**613 597**	**777 271**	**683 226**	**798 096**	**850 490**
Producer Support Estimate (PSE)	**217 205**	**204 671**	**181 101**	**179 605**	**182 165**	**181 533**
Support based on commodity output	178 267	143 527	82 272	84 544	83 020	79 251
Market Price Support	166 776	137 835	78 198	80 715	79 228	74 651
Payments based on output	11 491	5 692	4 074	3 829	3 792	4 600
Payments based on input use	18 292	19 510	23 265	22 369	23 953	23 475
Based on variable input use	8 863	8 900	9 239	8 583	9 362	9 770
with input constraints	683	334	351	253	426	375
Based on fixed capital formation	6 212	5 974	7 671	7 686	7 795	7 530
with input constraints	1 124	596	1 579	1 599	1 715	1 424
Based on on-farm services	3 217	4 636	6 356	6 100	6 795	6 174
with input constraints	397	869	888	863	909	893
Payments based on current A/An/R/I, production required[1]	17 102	33 765	26 341	25 857	25 020	28 147
Based on Receipts / Income	1 907	1 172	3 284	3 222	3 232	3 397
Based on Area planted / Animal numbers	15 195	32 594	23 058	22 636	21 788	24 749
with input constraints	3 300	12 518	16 811	18 028	15 265	17 138
Payments based on non-current A/An/R/I, production required	505	371	868	742	1 101	761
Payments based on non-current A/An/R/I, production not required	1 900	5 467	44 290	41 877	44 958	46 034
With variable payment rates	161	498	208	211	132	280
with commodity exceptions	0	0	123	162	34	174
With fixed payment rates	1 739	4 969	44 082	41 666	44 826	45 755
with commodity exceptions	1 417	4 099	20 145	18 507	20 963	20 964
Payments based on non-commodity criteria	942	2 526	3 772	3 854	3 889	3 572
Based on long-term resource retirement	941	2 376	2 655	2 872	2 759	2 334
Based on a specific non-commodity output	1	149	941	792	960	1 072
Based on other non-commodity criteria	0	0	175	190	170	166
Miscellaneous payments	198	-495	293	362	225	293
Percentage PSE	**37**	**30**	**20**	**23**	**20**	**19**
Producer NPC	**1.49**	**1.31**	**1.11**	**1.13**	**1.11**	**1.09**
Producer NAC	**1.59**	**1.42**	**1.26**	**1.29**	**1.25**	**1.23**
General Services Support Estimate (GSSE)	**33 556**	**53 023**	**74 308**	**65 854**	**76 882**	**80 189**
Research and development	3 216	4 578	6 056	5 826	6 169	6 173
Agricultural schools	880	1 533	2 198	1 915	2 286	2 393
Inspection services	946	1 261	2 612	2 448	2 758	2 628
Infrastructure	9 409	18 667	13 601	13 598	13 131	14 073
Marketing and promotion	11 959	22 233	47 232	39 502	49 892	52 303
Public stockholding	5 294	2 876	620	617	603	640
Miscellaneous	1 852	1 874	1 990	1 947	2 043	1 979
GSSE as a share of TSE (%)	**12.5**	**19.1**	**26.1**	**24.3**	**26.5**	**27.4**
Consumer Support Estimate (CSE)	**-144 721**	**-137 388**	**-62 026**	**-65 184**	**-62 592**	**-58 302**
Transfers to producers from consumers	-153 315	-134 869	-73 635	-77 707	-74 187	-69 009
Other transfers from consumers	-20 073	-24 392	-17 869	-13 859	-19 461	-20 286
Transfers to consumers from taxpayers	18 024	20 098	29 133	26 007	30 596	30 795
Excess feed cost	10 643	1 774	345	376	460	198
Percentage CSE	**-30**	**-23**	**-8**	**-10**	**-8**	**-7**
Consumer NPC	**1.52**	**1.35**	**1.14**	**1.15**	**1.13**	**1.12**
Consumer NAC	**1.42**	**1.30**	**1.09**	**1.11**	**1.09**	**1.08**
Total Support Estimate (TSE)	**268 786**	**277 792**	**284 542**	**271 466**	**289 643**	**292 517**
Transfers from consumers	173 389	159 261	91 504	91 566	93 648	89 296
Transfers from taxpayers	115 471	142 923	210 907	193 758	215 456	223 508
Budget revenues	-20 073	-24 392	-17 869	-13 859	-19 461	-20 286
Percentage TSE (expressed as share of GDP)[2]	**2.97**	**1.63**	**0.95**	**0.96**	**0.93**	**0.95**

Note: p: provisional. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
MPS is net of producer levies and Excess Feed Cost. MPS commodities: see notes to individual tables in Chapter 2.

1. A (area planted), An (animal numbers), R (receipts), I (income).
2. TSE as a share of GDP for 1986-88 for the OECD total excludes the Czech Republic, Estonia, Hungary, Poland and the Slovak Republic as GDP data is not available for this period.
3. The OECD total for 1986-88 includes all countries except Chile, Israel and Slovenia, for which data is not available.

Source: OECD, *PSE/CSE Database*, 2012

StatLink http://dx.doi.org/10.1787/888932654334

PART II

Chapter 4

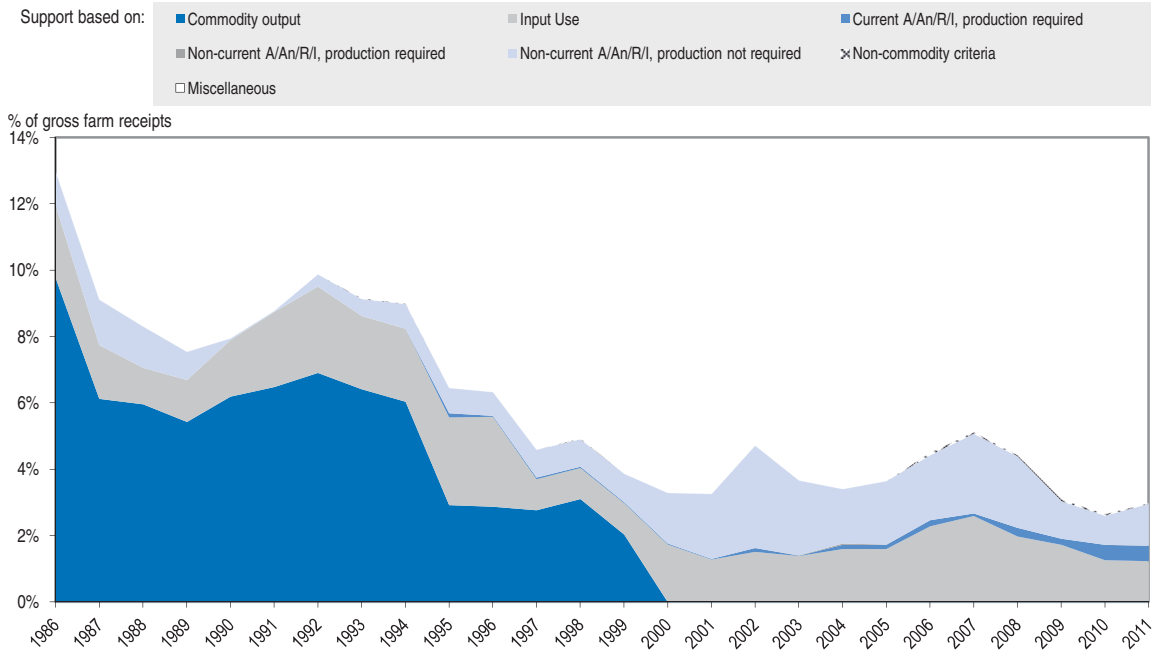
Australia

The Australia country chapter includes a brief evaluation of policy developments and related support to agriculture, contextual information on the framework in which agricultural policies are implemented and the main characteristics of the agricultural sector, an evaluation of support in 2010-11 and in the longer term perspective, and a brief description of the main policy developments in 2011-12.

Evaluation of policy developments

- There has been continuous and significant progress since 1986-88, reducing the level of support and removing the potentially most distorting forms of support. The current level of support is the second lowest in the OECD.
- The remaining support programmes are focused on the management of different production risks in agriculture. This includes Exceptional Circumstances (EC) programmes for droughts, disaster relief for floods, pest and disease control measures and tax concessions for Farm Management Deposits. Expenditure on these programmes by nature fluctuates from year to year. The government responded to peak of EC payments in 2006-08 with a national review of Drought Policy and a pilot drought reform programme.
- There is support to the farming community through general services, including research and development. Industry organisations, financed by a levy system, are also engaged in the design and financing of these activities.
- Recent policy initiatives have tackled the protection of Australia's natural environment under pressure of climate change. "Farming Future" provides farmers tools for a sustainable use of their land, "Caring for our Country" funds the environmental management of natural resources and the water trading system allows the transfer of scarce water resources. The overall challenge is to improve the economic viability of farms while ensuring a sustainable use of scarce resources, in particular, water.

Figure 4.1. **Australia: PSE level and composition by support categories, 1986-2011**



Source: OECD, *PSE/CSE Database*, 2012.

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Contextual information

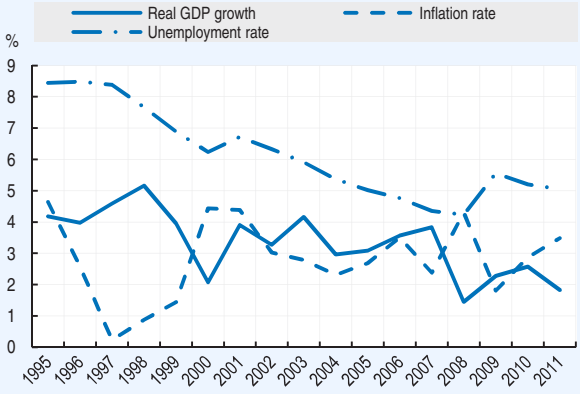
Australia is the world's 13th largest economy. It has a high GPD per capita and relatively low unemployment rates. Australia is the sixth largest country by land area. However, it has the oldest and least fertile soils – the largest share of total land constitutes desert or semi-arid land commonly known as the "outback". Nevertheless, Australia is an important producer and exporter of agricultural products such as beef and wheat, and maintains a consistently positive and sizeable agro-food trade balance. Lack of water is a principal limiting factor in Australia, and the share of agriculture in water consumption is high.

Table 4.1. **Australia: Contextual indicators, 1995, 2010***

	1995	2010*
Economic context		
GDP (USD billion)	394	1 528
Population (million)	18	22
Land area (thousand km^2)	7 682	7 682
Population density (habitants/km^2)	2	3
GDP per capita, PPP (USD)	22 113	40 719
Trade as % of GDP	14.0	15.5
Agriculture in the economy		
Agriculture in GDP (%)	3.6	2.3
Agriculture share in employment (%)	4.7	3.2
Agro-food exports (% of total exports)	18.8	12.2
Agro-food imports (% of total imports)	4.7	4.9
Characteristics of the agricultural sector		
Agro-food trade balance (USD million)	7 297	16 438
Crop in total agricultural production (%)	54	52
Livestock in total agricultural production (%)	46	48
Agricultural area (AA) (thousand ha)	463 348	409 029
Share of arable land in AA (%)	9	12
Share of irrigated land in AA (%)	. .	1
Share of agriculture in water consumption (%)	67	65
Nitrogen Balance, Kg/ha	15	14

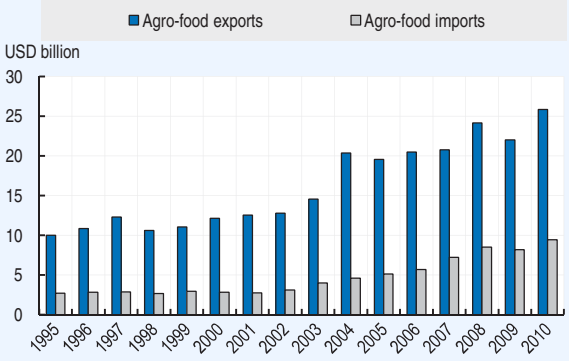
* or latest available year.
Source: OECD, Statistical Databases, World Development Indicators and national data.
StatLink http://dx.doi.org/10.1787/888932654049

Figure 4.2. **Australia: Main macroeconomic indicators, 1995-2011**



Source: OECD, Statistical Databases
StatLink http://dx.doi.org/10.1787/888932653270

Figure 4.3. **Australia: Agro-food trade, 1995-2010**



Source: International Trade by Commodity Statistics (ITCS) Database.
StatLink http://dx.doi.org/10.1787/888932653289

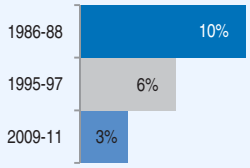
Note: Detailed definitions of contextual indicators and their sources are provided in the Annex II.A1.

Development of support to agriculture

Support to producers in Australia has been reduced from already relatively low levels in 1986-88 to the point that it is now the second lowest in OECD. Support slightly rebounded to 5% of gross farm receipts in 2006-08 due to a peak in expenditure on drought policy, but it is currently down to 3%. The moderate increase in support registered in 2011 is due to increased levels of tax revenue foregone on the Farm Management Deposits scheme resulting from improved production circumstances and to disaster relief in response to floods in eastern Australia.

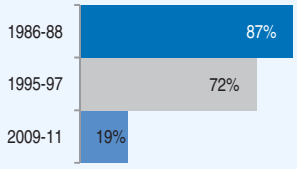
PSE as % of receipts (%PSE)

Support to farmers as measured by the %PSE declined from 10% in 1986-88 to 3% in 2009-11, largely below the OECD average of 20%. Most of the decline in recent years is due to reduced payments under the Exceptional Circumstances Relief Program and the Exceptional Circumstances Interest Rate Subsidy.



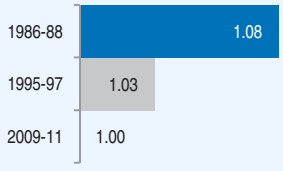
Potentially most distorting support as % of PSE

The share of potentially most distorting support (based on output and variable input use – without input constraints) has decreased significantly, and accounts for 19% of the PSE in 2009-11. This share is currently dominated by the Exceptional Circumstances Interest Rate Subsidy. Market price support is zero.



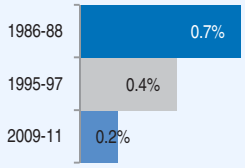
Ratio of producer price to border price (NPC)

Prices received by farmers in 1986-88 were 8% higher than what they would have received on the basis of world prices, compared to parity with world prices in 2009-11.

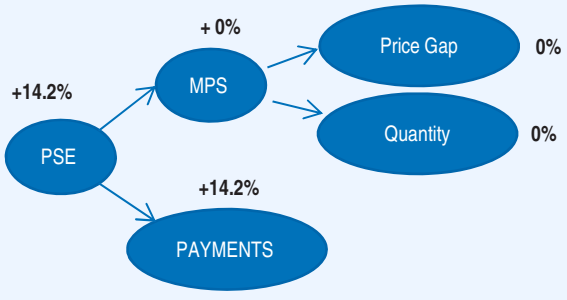


TSE as % of GDP

Total support was 0.7% of GDP in 1986-88, declining to 0.2% by 2009-11. The share of expenditures on general services (GSSE) to total support (TSE) has increased, from 6% of TSE in 1986-88 to 40% in 2009-11, well above the OECD average of 26%.

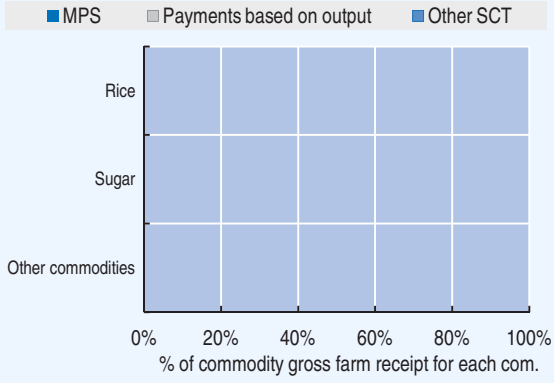


Decomposition of change in PSE, 2010 to 2011



The level of support increased in 2011 due to increases in flood disaster payments and tax expenditure on Farm Management Deposits.

Transfer to specific commodities (SCT), 2009-11



Single commodity transfers (SCT) is zero.

Table 4.2. **Australia: Estimates of support to agriculture**

AUD million

	1986-88	1995-97	2009-11	2009	2010	2011p
Total value of production (at farm gate)	**19 888**	**28 441**	**45 667**	**39 697**	**48 330**	**48 974**
of which: *share of MPS commodities, percentage*	86	75	74	71	74	75
Total value of consumption (at farm gate)	**7 364**	**11 644**	**20 147**	**19 487**	**20 636**	**20 317**
Producer Support Estimate (PSE)	**2 026**	**1 697**	**1 361**	**1 268**	**1 315**	**1 502**
Support based on commodity output	1 452	837	0	0	0	0
Market Price Support	1 452	837	0	0	0	0
Payments based on output	0	0	0	0	0	0
Payments based on input use	324	614	652	708	625	623
Based on variable input use	306	376	267	305	248	248
with input constraints	0	0	0	0	0	0
Based on fixed capital formation	5	33	109	112	108	108
with input constraints	0	0	0	0	0	0
Based on on-farm services	13	205	275	290	269	267
with input constraints	0	0	0	0	0	0
Payments based on current A/An/R/I, production required[1]	0	19	181	76	234	234
Based on Receipts / Income	0	19	181	76	234	234
Based on Area planted / Animal numbers	0	0	0	0	0	0
with input constraints	0	0	0	0	0	0
Payments based on non-current A/An/R/I, production required	0	0	0	0	0	0
Payments based on non-current A/An/R/I, production not required	250	227	509	460	433	636
With variable payment rates	250	137	210	101	162	367
with commodity exceptions	0	0	97	25	30	235
With fixed payment rates	0	90	299	358	270	268
with commodity exceptions	0	0	0	0	0	0
Payments based on non-commodity criteria	0	1	19	24	24	10
Based on long-term resource retirement	0	0	19	24	24	10
Based on a specific non-commodity output	0	0	0	0	0	0
Based on other non-commodity criteria	0	1	0	0	0	0
Miscellaneous payments	0	0	0	0	0	0
Percentage PSE	**10**	**6**	**3**	**3**	**3**	**3**
Producer NPC	**1.08**	**1.03**	**1.00**	**1.00**	**1.00**	**1.00**
Producer NAC	**1.11**	**1.06**	**1.03**	**1.03**	**1.03**	**1.03**
General Services Support Estimate (GSSE)	**132**	**511**	**846**	**882**	**832**	**825**
Research and development	132	385	604	632	592	586
Agricultural schools	0	0	5	5	5	5
Inspection services	0	26	97	98	97	95
Infrastructure	0	72	131	136	127	130
Marketing and promotion	0	27	9	10	11	8
Public stockholding	0	0	0	0	0	0
Miscellaneous	0	0	0	0	0	0
GSSE as a share of TSE (%)	**6.2**	**23.6**	**40.2**	**46.4**	**38.7**	**35.5**
Consumer Support Estimate (CSE)	**-848**	**-386**	**-83**	**-248**	**0**	**0**
Transfers to producers from consumers	-848	-386	0	0	0	0
Other transfers from consumers	0	0	0	0	0	0
Transfers to consumers from taxpayers	0	0	-83	-248	0	0
Excess feed cost	0	0	0	0	0	0
Percentage CSE	**-12**	**-3**	**0**	**-1**	**0**	**0**
Consumer NPC	**1.13**	**1.03**	**1.00**	**1.00**	**1.00**	**1.00**
Consumer NAC	**1.13**	**1.03**	**1.00**	**1.01**	**1.00**	**1.00**
Total Support Estimate (TSE)	**2 159**	**2 207**	**2 125**	**1 901**	**2 147**	**2 327**
Transfers from consumers	848	386	0	0	0	0
Transfers from taxpayers	1 311	1 821	2 125	1 901	2 147	2 327
Budget revenues	0	0	0	0	0	0
Percentage TSE (expressed as share of GDP)	**0.67**	**0.40**	**0.15**	**0.15**	**0.15**	**0.16**
GDP deflator 1986-1988=100	**100**	**134**	**211**	**199**	**211**	**223**

Note: p: provisional. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
MPS commodities for Australia are: wheat, other grains, rice, oilseeds, sugar, cotton, milk, beef and veal, sheepmeat, wool, pigmeat, poultry and eggs. Market Price Support is net of producer levies and Excess Feed Cost.
1. A (area planted), An (animal numbers), R (receipts), I (income).
Source: OECD, *PSE/CSE Database,* 2012.

StatLink http://dx.doi.org/10.1787/888932654353

Description of policy developments

Main policy instruments

The agriculture sector in Australia is market oriented with domestic and international prices closely aligned. There is no market price support for commodities. Agricultural support is mainly provided by budget-financed programmes as well as through regulatory arrangements and tax concessions. Budget-financed programmes are mainly used for structural adjustment and for natural resources and environmental management. Australia's *Farming Future* is the Australian Government's climate change initiative for primary industries. It provides funding over a period of four years (July 2008 to June 2012) to help primary producers adapt and respond to climate change. As of July 2012, Australia's Farming Future will be replaced by elements of the Australian Government's *Clean Energy Futures Plan*.

Australia is the driest inhabited continent and water management in agriculture is crucial given the high share of this sector in water consumption. Tax provisions allow landholders to claim accelerated depreciation for investments relating to land and water conservation. Australia has a nationwide water entitlement and trading system that aids the transfer of scarce water resources to the most productive uses.

Expenditure on research and development is financed largely by funds collected through industry levies, supplemented by funding from the Federal budget. In particular circumstances (*e.g.* droughts and floods), federal and state governments provide a range of assistance measures. This is the case of the *National Drought Policy* (a federal Exceptional Circumstances programme), and specific *ad hoc* programmes from state governments, for instance, in response to 2011 floods.

Pursuing trade liberalisation is a main priority for Australia. In addition to engaging in the multilateral approach in the WTO, Australia has concluded, and is negotiating, a number of bilateral and regional free trade agreements. The government's highest regional trade negotiation priority is the conclusion of the *Trans-Pacific Partnership Agreement (TPP)*.

Domestic policy developments in 2011-2012

The Australian governments priorities continue to focus on helping the industry adapt and adjust to the impact of climate change and maintain productivity. Major initiatives are also in place to protect Australia's natural environment.

The Australian Government conducted a comprehensive *National Review of Drought Policy* in 2009. The review included investigations of the climatic, economic and social aspects of drought and drought assistance in Australia. As a result, the Australian Government, in partnership with the Western Australian Government, is conducting a pilot of drought reform measures in part of Western Australia. The pilot was originally in place from 1 July 2010 to 30 June 2011 but on 10 May 2011 the government announced that the pilot has been extended for 12 months and is being conducted from 1 July 2010 to 30 June 2012.

Australian commodity production has been affected by a series of localised weather events since mid-November 2010. The flooding experienced in eastern Australia in 2011 caused a reduction in Australian agricultural production of AUD 1 billion (USD 1 billion) in 2010-11, with significant impacts on production of fruit and vegetables, cotton, grain sorghum and some winter crops. The largest losses were in cotton (about AUD 150 million) and fruits and vegetables (about AUD 225 million). The impact on livestock was relatively small in relation to the national herd and flock. Disruptions to transport, preventing milk collection, and damage to infrastructure, including

feed stores, were the main effects on livestock industries. Losses from floods do not qualify for Exceptional Circumstances programme that require downturn on farm income be prolonged beyond twelve months. The state governments of Queensland, Tasmania and Victoria implemented specific flood assistance schemes to assist primary producers. Within these programmes, grants were available to assist producers to pay for costs arising from damage caused by flooding. For example, the Queensland Government provided producers with assistance to cover costs associated with cleaning and restoration activities including: purchasing, hiring or leasing plant, equipment or materials to clean-up or resume business activities; clearing or disposing of debris and damaged goods; and paying additional wages to an employee to assist with the clean-up and restoration work.

Australia's primary industries face big challenges in a changing climate with a broad range of impacts. There may be physical impacts (*e.g.* changing rainfall patterns), social impacts (*e.g.* changes to farm business structures and community demographics) and economic impacts (*e.g.* changing productivity levels and markets). The objective of Australia's *Farming Future* is to equip primary producers to adapt and adjust to climate change. The initiative comprises: *The Climate Change Research Program* for research projects, *FarmReady* to help industry and primary producers develop skills and strategies to deal with climate change, *Climate Change Adjustment Program* that assists farmers in financial difficulty, Transitional income support, and Community Networks and Capacity Building activities.

In 2009 the Government began implementing *Caring for our Country*, a suite of programmes which funds environmental management of Australia's natural resources. It supports communities, farmers and other land managers to protect Australia's natural environment, and sustainably produce food and fibre. *Caring for our Country* replaced or incorporated the *National Heritage Trust programs* which included Landcare, Bushcare and Rivercare. Caring for our Country focuses on six priority areas: Northern and Remote Australia; Community Skills, Knowledge and Engagement; National Reserve System – a nationwide network of reserves; Biodiversity and Natural Icons; Coastal Environments and Critical Aquatic Habitats including water quality (and quantity); and Sustainable Farm Practices.

Trade Policy developments in 2011-2012

Additionally to its commitment to multilateral trade liberalization through WTO, Australia has comprehensive FTAs in force with ***New Zealand*** (1983), ***Singapore*** (2003), the ***United States*** (2005), ***Thailand*** (2005), ***Chile*** (2009) and jointly with New Zealand and ASEAN (AANZFTA) (2010). A separate bilateral agreement building on AANZFTA has recently been signed with ***Malaysia.*** An agreement aimed at building on AANZFTA is being negotiated with ***Indonesia***. In November 2010, Australia and Indonesia agreed to start the negotiation of an Indonesia-Australia Comprehensive Economic Partnership Agreement, but the timing of the first round of negotiations is yet to be determined. Further bilateral FTAs are currently under negotiation with ***China***, ***Japan***, ***Korea***, and the ***Gulf Cooperation Council***. After a joint feasibility study the launch of negotiations for a comprehensive free trade agreement between Australia and ***India*** was agreed in May 2011.

The government's highest regional trade negotiation priority is the conclusion of the *Trans-Pacific Partnership Agreement* (TPP). This agreement will build on the Trans-Pacific Strategic Economic Partnership Agreement (P4) between ***Brunei Darussalam***, ***Chile***, ***New Zealand*** and ***Singapore***, which entered into force in 2006. The TPP includes the P4 Parties as well as Australia, ***Peru***, the ***USA***, ***Vietnam*** and ***Malaysia***. There are discussions on the possibility of ***Canada, Japan*** and ***Mexico*** also joining these negotiations.

The WTO dispute concerning measures imposed by Australia on the importation of apples from ***New Zealand*** that began in 2007 arrived to an end in 2011. In September Australia reported that it had adopted the measures necessary to comply with the recommendations and rulings of the Dispute Settlement Body and that imports of New Zealand apples into Australia had commenced as of 19 August 2011. In March 2012 ***Ukraine*** requested WTO consultations with Australia concerning Certain Measures Concerning Trademarks and Other Plain Packaging Requirements Applicable to Tobacco Products and Packaging.

PART II

Chapter 5

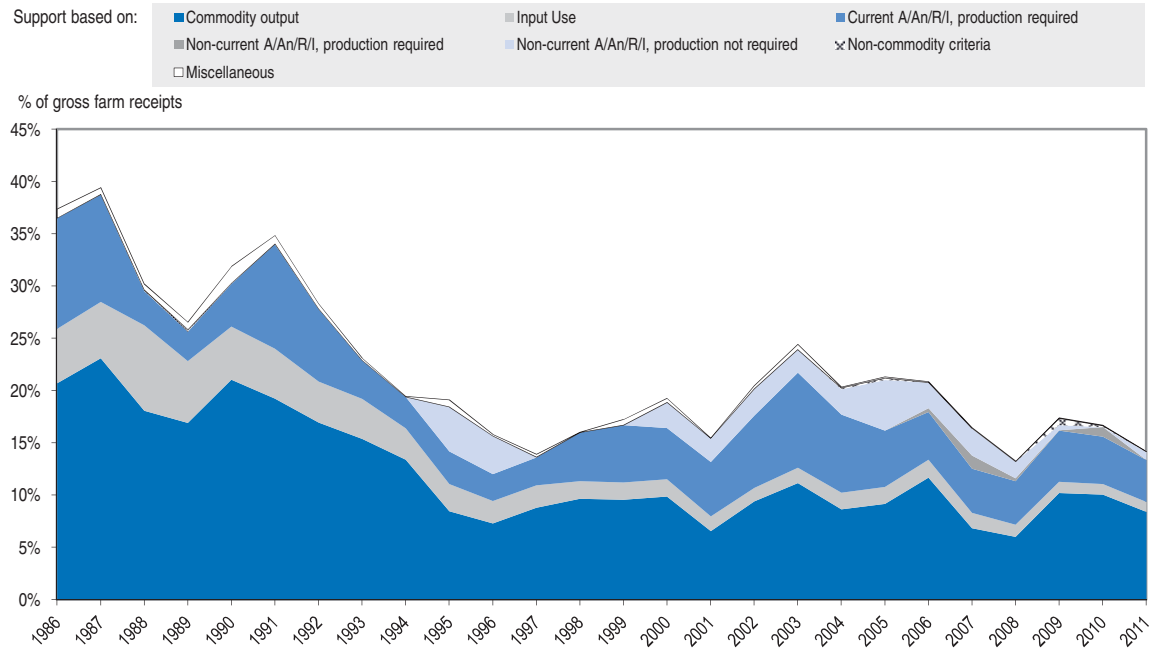
Canada

The Canada country chapter includes a brief evaluation of policy developments and related support to agriculture, contextual information on the framework in which agricultural policies are implemented and the main characteristics of the agricultural sector, an evaluation of support in 2010-11 and in the longer term perspective, and a brief description of the main policy developments in 2011-12.

Box 5.1. **Evaluation of policy developments**

- Overall, producer support has significantly decreased since 1986-88 and the majority of agricultural markets are competitive. Approaches to support policies have become firmly established, and most reforms in the past decade have involved fine-tuning existing programmes.
- The dairy, poultry and egg sectors continue to receive high price support, distorting production and trade and establishing high rents capitalised in the quotas required to produce under the supply-management system. Increasing the amount of quota available would improve market orientation and reduce these rents, which currently act as a barrier to entry into supply-managed sectors.
- Budgetary policies have become tightly focused on risk management for farm operations, resulting in several programmes with overlapping mandates and impacts. Programmes responding to disasters on an *ad-hoc* basis have become institutionalised in the current framework. However, the implementation of *ad-hoc* programmes should be governed by a clear set of ex-ante principles that mitigate potential pressure for their use in situations that could better be handled by existing programmes.
- The recent decision to remove the monopoly of the Canadian Wheat Board on marketing wheat and barley in western Canada, both for domestic use and export, is a positive step to enhance proactive price risk management by farmers.

Figure 5.1. **Canada: PSE level and composition by support categories, 1986-2011**



Source: OECD *PSE/CSE Database* 2012.

StatLink http://dx.doi.org/10.1787/888932653308

Contextual information

Canada is a large country with a small population relative to its area. Canada is ranked 7th in the OECD in GDP per capita. Inflation was 2.8% in 2011 and unemployment was 7.4%. Agriculture remains an important part of the economy regionally, but overall primary agriculture represents less than 2% of GDP. Canada is a net exporter of agricultural products and agriculture exports are important, accounting for 9 % of exports. Canada is the third largest exporter of wheat, behind the United States and Australia. More than half of Canadian agricultural exports are destined for the United States; market access is a significant issue for the sector. The typical farm in the western prairies is twice the national average, highly productive and produces largely for export markets. Most milk production is located in Eastern Canada, which has relatively smaller farm sizes and a larger variety of crops, including fruits, vegetables, and tobacco. The red meat industries (*i.e.* hog and beef cattle) maintain a significant presence across Canada, especially in Western Canada, Ontario and Quebec.

Table 5.1. **Canada: Contextual indicators, 1995, 2010***

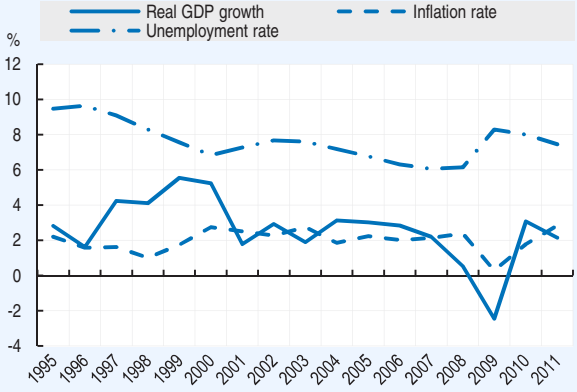
	1995	2010*
Economic context		
GDP (USD billion)	590	1 725
Population (million)	29	34
Land area (thousand km^2)	9 094	9 094
Population density (habitants/km^2)	3	3
GDP per capita, PPP (USD)	22 737	39 070
Trade as % of GDP	30.1	24.7
Agriculture in the economy		
Agriculture in GDP (%)	2.9	1.7
Agriculture share in employment (%)	3.8	2.1
Agro-food exports (% of total exports)	7.1	9.1
Agro-food imports (% of total imports)	5.6	7.0
Characteristics of the agricultural sector		
Agro-food trade balance (USD million)	3 649	7 516
Crop in total agricultural production (%)	51	55
Livestock in total agricultural production (%)	49	45
Agricultural area (AA) (thousand ha)	67 994	67 600
Share of arable land in AA (%)	67	67
Share of irrigated land in AA (%)	. .	2
Share of agriculture in water consumption (%)	10	6
Nitrogen Balance, Kg/ha	18	24

* or latest available year.

Source: OECD, Statistical Databases, World Development Indicators and national data.

StatLink http://dx.doi.org/10.1787/888932654068

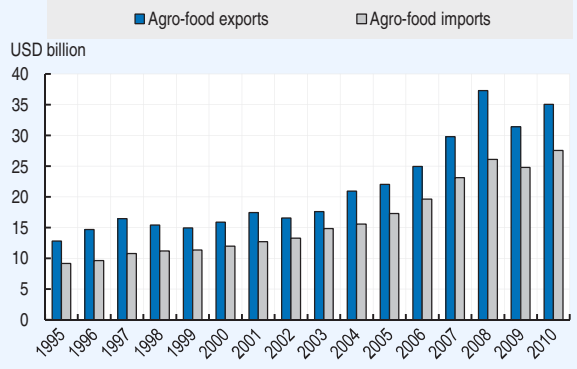
Figure 5.2. **Canada: Main macroeconomic indicators, 1995-2011**



Source: OECD, Statistical Databases.

StatLink http://dx.doi.org/10.1787/888932653327

Figure 5.3. **Canada: Agro-food trade, 1995-2010**



Source: International Trade by Commodity Statistics (ITCS) Database.

StatLink http://dx.doi.org/10.1787/888932653346

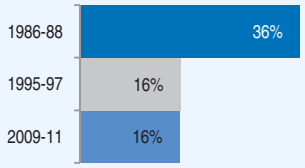
Note: Detailed definitions of contextual indicators and their sources are provided in the Annex II.A1.

Development of support to agriculture

Agricultural support in Canada has reduced significantly since 1986-88 but has been stable in recent years as federal-provincial programme frameworks became established. Support is focussed on payments based on farm income targeted to risk management. The share of potentially most production and trade distorting support, the NPC, and the share of SCT transfers in the PSE are largely determined by market price support, delivered through longstanding supply-management systems for milk, poultry and eggs.

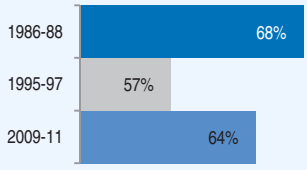
PSE as % of receipts (%PSE)

Significant reform has reduced support as a share of receipts relative to the 1986-88 period, but the trend in the %PSE has been flat since the mid 1990s. Support has been consistently below the OECD average each year and remains so in 2009-11.



Potentially most distorting support as % of PSE

Market price support to grains was discontinued by 1995, reducing the share of most distorting support. Currently, MPS for dairy accounts for the largest portion of potentially most distorting support (based on output and variable input use – without input constraints), making it contingent in part on the evolution of international prices for dairy products.

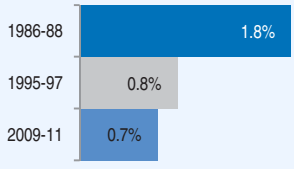


Ratio of producer price to border price (NPC)

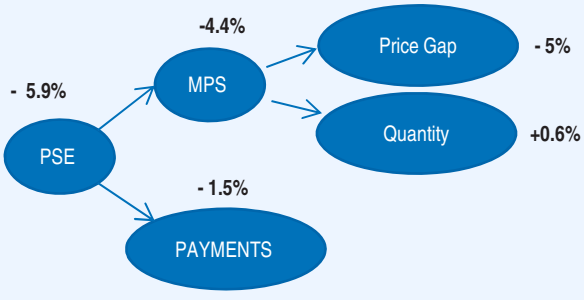
Since 1995, the NPC has derived largely from MPS for dairy, poultry and eggs. Producer prices of other commodities are mostly aligned with border prices.

TSE as % of GDP

While the nominal TSE has been stable, TSE as a % of GDP has been declining, less than 0.6% of GDP in 2011. GSSE has increased from less than 20% of the TSE in 1986-88 to more than 30% in 2009-11.

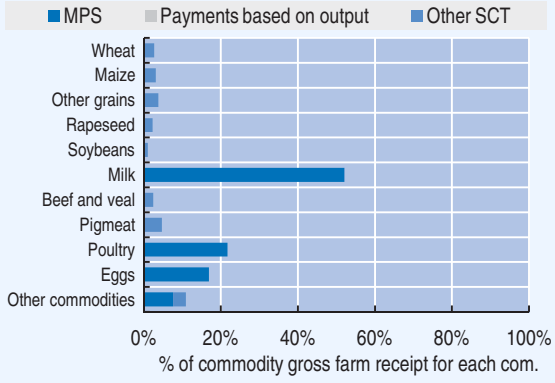


Decomposition of change in PSE, 2010 to 2011



Lower market price support to milk, deriving from higher border prices for dairy products, mainly contributed to the overall reduction of the PSE.

Transfer to specific commodities (SCT), 2009-11



Single commodity transfers were 73% of the PSE in 2011. The share of the SCT in commodity receipts is highest for milk (above 50%) and around 20% for poultry and eggs.

Table 5.2. **Canada: Estimates of support to agriculture**

CAD million

	1986-88	1995-97	2009-11	2009	2010	2011p
Total value of production (at farm gate)	**18 458**	**27 549**	**42 790**	**41 157**	**41 203**	**46 011**
***of which:** share of MPS commodities, percentage*	86	84	83	83	83	84
Total value of consumption (at farm gate)	**16 601**	**21 504**	**30 022**	**26 769**	**30 317**	**32 981**
Producer Support Estimate (PSE)	**7 940**	**4 896**	**7 341**	**7 716**	**7 371**	**6 937**
Support based on commodity output	4 591	2 465	4 356	4 531	4 431	4 106
Market Price Support	4 116	2 296	4 356	4 530	4 431	4 106
Payments based on output	476	169	1	2	0	0
Payments based on input use	1 396	692	463	473	454	461
Based on variable input use	795	345	357	352	345	375
with input constraints	0	0	0	0	0	0
Based on fixed capital formation	575	328	64	67	69	56
with input constraints	0	0	9	9	10	8
Based on on-farm services	26	19	42	55	41	30
with input constraints	0	0	0	0	0	0
Payments based on current A/An/R/I, production required[1]	1 787	840	2 042	2 165	2 004	1 957
Based on Receipts / Income	632	459	1 021	1 166	941	956
Based on Area planted / Animal numbers	1 155	382	1 021	999	1 063	1 001
with input constraints	0	0	0	0	0	0
Payments based on non-current A/An/R/I, production required	0	0	138	17	396	2
Payments based on non-current A/An/R/I, production not required	0	790	197	217	5	369
With variable payment rates	0	733	0	0	0	0
with commodity exceptions	0	0	0	0	0	0
With fixed payment rates	0	58	197	217	5	369
with commodity exceptions	0	0	2	3	3	0
Payments based on non-commodity criteria	10	0	119	285	57	15
Based on long-term resource retirement	10	0	119	285	57	15
Based on a specific non-commodity output	0	0	0	0	0	0
Based on other non-commodity criteria	0	0	0	0	0	0
Miscellaneous payments	155	109	26	27	24	27
Percentage PSE	**36**	**16**	**16**	**17**	**17**	**14**
Producer NPC	**1.39**	**1.10**	**1.11**	**1.12**	**1.12**	**1.10**
Producer NAC	**1.56**	**1.20**	**1.19**	**1.21**	**1.20**	**1.17**
General Services Support Estimate (GSSE)	**1 920**	**1 997**	**3 220**	**3 312**	**3 245**	**3 103**
Research and development	332	418	485	474	485	495
Agricultural schools	274	262	260	241	258	283
Inspection services	327	358	977	938	964	1 030
Infrastructure	438	325	551	495	568	590
Marketing and promotion	549	633	946	1 164	971	705
Public stockholding	0	0	0	0	0	0
Miscellaneous	0	0	0	0	0	0
GSSE as a share of TSE (%)	**19.6**	**29.0**	**30.5**	**30.0**	**30.6**	**30.9**
Consumer Support Estimate (CSE)	**-3 758**	**-2 415**	**-4 845**	**-5 061**	**-4 954**	**-4 521**
Transfers to producers from consumers	-4 062	-2 405	-4 345	-4 517	-4 424	-4 095
Other transfers from consumers	-48	-25	-500	-544	-530	-426
Transfers to consumers from taxpayers	42	6	0	0	0	0
Excess feed cost	310	9	0	0	0	0
Percentage CSE	**-23**	**-11**	**-16**	**-19**	**-16**	**-14**
Consumer NPC	**1.33**	**1.13**	**1.20**	**1.23**	**1.20**	**1.16**
Consumer NAC	**1.30**	**1.13**	**1.20**	**1.23**	**1.20**	**1.16**
Total Support Estimate (TSE)	**9 902**	**6 899**	**10 561**	**11 028**	**10 616**	**10 039**
Transfers from consumers	4 111	2 430	4 845	5 061	4 954	4 521
Transfers from taxpayers	5 840	4 494	6 216	6 512	6 192	5 944
Budget revenues	-48	-25	-500	-544	-530	-426
Percentage TSE (expressed as share of GDP)	**1.78**	**0.82**	**0.65**	**0.72**	**0.65**	**0.59**
GDP deflator 1986-1988=100	**100**	**125**	**168**	**163**	**168**	**173**

Note: p: provisional. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
MPS commodities for Canada are: wheat, maize, other grains, oilseeds, milk, beef and veal, pigmeat, poultry and eggs. Market Price Support is net of producer levies and Excess Feed Cost.
1. A (area planted), An (animal numbers), R (receipts), I (income).
Source: OECD, *PSE/CSE Database*, 2012.

StatLink http://dx.doi.org/10.1787/888932654372

Description of policy developments

Main policy instruments

Under the Canadian Constitution, responsibility for agriculture is shared by the federal and provincial governments. Since 2003 the main policy instruments have been delivered through joint Federal, Provincial, and Territorial (FPT) agreements. The current FPT multilateral agricultural policy framework, *Growing Forward* (GF), will expire on March 31, 2013. The development of the next agricultural policy framework is underway and is expected to build on previous frameworks towards a renewed focus on competitiveness and sustainability with recognition that enabling innovation and providing the right institutional and physical infrastructure are critical to the sector's success.

Major support policies are delivered through the business risk management (BRM) heading. The four BRM programmes are AgriInvest, which subsidises farm savings; AgriStability, which provides some support for income declines; AgriInsurance provides insurance against natural perils; and AgriRecovery for *ad hoc* disaster assistance. The OECD report "Thematic Review on Risk Management: Canada" [TAD/CA/APM/WP(2010)29/FINAL] describes and assesses these policies in detail.

Growing Forward allows more flexibility for provinces and territories to design and deliver non-BRM programs that responded to local priorities in support of shared national outcomes. Provinces can also determine the level of resources to be expended in the overall programme area of support within the agreed limits of the Framework Agreement, for example giving more priority to environment over innovation.

Market price support is provided for dairy products, poultry and eggs through tariffs and production quotas that are tradable only within provinces combined with a system of domestic price-setting.

Domestic policy developments in 2011-2012

Grain farmers in the western provinces (Alberta, Saskatchewan, Manitoba and part of British Colombia) who produce wheat or barley for export or human consumption have had an obligation to market their product through the Canadian Wheat Board (CWB). The CWB provides a number of ways for producers to reduce their price risk. Farmers receive a partial initial payment shortly after they deliver grain to the elevator and ultimately receive, once the marketing year is over, the average price of all product sales made during the year In December 2011, the Canadian Government passed legislation to discontinue the obligation for Western Canadian wheat and barley farmers to market through the CWB. The *Marketing Freedom for Grain Farmers Act* removes the monopoly of the CWB on marketing wheat and barley effective August 1, 2012, transforming it to a voluntary marketing organisation. The interim CWB will be in place for up to five years as it makes the transition to full private ownership.

AgriRecovery Initiatives were developed in 2011 to assist field crop producers with the extraordinary costs they incurred as a result of severe weather. The *Canada-British Columbia Excess Moisture Initiative* provided financial assistance to producers on the lower mainland of British Columbia and Vancouver Island to address the extraordinary costs associated with the impacts of excessive moisture received in 2010 and 2011. The program consists of a CAD 175 per acre payment to help with the costs of rehabilitating their water-damaged crop land. The *Prairie Excess Moisture Program II* (consisting of *Canada-Quebec Excess Moisture Initiative, Canada-Manitoba Agricultural Recovery Program, Canada-Saskatchewan Excess Moisture Initiative,Canada-Alberta Excess Moisture*

Initiative II) provided assistance to producers in order to manage the impacts of excess moisture and flooding throughout the spring/summer of 2011 The initiative consists of a maximum CAD 30 per acre payment for unseeded and flooded-out acres to help impacted crop producers mitigate the impacts of the disaster and rehabilitate their water-damaged cropland.

Several AgriRecovery initiatives were implemented in 2011 to assist livestock producers with extraordinary feed costs resulting from severe weather. The *Canada-Alberta Feed Transportation Assistance Initiative* provided financial support for transportation cost of feed to livestock producers in the Peace River Region of Alberta, who suffered over-wintering forage shortages due to severe drought conditions throughout the 2010 growing season. *Canada-Manitoba Feed and Transportation Assistance Program***,** and *Canada-Saskatchewan Feed Shortfall Assistance Program* also assisted the extraordinary feed costs they incurred to feed their breeding livestock due to extreme moisture conditions in 2011. *Canada-British Columbia Feed Assistance and Pasture Restoration Initiative* provided financial assistance for livestock producers in designated areas of British Columbia to help with the extraordinary feed costs incurred while delaying the placement of cattle on spring pastures. The payments were made per animal per day of grazing delay. This initiative also included assistance to help with the extraordinary costs to re-seed pastures damaged by wildfires or flooding in 2010 in a form of fixed payment per acre for reseeding.

Lastly, there were two AgriRecovery initiatives implemented to deal with the impacts of animal disease in poultry flocks in 2011. The *Canada-Manitoba Avian Influenza Assistance Initiative* was implemented to assist with the extraordinary expenses incurred to control the spread of influenza. The *Canada-Alberta Salmonella Enteritis Initiative* was implemented to assist poultry producers with the costs to eliminate salmonella from poultry flocks in Alberta.

Besides the AgriRecovery framework, Province of Manitoba provided a number of sub-national programmes in response to excess moisture condition in 2011. For example, *Manitoba Forage Restoration Assistance Program* provided an assistance to forage producers to restore established forage land damaged by flooding or excess moisture, in which producers received CAD 50 for each acre restored. *Lake Manitoba Pasture Flooding Assistance Program* also provided assistance to livestock producers to manage feed shortages due to the loss of pasture as a result of flooding in 2011 in the Lake Manitoba basin in the form of either per animal number or per acre payment**.** *Manitoba Green Feed Initiative* provided a payment of CAD 15 per acre of greenfeed to establish a cover crop on flood damaged land.

Trade Policy developments in 2011-2012

Since 2009, Canada implemented the Canada-***EFTA*** and Canada-***Peru*** Free Trade Agreements (FTAs). In 2011, Canada implemented the Canada-***Colombia*** FTA, and concluded its FTA with ***Honduras*.** Canada is working toward the implementation of signed FTAs with ***Jordan*** and ***Panama***. In 2009, Canada launched negotiations towards a Comprehensive Economic and Trade Agreement (CETA) with the ***EU***, Canada's second largest trading partner after the United States. The negotiations represent Canada's most significant trade initiative since the signing of the North American Free Trade Agreement.. Canada also has ongoing negotiations with the ***Central American Countries*** of El Salvador, Guatemala, Honduras and Nicaragua (launched in 2001), ***Korea*** (launched in 2005), ***CARICOM*** (launched in 2007), the ***Dominican Republic*** (launched in 2007), ***Singapore*** (launched in 2001), ***Ukraine*** (launched in 2010), ***India*** (launched in 2010), ***Morocco*** (launched in 2011), ***Costa Rica*** (modernization of existing FTA launched in 2011) and Japan (launched in 2012); is engaged in exploratory discussions with ***Mercosur*** and ***Thailand***; and has formally expressed its interest in joining the *Trans-Pacific Partnership*.

In December 2008, Canada requested consultations on the ***United States*** mandatory country of origin labelling (COOL) provisions in the Food, Conservation, and Energy Act 2008 (2008 Farm Bill). These measures contain an obligation to inform consumers at the retail level of the country of origin of covered commodities, including beef and pork. Upon Canada's request, a WTO panel was established in November 2009. The panel's report was circulated on November 18, 2011. The panel found that the COOL measure is a technical regulation under the WTO's TBT Agreement, and that it is inconsistent with the United States' WTO obligations, and that the letter written by Secretary Vilsack to industry, dated February 20, 2009, constitutes unreasonable administration of the COOL measure. On 23 March 2012, the United States notified the WTO of its decision to appeal certain issues of law covered in the panel report and certain legal interpretations developed by the panel.

PART II

Chapter 6

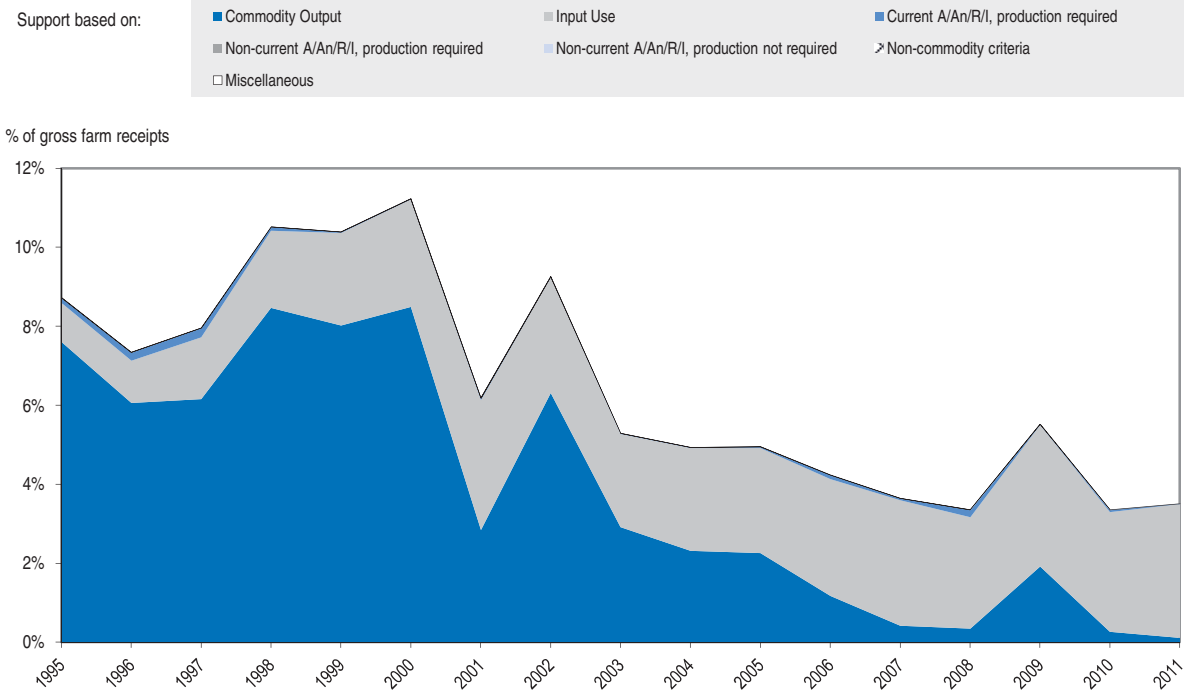
Chile

The Chile country chapter includes a brief evaluation of policy developments and related support to agriculture, contextual information on the framework in which agricultural policies are implemented and the main characteristics of the agricultural sector, an evaluation of support in 2010-11 and in the longer term perspective, and a brief description of the main policy developments in 2011-12.

Box 6.1. **Evaluation of policy developments**

- Agricultural policies involve almost no market distortion instruments and practically no border protection. Policy measures in the sector are mostly targeted to small-scale agriculture through different payments to farmers. Payments to small-scale farmers account for around 70% of total payments at the farm level, and are aimed to improve productivity, on-farm infrastructure, soil quality and irrigation systems.
- Total budgetary allocations to the agricultural sector have increased by 9% from 2010 to 2011. More than half of these expenditures have been spent on general services, mainly allocated on infrastructure, R&D and inspection services.
- As most of the agricultural support takes the form of supportive investments in the sector rather than in market interventions, a need for better collaboration and co-ordination between agencies (within and outside the Ministry of Agriculture) that provide and administer these resources seems imperative. In order to measure the effectiveness of budgetary allocations to agriculture, a comprehensive system of programme evaluation should be put in place.

Figure 6.1. **Chile: PSE level and composition by support categories, 1995-2011**



Source: OECD, *PSE/CSE database*, 2012.

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Contextual information

Chile has had an average real GDP growth rate of 4% over the past ten years. This stable growth has helped it to become an upper middle income country with a GDP/capita of USD 15 100 in 2010. The contribution of the agricultural sector to GDP has been around 4% during the same period. The sector makes an important contribution to exports, with agro-food exports (excluding fish and forestry products) accounting for 13% of all exports in 2010. Chile is a net exporter of agricultural and food products with a net surplus of USD 4.9 billion in 2010. In comparison with its share of GDP, agriculture accounts for a high share of employment (11%), reflecting the duality of its structure, where a semi-subsistence farm sector coexists alongside the large-scale commercial farm sector.

Table 6.1. **Chile: Contextual indicators, 1995, 2010***

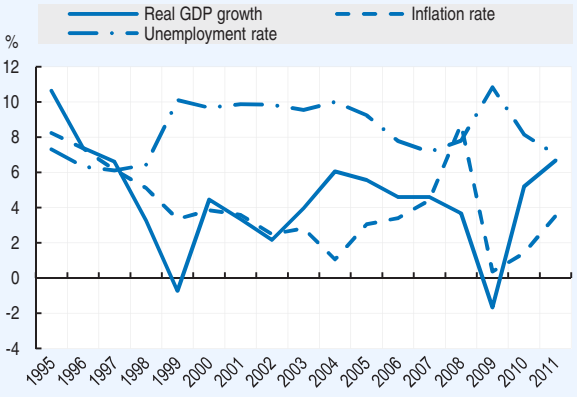
	1995	2010*
Economic context		
GDP (USD billion)	71	236
Population (million)	14	17
Land area (thousand km^2)	744	744
Population density (habitants/km^2)	19	23
GDP per capita, PPP (USD)	7 467	15 107
Trade as % of GDP	21.5	31.2
Agriculture in the economy		
Agriculture in GDP (%)	8.0	3.2
Agriculture share in employment (%)	15.7	11.2
Agro-food exports (% of total exports)	18.0	13.2
Agro-food imports (% of total imports)	7.2	7.6
Characteristics of the agricultural sector		
Agro-food trade balance (USD million)	1 787	4 927
Crop in total agricultural production (%)	64	56
Livestock in total agricultural production (%)	36	44
Agricultural area (AA) (thousand ha)	15 330	15 742
Share of arable land in AA (%)	14	8
Share of irrigated land in AA (%)	. .	. .
Share of agriculture in water consumption (%)	. .	. .
Nitrogen Balance, Kg/ha	. .	. .

* or latest available year.

Source: OECD, Statistical Databases, World Development Indicators and national data.

StatLink http://dx.doi.org/10.1787/888932654087

Figure 6.2. **Chile: Main macroeconomic indicators, 1995-2011**



Source: OECD, Statistical Databases.

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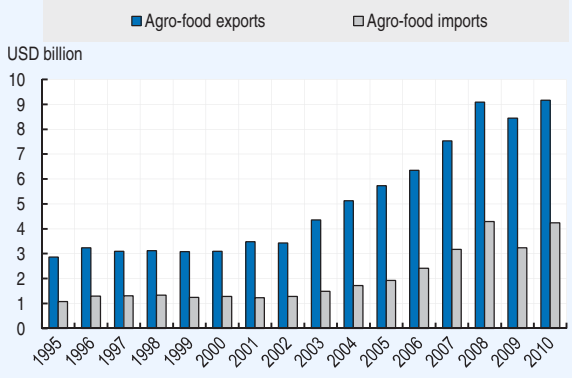
Figure 6.3. **Chile: Agro-food trade, 1995-2010**



Source: International Trade by Commodity Statistics (ITCS) Database.

StatLink http://dx.doi.org/10.1787/888932653403

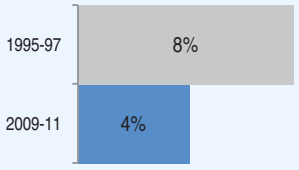
Note: Detailed definitions of contextual indicators and their sources are provided in the Annex II.A1.

Development of support to agriculture

Chile's agricultural support involves low market distortions, with almost no market price support (equivalent to 1.5% of the total support estimate). The PSE is one of the lowest in the OECD at 4%. The NPC is close to unity, meaning that domestic prices are aligned with international prices. Support to farmers is mostly targeted to small-scale farmers and mainly based on input use, dominated by fixed capital formation. Total public spending on agriculture increased by 9% from 2010 to 2011. Total support to the agricultural sector imposes a relatively low burden on the economy, around 0.4% of GDP.

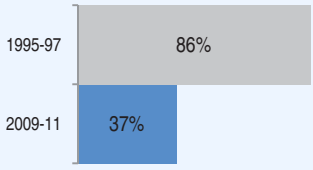
PSE as % of receipts (%PSE)

Producer support has shown a long term decline, with the majority of support now provided in the form of budgetary payments to small farmers. The current %PSE is the 3rd lowest in the OECD area.



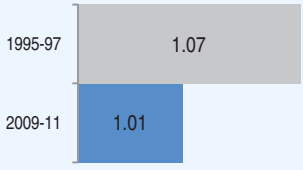
Potentially most distorting support as % of PSE

Chile has progressively reduced support that is potentially most production and trade distorting (based on output and variable input use – without input constraints). Currently most of this support is linkded to variable input use.



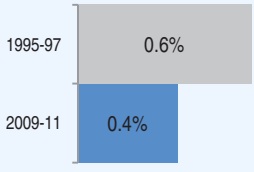
Ratio of producer price to border price (NPC)

Producer prices are almost aligned with world prices, reflecting almost no distortions in output markets.

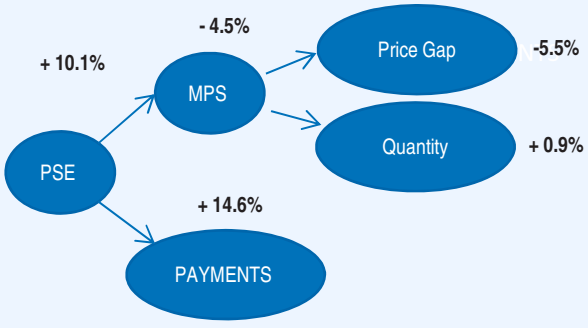


TSE as % of GDP

Agricultural spending has been rising; but the burden on the economy has been more or less constant and relatively low. More than 50% of total expenditure is allocated in general services, among the highest share in the OECD.

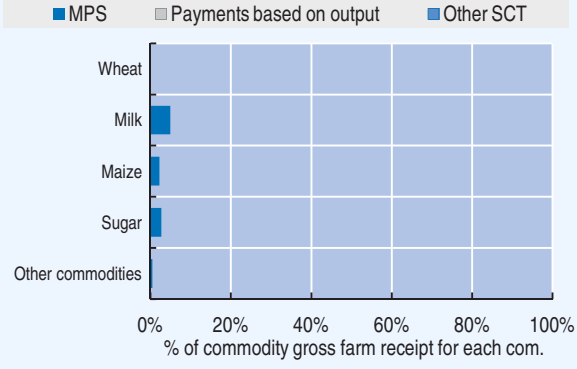


Decomposition of change in PSE, 2010 to 2011



The level of support increased even when the MPS fell, this was mainly due to an increase in direct payments to farmers.

Transfer to specific commodities (SCT), 2009-11



Transfers to specific commodities continues to be relatively insignificant.

Table 6.2. **Chile: Estimates of support to agriculture**

CLP million

	1995-97	2009-11	2009	2010	2011p
Total value of production (at farm gate)	**2 098 835**	**4 433 173**	**4 218 721**	**4 429 657**	**4 651 140**
***of which:** share of MPS commodities, percentage*	65	77	72	77	81
Total value of consumption (at farm gate)	**2 110 811**	**4 128 364**	**3 788 577**	**4 128 216**	**4 468 300**
Producer Support Estimate (PSE)	**170 102**	**187 933**	**241 580**	**153 370**	**168 848**
Support based on commodity output	140 034	33 915	84 068	12 314	5 362
Market Price Support	140 034	33 915	84 068	12 314	5 362
Payments based on output	0	0	0	0	0
Payments based on input use	25 910	152 695	156 703	138 198	163 185
Based on variable input use	6 697	36 181	35 131	35 199	38 213
with input constraints	0	0	0	0	0
Based on fixed capital formation	9 825	81 936	86 173	71 621	88 014
with input constraints	6 909	50 291	58 365	40 278	52 230
Based on on-farm services	9 389	34 578	35 400	31 377	36 958
with input constraints	307	10 844	11 164	9 180	12 189
Payments based on current A/An/R/I, production required[1]	4 158	1 323	809	2 858	301
Based on Receipts / Income	0	0	0	0	0
Based on Area planted / Animal numbers	4 158	1 323	809	2 858	301
with input constraints	4 158	1 323	809	2 858	301
Payments based on non-current A/An/R/I, production required	0	0	0	0	0
Payments based on non-current A/An/R/I, production not required	0	0	0	0	0
With variable payment rates	0	0	0	0	0
with commodity exceptions	0	0	0	0	0
With fixed payment rates	0	0	0	0	0
with commodity exceptions	0	0	0	0	0
Payments based on non-commodity criteria	0	0	0	0	0
Based on long-term resource retirement	0	0	0	0	0
Based on a specific non-commodity output	0	0	0	0	0
Based on other non-commodity criteria	0	0	0	0	0
Miscellaneous payments	0	0	0	0	0
Percentage PSE	**8**	**4**	**6**	**3**	**4**
Producer NPC	**1.07**	**1.01**	**1.02**	**1.00**	**1.00**
Producer NAC	**1.09**	**1.04**	**1.06**	**1.03**	**1.04**
General Services Support Estimate (GSSE)	**32 672**	**192 313**	**186 565**	**191 744**	**198 630**
Research and development	8 723	40 044	29 200	45 015	45 917
Agricultural schools	362	1 040	1 355	953	814
Inspection services	400	48 529	50 826	51 886	42 874
Infrastructure	20 888	94 656	95 982	84 360	103 626
Marketing and promotion	2 078	7 976	9 052	9 478	5 397
Public stockholding	0	0	0	0	0
Miscellaneous	220	69	151	52	4
GSSE as a share of TSE (%)	**15.6**	**51.1**	**43.6**	**55.6**	**54.1**
Consumer Support Estimate (CSE)	**-172 494**	**-37 813**	**-83 443**	**-17 735**	**-12 260**
Transfers to producers from consumers	-141 015	-31 669	-77 332	-12 314	-5 362
Other transfers from consumers	-33 146	-10 080	-11 745	-11 596	-6 898
Transfers to consumers from taxpayers	0	0	0	0	0
Excess feed cost	1 667	3 936	5 634	6 175	0
Percentage CSE	**-8**	**-1**	**-2**	**0**	**0**
Consumer NPC	**1.09**	**1.01**	**1.02**	**1.01**	**1.00**
Consumer NAC	**1.09**	**1.01**	**1.02**	**1.00**	**1.00**
Total Support Estimate (TSE)	**202 774**	**380 246**	**428 146**	**345 114**	**367 479**
Transfers from consumers	174 161	41 749	89 076	23 910	12 260
Transfers from taxpayers	61 759	348 577	350 814	332 800	362 117
Budget revenues	-33 146	-10 080	-11 745	-11 596	-6 898
Percentage TSE (expressed as share of GDP)	**0.64**	**0.38**	**0.47**	**0.33**	**0.32**
GDP deflator 1995-1997=100	**100**	**197**	**184**	**201**	**207**

Note: p: provisional. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
MPS commodities for Chile are: wheat, maize, apples, grapes, sugar, tomatoes, milk, beef and veal, pigmeat and poultry. Market Price Support is net of producer levies and Excess Feed Cost.
1. A (area planted), An (animal numbers), R (receipts), I (income).
Source: OECD, *PSE/CSE Database*, 2012.

StatLink http://dx.doi.org/10.1787/888932654391

Description of policy developments

Main policy instruments

Agricultural policies in Chile continue to emphasise agricultural productivity and competitiveness, as well as the conservation and improvements of natural resources. A new objective was introduced in 2011: the provision of a healthy diet to Chilean population. For this, the Chilean Agency for Quality and Food Safety (ACHIPIA) was incorporated into the Ministry of Agriculture. The aim of this agency is to co-ordinate any efforts or initiative with all of the Ministries dealing with issues concerning food safety.

In 2011, COTRISA (the wheat marketing enterprise) restarted, after several years, the purchases of wheat in the domestic market, with the aim of improving price transmission of international prices to domestic producers. This action was taken because the price paid by the domestic milling industry to local producers had been much lower than the import price. In this way, COTRISA provides better price information to both millers and producers, making the domestic miller industry indifferent to buying wheat from national or international markets. COTRISA does not seek to establish a guaranteed price, rather to achieve a better alignment between the international price and domestic price that producers receive. COTRISA only purchases wheat from small-scale producers, who have sown wheat during the 2011 season with the support of INDAP. The maximum amount of wheat to be purchased from each farmer in the 2011/12 season shall not exceed 350 quintals (around 35 metric tonnes) per farmer. The total amount bought in 2011 was 3 864 tonnes.

A Labour bill for agricultural workers was presented to parliament in 2011. This bill seeks to provide high flexibility to seasonal agricultural worker's contracts. It will establish an annual average of working hours, maximum monthly overtime and the amount of remuneration. It will also emphasise the employer obligations to provide tools and safety implements, as well as information on the proper use and handling of chemicals used in agriculture. Once approved by Congress, this law will benefit over 800 000 workers during the high season.

A bill for Commercial Transactions has been sent to parliamentary process. This bill seeks to provide more precise mechanisms and tools to standardise the quality and quantity measurement of agricultural products on the markets, including equipment's certification and sampling and counter sampling rules.

On the climate change front, Chile has formalised its incorporation into the Global Research Alliance on Agricultural Greenhouse Gases. In 2011 it also created the Ministerial Technical Committee on Climate Change. This committee is formed by technical representatives of the Ministry of Agriculture's agencies involved in climate change matters. Its main purpose is to undertake actions on climate change issues and incorporate new themes according to future challenges.

Domestic policy developments in 2011-12

Chilean agricultural policy involves few distortions on agricultural markets and does not have policy instruments to support prices. **Budgetary allocations** increased 9% from CLP 333 billion (USD 653 million) in 2010 to CLP 362 billion (USD 749 million) in 2011. 54% of total budget is allocated to general services, equivalent to CLP 199 billion (USD 410 million). This shows the continuation of the use of less market distorting policies and more on the creation of an auspicious environment for agricultural development. The remaining 45% of total budget is allocated to

different payments to farmers, from improving productivity and soil recovery programmes to animal and plant health and irrigation. Chile's ability to fund these investments is based on a strong fiscal position which has been helped by bouyant copper revenues.

Around 72% of total payments (mostly based on inputs) are targeted to small-scale and/or indigenous poor farmers. Total payments have seen an important increase of 18%, from CLP 138 billion (USD 271 million) in 2010 to CLP 163 billion (USD 338 million) in 2011. Within this category, support for improving **farm productivity and competitiveness** account for 50% of total payments and represent 22% of total budgetary allocations spent on agriculture, equivalent to CLP 81 billion (USD 168 million). Payments include support for improving production systems or farm investments, among others. These subsidies are mostly (73%) administered by INDAP, the Ministry's agency that deals with small farms. The remaining 27% is managed by agencies that are not part of the Ministry of Agriculture such as CONADI, CORFO, FOSIS and SENCE.

Another important category of payments to farmers is the **soil recovery programme**, administered by SAG and INDAP. This programme aims to improve degraded soils used in agriculture. This category accounts for 16% of total payments to farmers, with CLP 26 billion (USD 55 million) in 2011. **Sanitary and phyto-sanitary protection** is one the major priorities to Chilean agriculture, these services are administered by the SAG, the animal and plant health agency. Spending in this area represents 7% of total payments to farmers, accounting for CLP 11 billion (USD 24 million).

INDAP is also an important provider of **credit** to small-scale agriculture at preferential rates, and its role has become more important over the years. INDAP lending in 2011 was CLP 47 billion (USD 98 million), an increase of 31% from 2010. In terms of subsidies related to credit, the write-offs of INDAP in 2011 were small, only 1.7% of the total lending. Subsidies coming from preferential interest rates and from the BAF programme (where INDAP covers the transaction costs incurred by financial institutions channelling credit to small farmers), represent only 3% of total payments. The **crop insurance** programme grew 17% from 2010 to 2011, and represents 3% of total payments to farmers, with CLP 4.2 billion (USD 8.6 million) in 2011. This programme covers between 50% and up to 85% of the premium.

Irrigation investments account for 24% of total budgetary allocations in the sector, making it one of the most important areas of Chilean agricultural policy. Irrigation has both on-farm and off-farm components. On-farm provides subsidies to farmers to improve or install new irrigation system and represents 7% of the total budget given to agriculture. The off-farm component is mostly for major community, regional or national investments; this category is part of the GSSE and represents 17% of total allocations on the sector.

Chile is one of the few OECD countries where the share of GSSE (general services) in total expenditures on agriculture is quite important, 54%. General services category is dominated by **investments ininfrastructure** with a contribution of 52% or CLP 104 billion (USD 214 million), and it represents around 30% of the total budgetary allocation on the sector. Infrastructure category comprises only two items: irrigation and land and water rights for indigenous people. **R&D and agricultural schools** account together for 24% of total expenditures in general services and 13% of the total allocations on agriculture. In 2011, Chile invested in these two items CLP 47 billion (USD 97 million). Lastly, **Inspection services** represent 22% of expenditures within GSSE and 12% of total budgetary allocations.

Trade Policy developments in 2011-2012

Chile has a very open trade policy with a **uniform tariff** of 6%, however given the wide range of trade agreements, the average applied tariff has been less than 2% for agricultural products over the past few years.

Chile has a **price band system** (PBS) for wheat, wheat flour and sugar. However, for the past few years, the PBS has had zero effect given high international prices. As world prices of wheat have strengthened, rebates have been offered for the past several years, meaning that the duty paid has been much less than the MFN tariff of 6%, having actually an effect tariff of zero. The PBS for sugar, which was reformed by raising the bound tariff and opening up a **tariff rate quota**, has resulted in tariff rebates for most years and tariff rate quotas being applied in 2007-11.

In 2011, Chile has applied provisional **anti-dumping duties** on wheat flour imports from ***Argentina***, with the current rate of 9.7% until the Chile's Commission on Distortions makes a decision on a definitive measure.

In May 2011, the government proposed to Congress a modification of article 7 of Law N° 18.525, aimed at extending up to four years the maximum period of application of **safeguards**. This means two years, plus a possible extension for two more. Before this modification, safeguard measures could not exceed two years (1+1). The new limit is located in the middle of the range allowed by the WTO (four years, that can be extended up to eight years).The project has been approved by the Senate.

The only export policy Chile applies is one of **export promotion**. This is undertaken by the Export Promotion Bureau (PROCHILE), whose annual budget in 2011 was CLP 5.4 billion (USD 11 million).

Chile has continued to finalise more **Freetrade agreements**, with a commercial agreement with ***Turkey*** coming into force in March 2011 and agreements with ***Malaysia***, ***Nicaragua*** and ***Viet Nam*** signed and waiting for ratification in the Parliament. Currently, negotiations are taking place with ***India***, ***Thailand*** and ***Hong Kong*** to broaden the coverage of the current "Partial Scope Agreement". A new free trade area under negotiation is the *Trans-Pacific Partnership* (TPP), an initiative that involves the widening and deepening of the original P4 Agreement, formed by Chile, ***Brunei Darussalam***, ***New Zealand*** and ***Singapore***. Negotiations started in 2010 and have taken place with the participation of the P4 members, and those which would join the new agreement: ***United States***, ***Malaysia***, ***Peru***, ***Viet Nam*** and ***Australia***. At the end of 2011, an announcement was made regarding new participants in the negotiation: ***Canada***, ***Japan*** and ***Mexico***.

PART II

Chapter 7

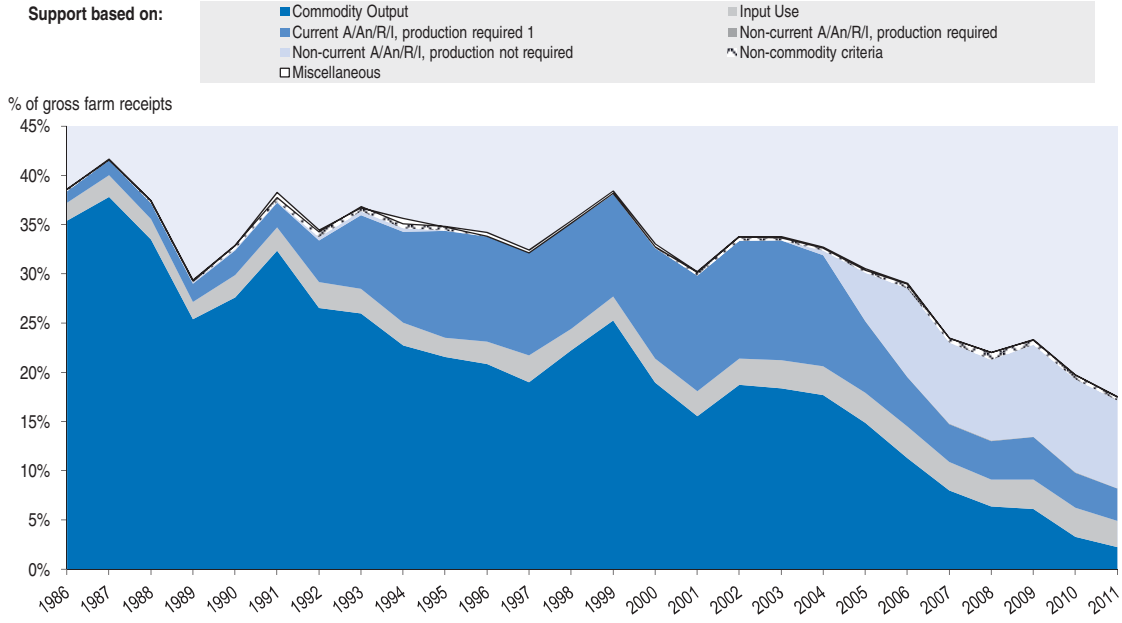
European Union

The European Union country chapter includes a brief evaluation of policy developments and related support to agriculture, contextual information on the framework in which agricultural policies are implemented and the main characteristics of the agricultural sector, an evaluation of support in 2010-11 and in the longer term perspective, and a brief description of the main policy developments in 2011-12.

Box 7.1. **Evaluation of Policy Developments**

- Overall, policy reforms since 1986-88 have improved the sector's market orientation. There has been a gradual and consistent move away from high levels of market price support and output payments and reduction in the level of support. Production and trade distorting policies now account for about 25% of support to producers as measured by the PSE. In addition, constraints to input use are attached to most payments.
- The implementation of recent reforms further reduced market intervention and protection, and increased the share of payments granted with no requirement to produce, thus allowing producers to better respond to market signals.
- As a result of reforms and high world prices, export subsidies are low at 0.5% of EAGF expenditures. Market access for agricultural products has improved through a number of bilateral agreements and lower applied tariffs in case of shortages. However a number of products continue to be subject to trade Tariff Rate Quotas and special safeguards.
- Flexibility in the implementation of commodity-specific payments at national level (Article 68) may distort competition across EU member states, although these payments are limited to 10% of the envelope.
- Initiatives to strengthen EU agricultural innovation should benefit the long-term competitiveness and sustainability of the sector.
- While substantial progress has been made in reducing the level of support and the share of production and trade distorting support, future efforts need to focus on progress towards better targeted support to improve the long-term productivity, sustainability and competitiveness of the sector

Figure 7.1. **European Union: PSE level and composition by support categories, 1986-2011**



1. EU12 in 1986-94 including ex-GDR from 1990; EU15 in 1995-2003; EU25 for 2004-06; EU27 from 2007.

Source: OECD, *PSE/CSE Database*, 2012.

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Contextual information

The ***European Union*** is the largest economic region. Its GDP per capita is below the OECD average. Agriculture accounts for 1.7% of GDP and 4.6% of employment in the EU27, with significant differences across member states. The European Union is a net importer of agro-food products. It was the second largest exporter in the world and the largest importer for those products. In 2009, agro-food products accounted for 6.5% of all EU exports and 6.7% of all EU imports. There is a large diversity of farms structure and production systems in EU regions. Agriculture occupies around half of the territory and accounts for about a quarter of water consumption.

Table 7.1. **European Union: Contextual indicators, 1995, 2010**[*]

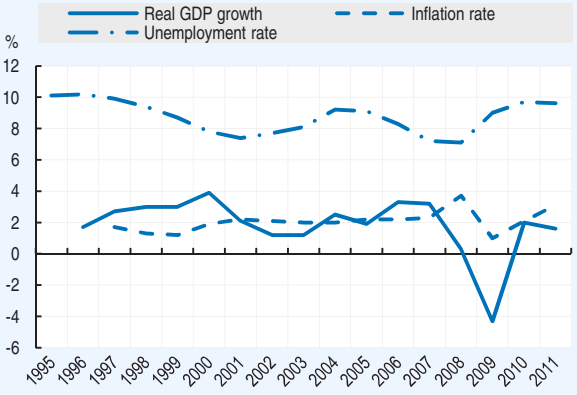
	1995	2010[*]
Economic context		
GDP (USD billion)	9 232	17 560
Population (million)	371	503
Land area (thousand km^2)	3 128	3 843
Population density (habitants/km^2)	119	130
GDP per capita, PPP (USD)	14 700	24 400
Trade as % of GDP	19.5	31.4
Agriculture in the economy		
Agriculture in GDP (%)	2.9	1.7
Agriculture share in employment (%)	4.7	4.6
Agro-food exports (% of total exports)	7.8	6.5
Agro-food imports (% of total imports)	9.2	6.7
Characteristics of the agricultural sector		
Agro-food trade balance (USD million)	–7 608	–12 676
Crop in total agricultural production (%)	53	57
Livestock in total agricultural production (%)	47	43
Agricultural area (AA) (thousand ha)	142 453	188 406
Share of arable land in AA (%)	53	51
Share of irrigated land in AA (%)	. .	. .
Share of agriculture in water consumption (%)	. .	. .
Nitrogen Balance, Kg/ha	. .	. .

[*] latest available year.

Source: OECD, Statistical Databases, World Development Indicators and national data.

StatLink http://dx.doi.org/10.1787/888932654106

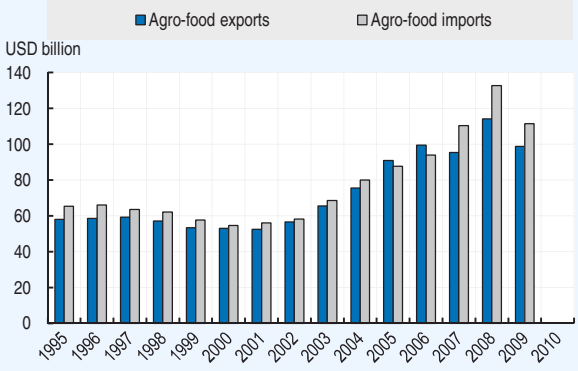
Figure 7.2. **European Union: Main macroeconomic indicators, 1995-2011**



Source: OECD, Statistical Databases.

StatLink http://dx.doi.org/10.1787/888932653441

Figure 7.3. **European Union: Agro-food trade, 1995-2010**



Source: International Trade by Commodity Statistics (ITCS) Database.

StatLink http://dx.doi.org/10.1787/888932653460

Note: Detailed definitions of contextual indicators and their sources are provided in the Annex II.A1.

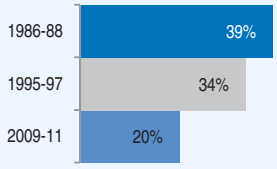
EU12 in 1986-94 including ex-GDR from 1990; EU15 in 1995-2003; EU25 for 2004-06; EU27 from 2007.

Development of support to agriculture

The European Union has gradually reduced its support to agriculture in the long term, in particular the potentially most production and trade distorting forms of support, which now represent about one quarter of support to producers. The level of price distortions has been significantly reduced as illustrated by changes in the NPC. The share of payments granted with no requirement to produce has increased to 51% of producer support. The share of payments targeted to environmentally and animal friendly practices has also increased.

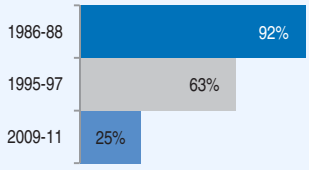
PSE as % of receipts (%PSE)

Support to producers (%PSE) has decreased gradually and consistently over the long term, in particular since the mid-90s, and is close to the OECD average. In 2011, it was below 18%, its lowest level ever, compared to 20% in 2010.



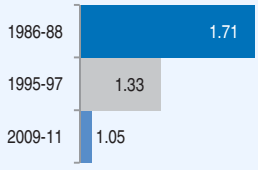
Potentially most distorting support as % of PSE

The European Union has progressively reduced market price support mechanisms and protection at the border and increased direct payments to farmers, mostly with no requirement to produce. The potentially most production and trade distorting measures (based on output and variable input use – without input constraints) now represent about 25% of the PSE.



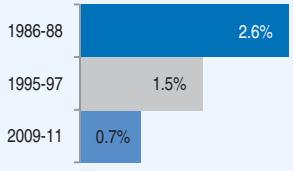
Ratio of producer price to border price (NPC)

On average, prices received by farmers were 5% higher than those on the world market in 2009-11. Domestic prices for most products were closely aligned with border prices, while sugar prices were 6% higher, beef and sheep prices were about 20% higher, and those received by poultry farmers were higher than border prices by about 50%.

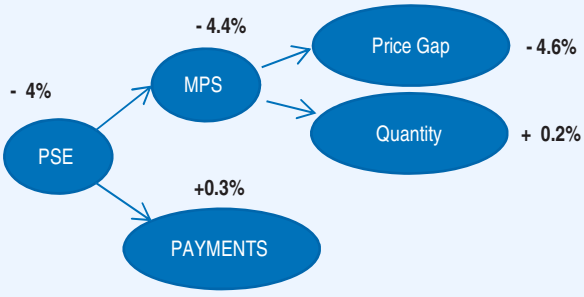


TSE as % of GDP

Total support was below 0.8% of GDP in 2009-11 and expenditure on general services was close to 12% of total support.

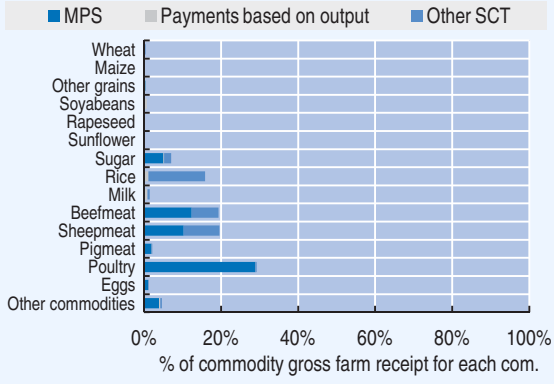


Decomposition of change in PSE, 2010 to 2011



The reduction in support between 2010 and 2011 is mainly due to a narrowing of the gap between domestic and border prices as world price increases were not fully transmitted to domestic markets.

Transfer to specific commodities (SCT), 2009-11



Single Commodity Transfers (SCT) represented 23% of total PSE. The share of the SCT in the commodity gross farm receipt is at or close to zero for grains (except rice), oilseeds, milk and pigmeat; slightly around 20% for beef and veal, sheepmeat; and close to 30% for poultry.

Table 7.2. **European Union: Estimates of support to agriculture**

EUR million

	1986-88	1995-97	2009-11	2009	2010	2011p
Total value of production (at farm gate)	**211 380**	**239 230**	**328 838**	**302 616**	**326 267**	**357 632**
of which: *share of MPS commodities, percentage*	75	74	73	72	73	74
Total value of consumption (at farm gate)	**188 226**	**227 942**	**319 919**	**295 330**	**316 894**	**347 532**
Producer Support Estimate (PSE)	**88 005**	**93 763**	**79 056**	**85 649**	**77 317**	**74 203**
Support based on commodity output	79 853	57 151	15 007	22 512	12 925	9 583
Market Price Support	74 791	53 636	14 068	21 308	12 133	8 763
Payments based on output	5 063	3 515	939	1 204	792	820
Payments based on input use	4 565	6 512	11 291	10 985	11 627	11 262
Based on variable input use	872	2 292	4 440	4 194	4 569	4 557
with input constraints	0	0	34	32	32	40
Based on fixed capital formation	2 685	2 565	5 201	5 112	5 361	5 129
with input constraints	0	86	331	441	405	148
Based on on-farm services	1 008	1 655	1 651	1 679	1 696	1 577
with input constraints	82	427	16	35	6	7
Payments based on current A/An/R/I, production required[1]	3 195	29 775	14 516	15 779	13 876	13 893
Based on Receipts / Income	132	64	690	573	783	713
Based on Area planted / Animal numbers	3 063	29 711	13 826	15 205	13 093	13 181
with input constraints	849	11 363	11 531	12 107	11 119	11 368
Payments based on non-current A/An/R/I, production required	0	0	151	169	176	108
Payments based on non-current A/An/R/I, production not required	0	24	36 300	34 276	36 885	37 737
With variable payment rates	0	0	0	0	0	0
with commodity exceptions	0	0	0	0	0	0
With fixed payment rates	0	24	36 300	34 276	36 885	37 737
with commodity exceptions	0	0	14 716	13 350	15 376	15 421
Payments based on non-commodity criteria	428	988	1 658	1 694	1 766	1 515
Based on long-term resource retirement	426	882	733	905	816	478
Based on a specific non-commodity output	1	106	831	697	852	944
Based on other non-commodity criteria	0	0	95	92	98	94
Miscellaneous payments	-35	-687	133	233	62	104
Percentage PSE	**39**	**34**	**20**	**23**	**20**	**18**
Producer NPC	**1.71**	**1.33**	**1.05**	**1.08**	**1.04**	**1.03**
Producer NAC	**1.65**	**1.51**	**1.25**	**1.30**	**1.25**	**1.21**
General Services Support Estimate (GSSE)	**8 391**	**8 901**	**10 537**	**10 455**	**10 408**	**10 749**
Research and development	1 059	1 555	2 075	2 147	2 068	2 010
Agricultural schools	287	878	1 407	1 197	1 492	1 531
Inspection services	171	241	639	713	702	503
Infrastructure	1 166	1 851	3 132	3 325	3 007	3 065
Marketing and promotion	1 557	2 250	3 212	2 875	3 199	3 561
Public stockholding	4 114	1 865	32	165	-106	38
Miscellaneous	38	260	40	34	46	40
GSSE as a share of TSE (%)	**8.3**	**8.4**	**11.6**	**10.7**	**11.6**	**12.5**
Consumer Support Estimate (CSE)	**-65 589**	**-46 625**	**-12 497**	**-20 046**	**-10 488**	**-6 957**
Transfers to producers from consumers	-75 427	-51 450	-13 679	-20 861	-11 879	-8 297
Other transfers from consumers	-1 501	-481	-302	-610	-295	-1
Transfers to consumers from taxpayers	4 442	3 931	1 462	1 425	1 621	1 340
Excess feed cost	6 897	1 376	22	0	65	0
Percentage CSE	**-36**	**-21**	**-4**	**-7**	**-3**	**-2**
Consumer NPC	**1.70**	**1.30**	**1.05**	**1.08**	**1.04**	**1.02**
Consumer NAC	**1.56**	**1.26**	**1.04**	**1.07**	**1.03**	**1.02**
Total Support Estimate (TSE)	**100 838**	**106 594**	**91 056**	**97 529**	**89 346**	**86 292**
Transfers from consumers	76 928	51 932	13 981	21 472	12 174	8 297
Transfers from taxpayers	25 411	55 144	77 377	76 668	77 466	77 995
Budget revenues	-1 501	-481	-302	-610	-295	-1
Percentage TSE (expressed as share of GDP)	**2.56**	**1.50**	**0.75**	**0.83**	**0.73**	**0.68**
GDP deflator 1986-1988=100	**100**	**140**	**178**	**175**	**179**	**182**

Note: p: provisional. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
EU12 for 1986-94, including ex GDR from 1990; EU15 for 1995-2003; EU27 from 2007.
MPS commodities for the European Union are: wheat, maize, other grains, rice, oilseeds, sugar, milk, beef and veal, sheepmeat, pigmeat, poultry, eggs, potatoes, tomatoes, plants and flowers and wine. Market Price Support is net of producer levies and Excess Feed Cost.
1. A (Area planted), An (Animal numbers), R (receipts), I (income).
Source: OECD, *PSE/CSE Database*, 2012.

Source: StatLink http://dx.doi.org/10.1787/888932654410

Description of policy developments

Main policy instruments

The Common Agricultural Policy (CAP) is composed of two pillars. Pillar I defines and funds market measures under the Common Market Organisation, and includes the Single Payment Scheme (SPS) and the Single Area Payment Scheme (SAPS). Pillar II, or Rural Development Regulation of Agenda 2000, contains various measures co-financed by EU member states, including agri-environmental schemes, payments to less favoured areas and investment assistance. Pillar I funds come from the European Agricultural Guarantee Fund (EAGF), while Pillar II funds come from the European Agricultural Fund for Rural Development (EAFRD). EU budget on agriculture and rural development (title 05) decreased from EUR 55.6 billion (USD 73.7 billion) in 2010 to EUR 54.8 billion (USD 76.2 billion) in 2011, of which 5% were for market price support measures, 73% for Pillar I payments and 22% for Pillar II measures.

Most Pillar I payments are implemented as a single payment granted with no requirement to produce. Under the Single Payment Scheme (SPS) applying in the EU15, Malta and Slovenia, payment entitlements are based on historical references, either at individual farm level (historical model), at regional level (regional model) or as a combination of the two (hybrid model).[1] Until 2013, a specific transitional and optional scheme, the Single Area Payment Scheme (SAPS), applies in other member states.[2] Under the SAPS, each hectare in a member state receives the same payment rate. However, payments relating to the reform of the sugar regime and the fruit and vegetable regime may be paid on a historical basis. In EU15 countries, most payments for specific commodities are integrated into the single payment as of 2012, with some exceptions: member states can chose to maintain the ewe premium and the suckler cow premium, and payments for cotton. Moreover, member states can introduce commodity-specific payments as part of Article 68 of the *Health Check* Regulation, which gives them the option to use 10% of their national budget ceilings under EAGF for specific purposes. During the ten-year phase-in period, new member states, which joined the European Union in 2004 or 2007, may complement EU funds with Complementary National Direct payments (CNDPs) from national funds up to a defined ceiling. They are granted as a single payment or as commodity-specific area or headage payments.

Pillar I also funds the following market price support measures. There is an intervention price for cereals (with the exception of oats and rye). Public intervention is set at zero for barley, maize and sorghum. For wheat there is a limit for purchase at the cereal intervention price, beyond which purchase is by tender. Sugar is supported through production quotas and private storage when market prices fall below "reference" prices. The market support regime for cereals and sugar also comprises trade protection through tariffs, tariff rate quotas (TRQs) and export subsidies. Fruits and vegetables are supported through various measures increasingly co-financed by producers, including crisis intervention managed by producer organisations, an entry price system, and *ad valorem* duties, but no export subsidies.

Intervention prices are used for butter and skimmed milk powder in conjunction with import protection and export subsidies. Milk production quotas are being phased out and are planned to expire in April 2015. The beef market is supported by basic prices, tariffs, TRQs and export subsidies. Support for pigmeat is provided by import protection and export subsidies. For sheepmeat, the market support regime comprises tariffs and TRQs, with most country-specific TRQs subject to a zero customs duty, and provisions for private storage. For poultry and eggs, there are TRQs and export subsidies. As a result of these measures, prices paid to domestic producers

were 5% above world market prices in 2009-11, and the support they generated (Market Price Support) represented 18% of the estimated support to agricultural producers.

Pillar II funds are implemented through National (or Regional) Development Programmes, which define the list of measures chosen by the country and their funding. The current plans cover the period 2007-13. They focus on three "thematic axes": 1) improving the competitiveness of the agricultural and forestry sectors; 2) improving the environment and the countryside; 3) improving the quality of life in rural areas and encouraging diversification of the rural economy. Axis 1 includes measures for farm modernisation, the setting-up of young farmers, early retirement, semi-subsistence farms undergoing restructuring, vocational training, producer groups, adding value to farm and forestry products, and restoring production potential damaged by natural disasters. Axis 2 includes agri-environmental and animal welfare payments, payments to farmers in areas with natural handicaps, payments for afforestation, payments for protecting biodiversity in specific sites, and support to non-productive investments. Axis 3 groups measures encouraging the diversification into non-agricultural activities, tourism activities, the creation and development of micro-enterprises, rural services, and the conservation of rural heritage. Rural Development Programmes also support projects using the "LEADER approach" – relying on a multi-sectoral approach and local partnerships to address specific local problems; as well as technical assistance for the implementation of Pillar II measures.

The combination of EU, national and regional payments to producers represents over 80% of the PSE. Those payments were relatively stable between 2011 (+0.3%) and 2010. The 4% decrease in the PSE was mainly due to a 28% reduction in MPS due to higher world prices.

In October 2011, the European Commission released its legislative proposals for the CAP post-2013. These will be discussed in the Council and the European Parliament over 2012-13. Proposals put forward essentially suggest changes in the distribution of direct payments within and between countries. As such, these measures are expected to have little or no impact on production and trade. Changes suggested to Pillar I may have a positive impact on the environment where farming practices endanger fragile areas. The various funds for rural development will be better integrated, there will be increased emphasis on R&D and extension services, risk management measures will be provisioned, the milk and sugar quotas will be terminated, "areas facing natural constrains" that receive additional support will be defined using objective criteria. These are elements of the reform package expected to have a positive impact on the long term productivity of the sector. The proposals are based on budget plans proposed by the European Commission in June 2011, which are also being discussed. More details on the main changes proposed are presented in Box 1.2 of Chapter 1.

Domestic policy developments in 2011-12

With *Health Check* regulations[3] in place, public intervention is limited to wheat, butter and skimmed milk powder. **Intervention purchase** is limited to 3 million tonnes for **wheat**, 30 000 for **butter** and 109 000 tonnes for **skimmed milk powder** (SMP). Above those limits, purchase is done by tender. Private storage aid is available for some other products. Tender for private storage aid for olive oil was opened in summer 2011 and then re-opened in October. Private storage aid for pigmeat was available for a few weeks at the beginning of 2011.

As a result of reductions in **intervention prices** in the mid-2000s, the price paid to **rice**, **sugar** and **milk** producers has significantly decreased and has been aligned with border prices in recent years. The share of MPS decreased from around half of the PSE in 2004 to 18% in 2011, mainly due to higher world prices.

As planned in the *Health Check*, **milk quotas** were increased by 1% in 2010/11 and another 1% in 2011/12. To facilitate the transition, a number of countries have introduced dairy specific payments within article 68 provisions (*e.g.* ***Austria***, ***Bulgaria***, ***the Czech Republic***, ***Estonia***, ***Finland*** and ***Latvia***). In December 2011, an informal agreement was reached on new rules for the milk sector. Member states have the option to make **written contracts** between farmers and processors compulsory and to oblige purchasers of milk to offer farmers a minimum contract duration. These contracts should contain specific elements such as price, volume, duration, details concerning payment, collection and rules for force majeure. These elements should be freely negotiated between the farmer and the collector, but producer organisations can negotiate collectively on behalf of members up to limits (3.5% of EU and 33% of national milk production). This was the case in ***France*** where a decision was made to make contracting compulsory in the dairy sector, and in the **fruits and vegetables** sector as well.

Under the **Single Payment Scheme**, the flexibility for countries to maintain commodity-specific payments is limited to the ewe premium (50%), the suckler cow premium (100%) and cotton aid (35%). The beef slaughter premium and male beef premium, payments for fruits and vegetables, payments for tomatoes , quality premium for rice, aid for nuts, aid payments for seeds, aids for protein crops, aids for starch potato growers, and processing aids for dried fodder, potato starch and flax and hemp were discontinued in 2011 or 2012.

Member states also have the flexibility to introduce assistance to sectors with specific situations as part of the so-called **Article 68** measures. These are mostly used in the livestock sectors for dairy and sheep and goat. Article 68 measures supporting the crop sector are more generic in nature, encouraging crop rotation for example, but specific commodity payments to improve the quality of production are extended to protein crops, durum wheat, tobacco, olive oil and sugar. Article 68 measures also cover non-commodity specific payments such as insurance subsidies and payments for organic farming and environmentally friendly production.

Member states, which entered the European Union in 2004, were allowed to maintain Complementary National Direct Payments (**CNDPs**), which continued to decrease. Some measures funded by CNDPs are now funded through Article 68. National support was allowed under the Temporary Framework for state aid, allowing EUR 15 000 (about USD 20 000) to be paid per farmer up to March 2011.

As a result of these changes and the increase of **single payments** in new member states as planned in the 10 year transition period following accession (phasing-in), the share of single payments in total PSE payments increased from 48% in 2010 to 51% in 2011.

Implementation of **rural development programmes** (RDPs) for 2007-13 continued with the introduction of a number of new measures, such as animal welfare payments, payments for meeting standards, and payments for the adoption of quality schemes. An amendment was adopted that increased the rate of EU financing in RDPs from 85 percent to 95 percent in member states that face specific economic and financial difficulties, namely ***Romania***, ***Latvia***, ***Greece***, ***Ireland*** and ***Portugal***.

A number of member states amended **young farmers'** schemes. In ***Estonia***, a tax exemption was introduced for self-employed farmers that transmit their holding to younger farmers. In ***Portugal***, adjustments were introduced to the Young Farmers Programme that decreased the maximum eligible value for setting up young farmers by 25% and introduced a 40% minimum co-financing condition on investment.

Three pan-European **research** facilities, with EUR 700 million (USD 970 million) funding, will be created to pool resources in the areas of 1) ecosystems response to environment and land-use changes; 2) systems biology with agricultural, healthcare and pharmaceutical applications; and 3) access to viruses, bacteria and fungi needed for research on pest and human disease and

research on bio-security. Moreover, the European Commission proposed to allocate EUR 4.5 billion of EU funds for research and innovation in the agricultural sector as part of its "Horizon 2020" plan for 2014-20 adopted in December 2011.

Agriculture was identified as one of three areas that could benefit from the **European Innovation Partnership** initiative. This EU led initiative was launched in February 2012 to accelerate the uptake of innovation to serve improved productivity and sustainability in the agricultural sector through a multi stakeholder public-private partnership. The initiative will offer a cooperative platform that will identify and address research and innovation inefficiencies in a one to three years' time horizon. It will not replace funding programmes or regulatory processes, but is expected to increase effectiveness of relevant RDP support.

The EU's internal **food aid scheme** will continue in 2012 and 13 after a compromise deal was approved by the European Parliament to continue with an annual budget of EUR 500 million (USD 695 million). Initially, the European Commission was to reduce by over 75% the budget available for the scheme to comply to a ruling by the European Court of Justice that under CAP funding, food cannot be purchased from the market to supply the "Aid for the Needy" food scheme.

The coverage of the EU **school fruit scheme** introduced in 2010 was expanded to larger numbers of pupils in an increasing number of countries, and funding increased to EUR 90 million (USD 125 million) per school year. ***Finland***, ***Sweden*** and the ***United Kingdom*** have chosen to opt out of this scheme.

The European Food Safety Authority (EFSA) launched new, more precise guidelines for monitoring the environmental impact of authorised **Genetically Modified** (GM) crops, in response to changes in the EU's Environmental Risk Assessment (ERA) rules. In February 2011, member states set the tolerance threshold for Genetically Modified Organism (GMO) traces in feedstuffs at 0.1%, a rate for which detection is scientifically reliable. A zero tolerance approach was applied beforehand. Concurrently, in December 2011 it was agreed to extend the phase out period for traces of **GM oilseed rape** products withdrawn in 2007 that was due in 2012 for another five years to 2017.

The transition period foreseen in the EU **Laying Hens Directive** for the conversion of all battery cages to more welfare-friendly accommodation came to an end on 1 January 2012. Egg industries in several countries have not yet fulfilled the requirements. ***Bulgaria*** has allocated EUR 12.5 million (USD 17.5 million) to bring poultry facilities in line with EU requirements by June 2012. The same amount has been allocated to bring the pig sector to meet the ban on sow stalls by January 2013. Other Member States strengthened **animal welfare** measures, ***Austria*** extended the time during which sows must not be confined from 205 days to 265.

Measures were taken to meet obligations under the EU **Water Framework Directive** (***Denmark***, ***France***, ***Italy*** and the ***United Kingdom***). Water retention capacities were increased in several countries by changes in regulations and financial assistance from the EU and water agencies. EU and national funds will be granted for projects aiming to reduce water consumption, including the switch to water saving crops, and the design and adoption of more efficient irrigation systems. The use of environment and health friendly **pesticides** will also be encouraged. Several countries (***France***, ***Italy*** and ***Slovenia***) have taken measures to improve the implementation of the EU **Nitrate Directive** by applying stricter limits on manure spreading or revising the definition of vulnerable zones.

The EU regulation on **dioxin control** for feed will be tightened from September 2012. According to the new regulation (225/2012) *a)* feed processing businesses will be subject to approval, *b)* fat intended for feed would have to be segregated from products intended for other purposes and labelled accordingly, *c)* mandatory minimum testing will be introduced, and *d)* segregation will be maintained during the storage and transport stages to avoid contamination.

Several plans aim to reduce the use of **antibiotics**. In ***Denmark*** the plan aims to reduce the use of antibiotics in pig production by 10% by 2013. In ***France*** and ***Germany*** the plans promote the adoption of best practices, the monitoring of use and the development of alternatives.

Farm level **environmental certification** was introduced in ***France*** under control of a national commission bringing together trade unions, cooperatives, agro-food industries, environmental protection organisations and consumers.

Starting in January 2012, a single agricultural **risk insurance** management scheme was introduced in ***Hungary*** combining a government damage control scheme that requires mandatory participation of farms above a defined acreage and voluntary participation of other farms with a commercial insurance scheme. In ***Estonia***, the crop insurance scheme that had been foreseen in 2008 was abandoned.

An EU **emergency aid** package worth EUR 227 million (USD 316 million) was made available to **fresh vegetable growers** affected by the E-coli crisis. Between 50% and 70% of market losses will be compensated. An additional EUR 17 million (USD 24 million) three-years support package was subsequently approved in 2012 for the promotion of fruit and vegetables in the internal market and third countries (*e.g.* China, Russia and Ukraine).

An action plan for the **fruit and vegetable** sector was put in place in ***France*** with an overall envelope of EUR 25 million (USD 35 million). The plan includes a number of short-term measures that will reduce producers' financial and social contributions, support potentially viable farms, fund training for farmers exiting the sector, support investment in the restructuring of marketing firms, support the adoption of improved varieties of peaches, support the modernisation of greenhouses and the training of salaried labour.

Implementation of a regional action plan for the **pig sector** in ***Belgian Flanders*** began in December 2011**.** The action plan encompasses a variety of aspects, including improving farmers' access to finance and financial services, promoting marketing and quality, improving the industry's bargaining capacity and investing in R&D infrastructures. This action plan was developed building on a stakeholder consultation on the future of the sector at the 2020 horizon.

The European Union allowed a number of member states to distribute up to 50% of direct payment six weeks earlier than usual to farmers affected by the spring drought[4]. This was the case in ***Belgium***, ***France***, ***Italy***, ***Spain*** and ***Luxembourg***. In March 2012 advance payments requests have been filed by ***Portugal*** and ***Spain*** to support producers affected by a dry 2011/12 winter and spring.

Latvia and ***Slovakia*** abolished **fuel tax refunds** in 2010 and 2011 respectively, but ***Latvia*** introduced instead an excise tax exemption.

In ***Estonia***, the State Assets Act was amended in January 2011 to take into account agricultural producers' former rights to **agricultural land ownership** in some specific cases. In ***Poland***, an amendment to the act on the Management of Agricultural Property came into force that aims to accelerate the privatisation of agricultural land to the benefit of family holdings by reducing the transaction fee and introducing a condition on eligibility of individual farmers.

In ***Portugal***, the new **Ministry for Agriculture, Sea, Environment and Spatial Planning** began its activities in June 2011. The new Ministry brings together the former Ministry of Agriculture, Rural Development and Fisheries with the Ministry of Environment and Spatial Planning as well as maritime affairs.

Trade policy developments in 2011-12

In 2011, **export subsidy** spending was about EUR 194 million (USD 270 million), compared to EUR 437 million (USD 579 million) in 2010 and EUR 3.7 billion (USD 5 billion) in 2004. This gradual

decline is due to reforms of the sugar, fruits and vegetable, wine and dairy regimes and the rise in world prices. According to the most recent EU notifications to the WTO on export subsidies commitments (March 2012), the European Union remained well below its WTO ceiling for the marketing year 2009/10, overall and for most products. Export subsidies were still used for poultry, where they represent more than half the outlay allowance and for most dairy products (10% of the outlay allowance). For 2011/12, the European Union increased the ceiling for out-of quota exports to the limit permitted under WTO rules.

On **market access**, import duties on **maize, sorghum** and **rye** have been set to zero for the 2010/11 marketing years as a result of a mechanism linking import duties to border prices. In February 2011, in-quota import duties on feed ***wheat*** and ***barley*** were suspended. In December 2011, the suspension of duties was extended until June 2012. The European Union opened additional import quotas at zero duty for 300 000 tonnes of ***sugar*** in April and 200 000 tonnes in May 2011. **Import licences** for 100 000 tonnes of raw **sugar** at a reduced custom duty EUR 255 per tonne (down from EUR 339) were approved for the 2010/11 and 2011/12 marketing years. The current **import ban** that was imposed on several Asian countries at the outbreak of the avian influenza is currently effective until 30 June 2012.

According to the most recent EU notifications to the WTO (January 2011), **import tariff quotas** in 2008/09 were filled at 80-100% for 40% of quotas, Imports were zero to 5% of quota for 38% of them, notably for live bovine animals, swine carcasses and preserved meat, chicken meat, and most dairy products except cheddar cheese. In 2009, 57% of quotas were filled at 80-100%, while a quarter of them had a fill-rate of zero to 5%. The latter was the case for live sheep, manioc, sweet potatoes, corn gluten, sorghum, broken rice or cereal bran, for example.

According to the most recent EU notifications to the WTO (February 2012), the price-based **special safeguard system** has been made operational for some **poultrymeat**, **egg** and **sugar** products in marketing year 2009/10. During the same period, the volume-based special safeguard action has not been invoked. However, the system has been made operational at the level of calculation of figures for the trigger volumes for some fruit and vegetables products.

In February 2011, the European parliament signed the pact drawn up with ***Latin American*** countries over the **banana** import regime in December 2009. This puts an end to the banana dispute. The dispute over beef hormones between the European Union and the ***United States*** ended in November 2011. EU quota for US imports will increase from 20 000 tonnes to 45 000 tonnes by August 2012. The United States removed retaliatory sanctions ahead of schedule in July 2011. The dispute with ***Canada*** over the same issue had ended in March 2011, with Canada also gaining access to the EU high quality beef quota.

In May 2011, the European Commission proposed to exclude fastest-developing trading partners from the EU's **Generalised System of Preferences (GSP)**, which offers reduced import duties and tariff-free quotas to developing countries for a large number of agricultural and industrial products since the 1970s. The number of beneficiaries would be reduced from 176 to 80.

Several **bilateral agreements** entered into force or were concluded. The European Union-***Korea*** Free Trade Agreement entered into force in July 2011. As a result, 98% of EU agricultural exports will gain duty-free access to Korean market within five years. In April 2011, the European Union and ***Norway*** signed a bilateral trade agreement covering meat and dairy products, fruits, vegetables, ornamental plants and pet food. Under this agreement, which will enter into force in January 2012, Norway has granted the European Union zero or lower duties under tariff quotas for meats and cereals, while the European Union has granted Norwegian exports better access for cheese, potato chips and berries. An agreement on additional trade preferences was concluded between the two countries in November 2011.

In February 2012, the number of import quotas with zero or low duty from ***Morocco*** was increased and a number of tariffs on agricultural products were reduced or removed (45% up from 14.4%). Other tariffs will gradually be reduced in the following 10 years. The share of duty-free Moroccan imports from the EU will increase from 30% to 55%.

A trade agreement allowing duty-free and mostly quota-free entry into the European Union for ***Palestinian*** agricultural and fisheries products was reached in October 2011 and will enter into force at the beginning of 2012. However, import duties on fruits and vegetables will remain in place unless the EU's standard entry price system is adhered to. European producers will gain access to some Palestinian markets.

A Multiparty Trade Agreement between the European Union, ***Columbia*** and ***Peru*** was concluded in April 2011 and subsequently ratified by the European Parliament. This will provide for full liberalisation of a range of foodstuffs and beverages, while creating low-tariff quotas for sensitive products such as cheese and yogurt. The European Union secured access to some dairy products and pigmeat, while granting increased access to bananas, rum and sugar. No tariff reduction is foreseen for butter, fresh cheeses, beef and poultry meat.

In April 2011, the European Union and ***Moldova*** have concluded negotiations on an agreement to protect their respective Geographical indications (GIs). Similarly, the European Union, ***Switzerland*** and Lichtenstein signed a bilateral agreement for the protection of their respective GIs for agricultural products and foodstuffs in May 2011. Discussion over mutual recognition of 10 EU GIs and 10 Chinese GIs by the European Union and ***China*** are near completion. The EU and ***Canada*** have reached agreement on an equivalency in Organic products in June 2011. The agreement covers vegetables, seeds, processed foods and animal feed. A similar agreement was reached with the United States that will enter into force in June 2012. Certified organic products which are antibiotic free will be allowed market access on an equivalent basis in both markets.

Negotiations on free trade agreement are on-going between the European Union and a number of countries such as ***Canada, India, Malaysia, Singapore***, or groups of countries (*e.g.* Euromed, ASEAN, Mercosur, Central American countries comprising ***Panama, Guatemala, Costa Rica, El Salvador, Honduras*** and ***Nicaragua***).[5] Negotiations were launched to extend trade relations with ***Egypt***, ***Jordan***, ***Morocco*** and ***Tunisia*** as part of the existing Euro-Mediterranean Association Agreement.

A number of countries applied to join the European Union: ***Montenegro*** in December 2008, ***Albania*** in May 2009; ***Iceland*** in July 2009; and ***Serbia*** in December 2009. Accession negotiations continued with ***Croatia***, ***Iceland*** and ***Turkey*** in 2011. ***Serbia*** was granted candidate status in March 2012. In December 2011, an EU accession treaty has been signed by EU and Croatian Leaders. It will be submitted to a referendum in Croatia and to the national parliaments of all 27 member states for ratification. Croatia is expected to join the European Union in July 2013.

Notes

1. *http://ec.europa.eu/agriculture/markets/sfp/pdf/2008_01_dp_capFVrev.pdf*.
2. Of the 12 member states that joined the European Union in 2004 and 2007, six (the Czech Republic, Estonia, Hungary, Poland, the Slovak Republic and Slovenia) are members of the OECD. The other six, which are not members of the OECD, are covered in this report, in particular in EU aggregate indicators, but not in indicators for the OECD area.
3. Council Regulations (EC) No. 72/2009, 73/2009 and 74/2009.
4. *http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:203:0009:0009:EN:PDF*.
5. A table with state of play for on-going bilateral trade negotiations as well as map for existing trade agreement can be accessed at the following address: *http://trade.ec.europa.eu/doclib/docs/2006/december/tradoc_118238.pdf*.

PART II

Chapter 8

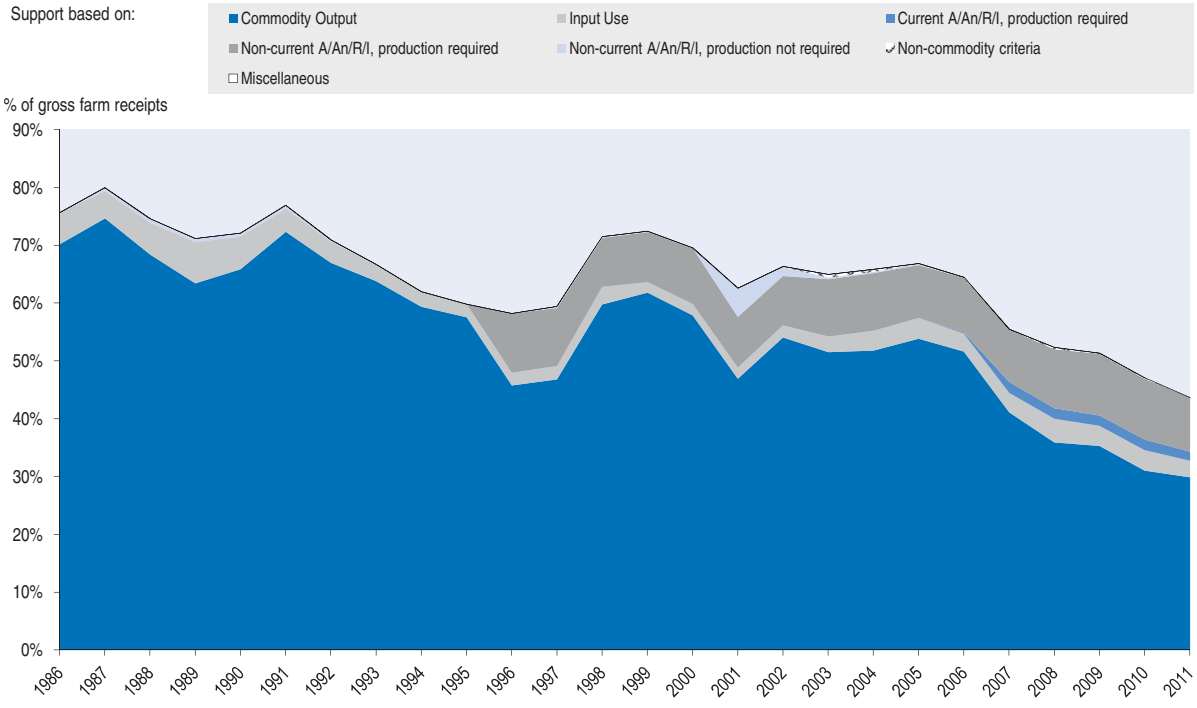
Iceland

The Iceland country chapter includes a brief evaluation of policy developments and related support to agriculture, contextual information on the framework in which agricultural policies are implemented and the main characteristics of the agricultural sector, an evaluation of support in 2010-11 and in the longer term perspective, and a brief description of the main policy developments in 2011-12.

Box 8.1. **Evaluation of Policy Developments**

- Overall, there has been limited policy reform since 1986-88. The level of support remains well above the OECD average despite a significant decline notably during the past six years due to high world prices and exchange rate movements.
- Since 2006, market price support and its share in gross farm receipts fell significantly, as a result of the strong devaluation of the Icelandic Króna during 2007-09 and higher international price levels. Increasing border prices denominated in local currency were particularly important to dairy. In consequence, the overall share of support to producers in gross farm receipts dropped by almost a third.
- Policies in Iceland remain dominated by production and trade distorting measures despite some shift towards more decoupled forms of support in the sheepmeat sector where payments based on historical animal numbers have replaced output-based payments since 1996. The more recent establishment of a market for dairy quotas further helps to reduce efficiency losses.
- Further efforts are still needed to reduce the level of support and to continue the development of more efficient and coherent policy measures. They should target explicit policy objectives, including environment protection, in ways that are less production and trade distorting and that conserve natural resources.

Figure 8.1. **Iceland: PSE level and composition by support categories, 1986-2011**



Source: OECD, *PSE/CSE Database*, 2012.

StatLink http://dx.doi.org/10.1787/888932653479

Contextual information

Iceland is a relatively small economy with a GDP per capita close to the OECD average, slightly higher than average inflation, and low unemployment rates. The recent economic downturn, however, resulted in a significant worsening of the economy with lower per capita GDP and higher inflation and unemployment rates. With about 7% and 6%, respectively, the shares of agriculture (including fish) in both GDP and employment are relatively, though not particularly, high, caused by an important fishing sector[1]. Iceland has a consistent net importer of agro-food products (excluding fishery), with a total agro-food trade balance of USD –161 million in 2010[2]. Agriculture in Iceland mainly consists of livestock production, with milk and sheepmeat being the most important products, together accounting for about half the agricultural production. Horticulture, much of which is under glass, is an important sector, too, and together with a few other crops represented some 16% of total agricultural production in 2011.

Table 8.1. **Iceland: Contextual indicators, 1995, 2010***

	1995	2010*
Economic context		
GDP (USD billion)	7	14
Population (million)	0.27	0.31
Land area (thousand km^2)	100	100
Population density (habitants/km^2)	3	3
GDP per capita, PPP (USD)	23 242	35 642
Trade as % of GDP	25.3	33.9
Agriculture in the economy		
Agriculture in GDP (%)	11.6	7.2
Agriculture share in employment (%)	9.5	5.6
Agro-food exports (% of total exports)	6.8	4.3
Agro-food imports (% of total imports)	10.0	9.2
Characteristics of the agricultural sector		
Agro-food trade balance (USD million)	–53	–161
Crop in total agricultural production (%)	22	16
Livestock in total agricultural production (%)	78	84
Agricultural area (AA) (thousand ha)	2 280	2 281
Share of arable land in AA (%)	0.3	0.3
Share of irrigated land in AA (%)	. .	. .
Share of agriculture in water consumption (%)	42	42
Nitrogen Balance, Kg/ha	7	9

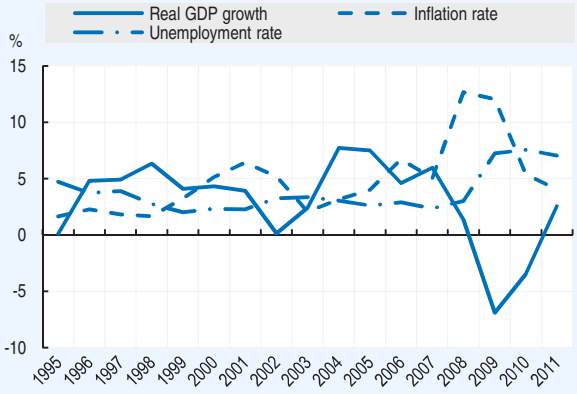
* or latest available year.

Note: Agriculture employment without fisheries is about half the percentage shown.

Source: OECD, Statistical Databases, World Development Indicators and national data.

StatLink http://dx.doi.org/10.1787/888932654125

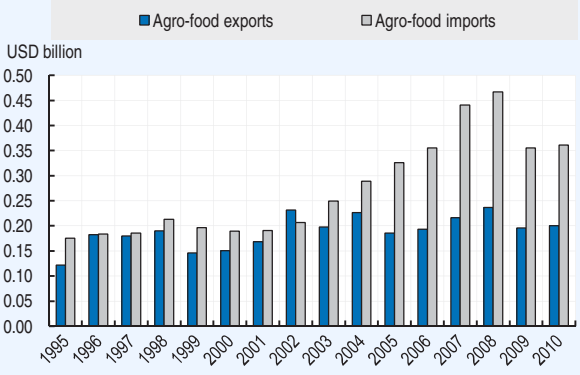
Figure 8.2. **Iceland: Main macroeconomic indicators, 1995-2011**



Source: OECD, Statistical Databases.

StatLink http://dx.doi.org/10.1787/888932653498

Figure 8.3. **Iceland: Agro-food trade, 1995-2010**



Source: International Trade by Commodity Statistics (ITCS) Database.

StatLink http://dx.doi.org/10.1787/888932653517

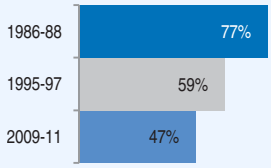
Note: Detailed definitions of contextual indicators and their sources are provided in the Annex II.A1.

Development of support to agriculture

Support to agriculture in Iceland has declined, but remains high and the most production and trade distorting forms still present two thirds of total support. The level of price distortions, as measured by the NPC, has been reduced, and direct payments – largely based on historical livestock production – has replaced some of the former price support.

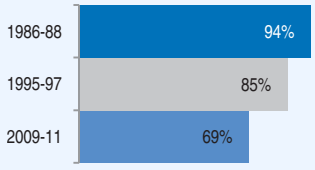
PSE as % of receipts (%PSE)

Iceland has reduced its support to farmers by 30 percentage points between 1986-88 and 2009-11. Despite a gradual reduction in the long term, overall support remains high (more than twice the OECD average) in 2009-11. The % PSE continued declining between 2009 and 2011, from 51% to 44%, respectively.



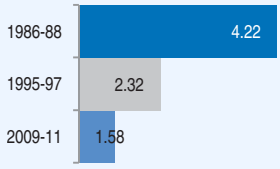
Potentially most distorting support as % of PSE

The share of potentially most distorting support (based on output and variable input use – without input constraints) in total PSE has fallen significantly over the past decades. This reflects the change in sheepmeat payments towards historical entitlements in the mid-90s and the strong devaluation of the Krona since 2007. Still, support based on output and variable input represents almost 70% of the PSE.



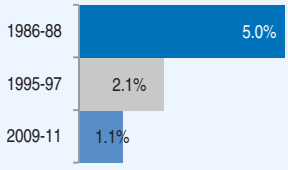
Ratio of producer price to border price (NPC)

In the long term the ratio of producer price to border price was substantially reduced, from over 4 in 1986-88 to 1.6 in 2009-11. Poultry, milk and eggs show the highest NPC. Again, the change in sheepmeat payments and the devaluation of the Krona contributed.

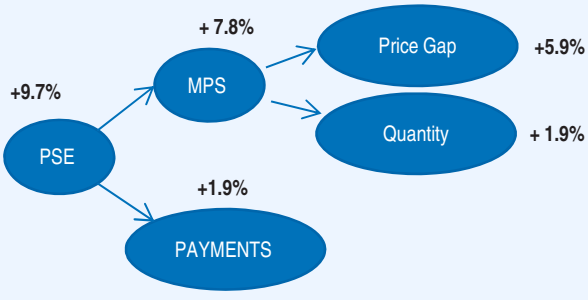


TSE as % of GDP

Total support was 1.1% of GDP in 2009-11 and the expenditure on general services represented 5% of the Total Support Estimate.

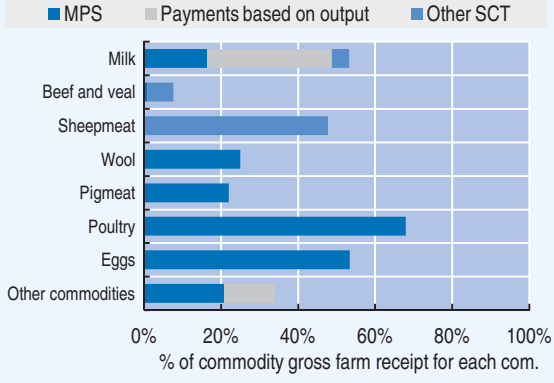


Decomposition of change in PSE, 2010 to 2011



The level of support increased in 2011 largely due to a widened gap between domestic and border prices (MPS) for pork and poultry meat following increased farm gate prices.

Transfer to specific commodities (SCT), 2009-11



The SCT represented 95% of the total PSE. The share of the SCT in the commodity gross farm receipt is lowest for beef and veal (8%), and 68% for poultry.

Table 8.2. **Iceland: Estimates of support to agriculture**

ISK million

	1986-88	1995-97	2009-11	2009	2010	2011p
Total value of production (at farm gate)	**9 644**	**10 326**	**22 788**	**20 524**	**21 216**	**26 625**
of which: *share of MPS commodities, percentage*	80	74	91	94	95	84
Total value of consumption (at farm gate)	**8 388**	**9 706**	**17 044**	**18 059**	**18 447**	**14 627**
Producer Support Estimate (PSE)	**7 896**	**8 759**	**15 433**	**15 514**	**14 678**	**16 106**
Support based on commodity output	7 312	7 397	10 449	10 660	9 672	11 014
Market Price Support	7 246	4 286	5 465	5 823	4 711	5 860
Payments based on output	66	3 112	4 984	4 836	4 962	5 154
Payments based on input use	536	337	1 079	1 059	1 121	1 058
Based on variable input use	129	0	189	153	200	213
with input constraints	0	0	0	0	0	0
Based on fixed capital formation	233	126	405	404	402	409
with input constraints	0	0	0	0	0	0
Based on on-farm services	174	210	485	502	518	436
with input constraints	0	0	0	0	0	0
Payments based on current A/An/R/I, production required[1]	0	0	561	542	556	586
Based on Receipts / Income	0	0	0	0	0	0
Based on Area planted / Animal numbers	0	0	561	542	556	586
with input constraints	0	0	2	0	2	4
Payments based on non-current A/An/R/I, production required	0	1 011	3 318	3 220	3 285	3 449
Payments based on non-current A/An/R/I, production not required	48	14	0	0	0	0
With variable payment rates	0	0	0	0	0	0
with commodity exceptions	0	0	0	0	0	0
With fixed payment rates	48	14	0	0	0	0
with commodity exceptions	48	14	0	0	0	0
Payments based on non-commodity criteria	0	0	26	33	45	0
Based on long-term resource retirement	0	0	26	33	45	0
Based on a specific non-commodity output	0	0	0	0	0	0
Based on other non-commodity criteria	0	0	0	0	0	0
Miscellaneous payments	0	0	0	0	0	0
Percentage PSE	**77**	**59**	**47**	**51**	**47**	**44**
Producer NPC	**4.22**	**2.32**	**1.58**	**1.76**	**1.62**	**1.37**
Producer NAC	**4.34**	**2.45**	**1.91**	**2.06**	**1.89**	**1.78**
General Services Support Estimate (GSSE)	**731**	**927**	**894**	**944**	**929**	**808**
Research and development	140	232	114	130	122	89
Agricultural schools	47	95	0	0	0	0
Inspection services	40	88	343	352	346	329
Infrastructure	91	187	37	55	50	5
Marketing and promotion	54	75	50	66	64	21
Public stockholding	359	249	350	340	347	364
Miscellaneous	0	0	0	0	0	0
GSSE as a share of TSE (%)	**6.8**	**9.2**	**5.4**	**5.6**	**5.8**	**4.7**
Consumer Support Estimate (CSE)	**-4 566**	**-4 012**	**-4 069**	**-5 324**	**-4 394**	**-2 490**
Transfers to producers from consumers	-6 421	-4 340	-4 422	-5 688	-4 697	-2 880
Other transfers from consumers	-51	-35	-22	0	-67	0
Transfers to consumers from taxpayers	1 906	363	375	364	371	390
Excess feed cost	0	0	0	0	0	0
Percentage CSE	**-70**	**-43**	**-24**	**-30**	**-24**	**-17**
Consumer NPC	**4.44**	**1.82**	**1.35**	**1.46**	**1.35**	**1.25**
Consumer NAC	**3.50**	**1.75**	**1.32**	**1.43**	**1.32**	**1.21**
Total Support Estimate (TSE)	**10 533**	**10 048**	**16 701**	**16 822**	**15 978**	**17 304**
Transfers from consumers	6 472	4 375	4 444	5 688	4 765	2 880
Transfers from taxpayers	4 112	5 708	12 280	11 134	11 281	14 424
Budget revenues	-51	-35	-22	0	-67	0
Percentage TSE (expressed as share of GDP)	**5.00**	**2.06**	**1.07**	**1.12**	**1.04**	**1.05**
GDP deflator 1986-1988=100	**100**	**211**	**438**	**414**	**442**	**459**

Note: p: provisional. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
MPS commodities for Iceland are: milk, beef and veal, sheep meat, wool, pig meat, poultry and eggs. Market Price Support is net of producer levies and Excess Feed Cost.

1. A (area planted), An (animal numbers), R (receipts), I (income).

Source: OECD, *PSE/CSE database,* 2012.

StatLink http://dx.doi.org/10.1787/888932654429

Description of Policy Developments

Main policy instruments

Agricultural policies in Iceland are governed by binding, renewable, multi-year bilateral agreements between the Government of Iceland and the Farmers' Association, concerning the general framework for support and production control for sheep and dairy farmers and horticulture. Three agreements are currently in force, including the Agreement on dairy production from 2004 which expires 2014, the Agreement on sheep production from 2007 which expires 2015, and the Agreement on horticultural production form 2002 which expires 2013. All three agreements were revised in 2009, with their validity extended by 2 years in each case.

Support to Iceland's agriculture mainly comes through border protection (and a tradable production quota in case of the dairy sector), on the one hand, and budget payments, on the other. Budget payments are provided in different forms, and are based on output in the horticulture sector. Output quantities and animal numbers are the bases for payments to dairy farmers, while payments are based on historical, tradable entitlements in the sheep meat sectors.

The dairy sector remains largely regulated through **production quotas** and **price control**. Producers are guaranteed a **minimum price** set for **milk** delivered within the quota. Milk prices are decided on an annual basis by a government-chaired committee between the Farmers' association and the labour union representing the consumer side. In addition, dairy farmers receive direct payments originally based on historical production levels. These entitlements are, however, tradable between farmers, as is the production quota. Additional support is provided for breeding, land cultivation and development.

Entitlements for **direct payments** are equally tradable in the **sheep meat** sector. Reception of payments is, however, conditional of keeping a minimum of winter-fed sheep on the farm. In contrast, the obligation for sheep farmers to export when total production exceeded domestic demand has been abolished from 1 June 2009. Additional payments are made in the context of a quality control scheme for lamb meat which relates to animal welfare, product quality and traceability, and sustainable land use. While meat prices are freely set by slaughter companies, the Farmers' Association regularly publishes reference prices which can help price determination.

Border measures in the form of **import tariffs** are of particular importance in the **poultry** and **eggs** sector and, to a lesser extent, in the **pigmeat** sector. On a Most-Favoured Nation basis, Iceland applies an *ad valorem* tariff of 30% to imports of most meat and egg products, subject to an additional specific tariff depending on the product – although lower rates may apply for products originating in partner countries of the European Economic Area or one of the more than 20 Free Trade Agreements. In consequence, domestic prices for pigmeat, poultry and eggs tend to be substantially higher than prices at the international market.

All agricultural revenues are subject to a **levy** which is distributed within and between various agricultural bodies. **Consumer subsidies** for wool are provided at the wholesale level. **Agri-environmental policies** mainly focus on soil conservation and forestry through payments aiming at reducing desertification and sand encroachment, promotion of sustainable land use and reclamation and restoration of degraded land.

In July 2009, Iceland applied for joining the European Union, with accession negotiations started in July 2010. A Screening Report was published in June 2011.[3]

Domestic policy developments in 2011-12

With most of the agricultural policies and support measures being determined by the Agreements with the Farmers' Association, which are not due to expire before 2013, 2014 and 2015 respectively, no specific new policies were applied in 2011.

Trade policy developments in 2011-12

Iceland applies no **export subsidies**. However, as mentioned above, significant border protection is maintained through import tariffs for most products produced in Iceland. Import of live animals is prohibited for sanitary reasons.

Iceland is a Member of the European Free Trade Association (EFTA) and the European Economic Area (EEA). While the EEA excludes most trade in agricultural goods, it opens trade in a number of processed agricultural products and encourages bilateral agreements on basic ones. Such a bilateral agreement between Iceland and the ***EU*** has been in force since 2007, extending the EU-Iceland Free Trade Agreement from 1972. It reduces or eliminates agricultural tariffs and establishes quotas in bilateral trade. Furthermore, EFTA has a number of Free Trade Agreements with countries in South-East Europe, North Africa and the Middle East, Latin America, and Asia, as well as with the South African Customs Union. In addition, Iceland is Party to a bilateral Free Trade Agreement with the Faroe Islands.

Notes

1. The share of agriculture, excluding fishing, in Iceland's GDP was only 1.3% in 2008.
2. At the same time, Iceland is a significant net exporter of fish and fish products, with net exports exceeding USD 1.4 billion in 2009.
3. Chapter 11 – Agriculture and Rural Development – can be found at *http://ec.europa.eu/enlargement/pdf/iceland/key-documents/screening_report_11_is_internet_en.pdf*.

PART II

Chapter 9

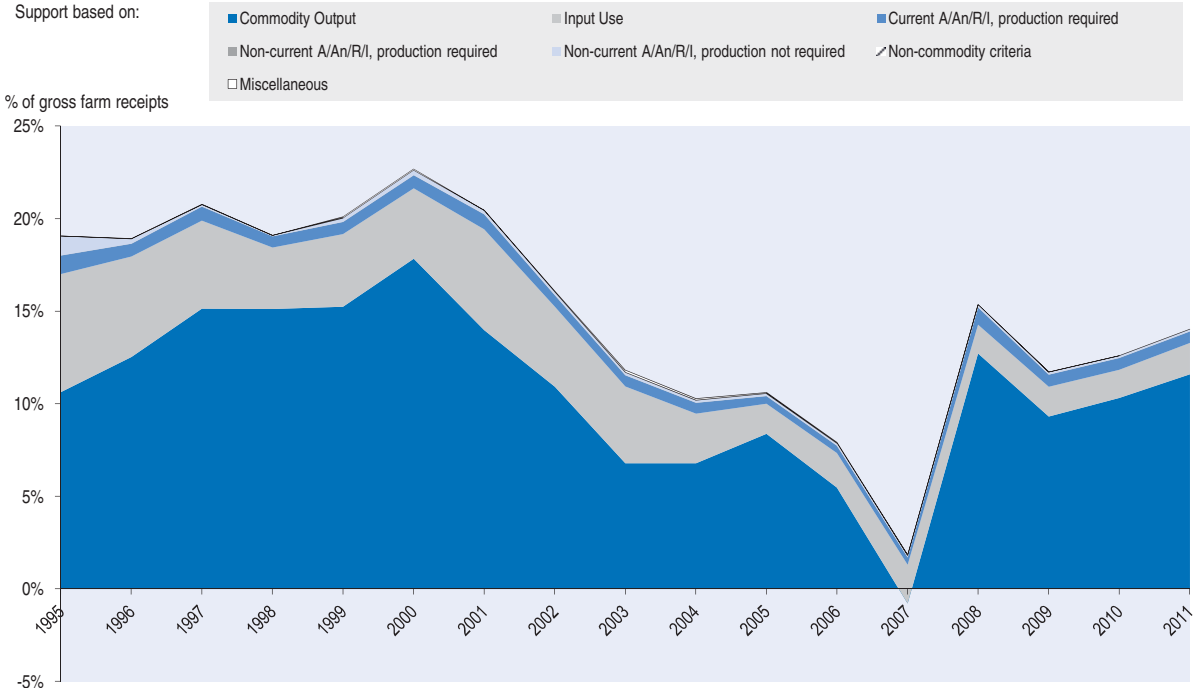
Israel

The Israel country chapter includes a brief evaluation of policy developments and related support to agriculture, contextual information on the framework in which agricultural policies are implemented and the main characteristics of the agricultural sector, an evaluation of support in 2010-11 and in the longer term perspective, and a brief description of the main policy developments in 2011-12.

Box 9.1. **Evaluation of policy developments**

- Since 1995, Israel has reduced support to agriculture roughly at the same speed as the OECD as a whole. As a result, its level of support remains at around two-thirds of the OECD average. This reduction was partly driven by progress in domestic policy reform and by lower border protection resulting from bilateral trade liberalisation agreements. Besides, higher prices on world markets in recent years also contributed to the reduction in the relative importance of support.
- While in the longer-term the level of support to agriculture fell, it has increased slightly over the last two years and its composition remains trade and production distortive. This mostly reflects continued high border protection for agricultural commodities maintaining domestic prices above international levels and a relatively high share of support to farm inputs that are known to be the most distortive forms of support.
- The level of support, in particular the market price support component, is subject to strong fluctuations as domestic prices for selected commodities are administered by the government rather than following market developments. Thus, an adjustment of domestic prices to world market prices is delayed or works in the opposite direction.
- The main agricultural policy instruments remained unchanged in 2011. There is a wide range of policy reforms that could be undertaken to further improve the efficiency of the Israeli agricultural sector and its international competitiveness at lower costs to taxpayers and consumers. In addition to structural reforms, such as diminishing administrative burdens on agricultural land market transactions, Israel could reduce and simplify import tariffs on agricultural products and could take further steps in easing the production planning system in the livestock sector.
- The environmental performance of agriculture has been mixed and can be further improved, in particular in water use efficiency. As agriculture uses more than half of all water consumed, meeting the conditions agreed between the government and farmers in 2006, to further increase water prices to cover average costs of water production by 2015, is of key importance.

Figure 9.1. **Israel: PSE level and composition by support categories, 1995-2011**



Note: The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Source: OECD, *PSE/CSE Database*, 2012.

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Contextual information

Israel's economy sustained the 2009 global crisis relatively well and resumed above 4% growth rate in both 2010 and 2011. Its GDP per capita at purchasing power parity is slightly below the OECD average. The share of agriculture in total employment and in domestic product has fallen to around 2%. But agriculture still accounts for 57% of annual water consumption and the use of water resources is the dominant environmental issue for the sector. Arable land is another scarce factor with an average availability at just 0.04 hectare per capita. Half of arable land is irrigated. Israel is unique amongst developed countries in that land and water resources are nearly all state-owned. Co-operative communities, principally the *kibbutz* and *moshav*, dominate agricultural production accounting for about 80% of agricultural output. The agro-food sector is strongly integrated with international markets with exports dominated by fruit and vegetables and imports, by land-intensive cereals and oilseeds and selected other commodities such as beef and sugar. The negative balance of trade in agro-food products tended to increase in recent years.

Table 9.1. **Israel: Contextual indicators, 1995, 2010***

	1995	2010*
Economic context		
GDP (USD billion)	96	243
Population (million)	5	8
Land area (thousand km^2)	20	20
Population density (habitants/km)	273	375
GDP per capita, PPP (USD)	18 896	28 596
Trade as % of GDP	24.7	26.9
Agriculture in the economy		
Agriculture in GDP (%)	2.1	2.1
Agriculture share in employment (%)	2.9	1.6
Agro-food exports (% of total exports)	7.0	3.9
Agro-food imports (% of total imports)	6.6	7.1
Characteristics of the agricultural sector		
Agro-food trade balance (USD million)	–526	–1 914
Crop in total agricultural production (%)	61	61
Livestock in total agricultural production (%)	39	39
Agricultural area (AA) (thousand ha)	573	523
Share of arable land in AA (%)	60	58
Share of irrigated land in AA (%)	45	52
Share of agriculture in water consumption (%)	63	57
Nitrogen Balance, Kg/ha	. .	. .

* or latest available year.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Source: OECD, *Statistical Databases*, World Development Indicators and national data.

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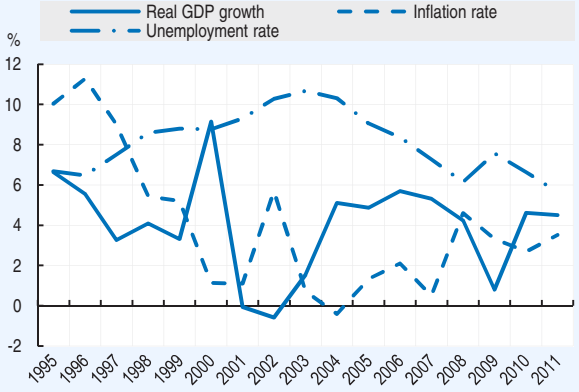
Figure 9.2. **Israel: Main macroeconomic indicators, 1995-2011**



Source: OECD, *Statistical Databases.*

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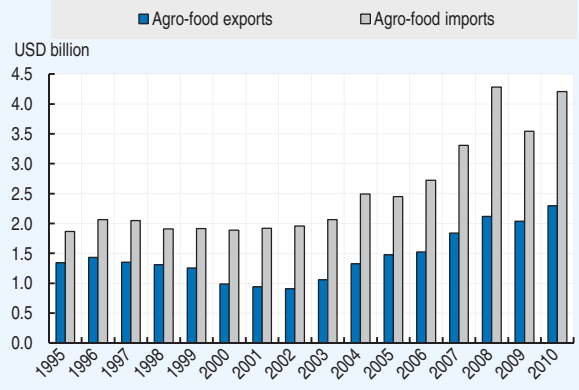
Figure 9.3. **Israel: Agro-food trade, 1995-2010**



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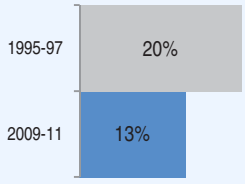
Note: Detailed definitions of contextual indicators and their sources are provided in the Annex II.A1.

Development of support to agriculture

Israel has reduced support to agriculture since 1995, but the share of most production and trade distorting forms of support remains very high. Moreover, the level of market price support is still subject to strong fluctuations as domestic prices for selected commodities remain regulated by the government and their adjustments are either delayed or delinked from changes on international markets.

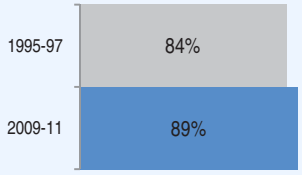
PSE as % of receipts (%PSE)

In the long term Israel reduced support to agriculture which is now at two-thirds of the OECD average. The %PSE increased slightly in both 2010 and 2011.



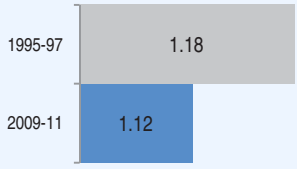
Potentially most distorting support as % of PSE

While the level of support has fallen, the most production and trade distorting policies (based on commodity output and variable input use – without input constraints) dominate and represent 89% of the total support.



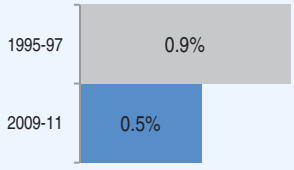
Ratio of producer price to border price (NPC)

Overall, prices received by farmers were on average 12% higher than those observed on the world markets in 2009-11.

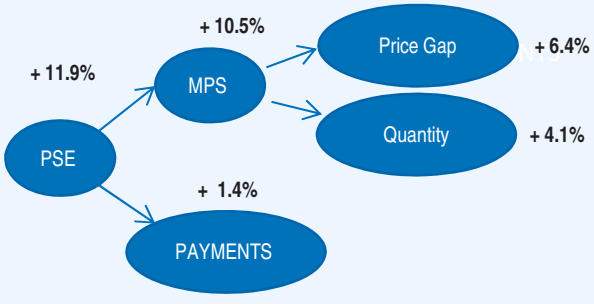


TSE as % of GDP

Total support was 0.5% of GDP in 2009-11, compared to the OECD average of around 1%, and the expenditure on general services represented 14% of the total support.

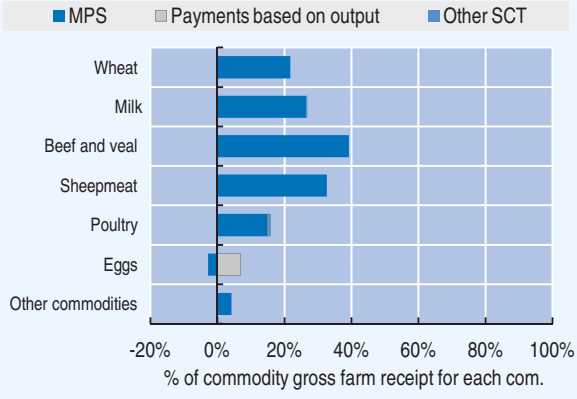


Decomposition of change in PSE, 2010 to 2011



The level of support increased in 2011 mainly due to the stronger increase in domestic prices compared to the rise in border prices.

Transfer to specific commodities (SCT), 2009-11



The Single Commodity Transfers (STC) represented 82% of the total PSE. The share of the SCT in the commodity gross farm receipts is lowest for fruit and vegetables, and the highest for beef and veal, sheepmeat and milk.

Table 9.2. **Israel: Estimates of support to agriculture**

ILS million

	1995-97	2009-11	2009	2010	2011p
Total value of production (at farm gate)	**11 651**	**25 918**	**25 581**	**26 056**	**26 117**
of which: *share of MPS commodities, percentage*	72	82	83	79	83
Total value of consumption (at farm gate)	**9 274**	**19 609**	**18 345**	**20 356**	**20 124**
Producer Support Estimate (PSE)	**2 466**	**3 404**	**3 078**	**3 367**	**3 766**
Support based on commodity output	1 617	2 771	2 446	2 756	3 110
Market Price Support	1 553	2 708	2 383	2 695	3 047
Payments based on output	65	62	63	61	63
Payments based on input use	688	430	423	409	459
Based on variable input use	457	243	258	229	243
with input constraints	0	0	0	0	0
Based on fixed capital formation	183	124	114	128	129
with input constraints	0	0	0	0	0
Based on on-farm services	48	64	51	52	87
with input constraints	0	0	0	0	0
Payments based on current A/An/R/I, production required[1]	102	169	174	169	163
Based on Receipts / Income	97	146	155	146	136
Based on Area planted / Animal numbers	5	23	19	23	27
with input constraints	0	0	0	0	0
Payments based on non-current A/An/R/I, production required	0	0	0	0	0
Payments based on non-current A/An/R/I, production not required	56	34	35	32	35
With variable payment rates	0	34	35	32	35
with commodity exceptions	0	0	0	0	0
With fixed payment rates	56	0	0	0	0
with commodity exceptions	0	0	0	0	0
Payments based on non-commodity criteria	0	0	0	0	0
Based on long-term resource retirement	0	0	0	0	0
Based on a specific non-commodity output	0	0	0	0	0
Based on other non-commodity criteria	0	0	0	0	0
Miscellaneous payments	2	0	0	0	0
Percentage PSE	**20**	**13**	**12**	**13**	**14**
Producer NPC	**1.18**	**1.12**	**1.11**	**1.12**	**1.13**
Producer NAC	**1.24**	**1.15**	**1.13**	**1.14**	**1.16**
General Services Support Estimate (GSSE)	**390**	**661**	**624**	**677**	**681**
Research and development	152	243	215	234	282
Agricultural schools	3	2	2	2	2
Inspection services	56	97	93	104	94
Infrastructure	11	269	262	289	256
Marketing and promotion	59	2	2	2	1
Public stockholding	108	46	47	47	45
Miscellaneous	0	1	3	1	1
GSSE as a share of TSE (%)	**13.7**	**16.3**	**16.9**	**16.7**	**15.3**
Consumer Support Estimate (CSE)	**-2 072**	**-3 064**	**-2 886**	**-3 045**	**-3 260**
Transfers to producers from consumers	-1 705	-2 537	-2 356	-2 508	-2 748
Other transfers from consumers	-386	-557	-579	-551	-540
Transfers to consumers from taxpayers	0	0	0	0	0
Excess feed cost	20	30	49	14	28
Percentage CSE	**-22**	**-16**	**-16**	**-15**	**-16**
Consumer NPC	**1.29**	**1.19**	**1.19**	**1.18**	**1.20**
Consumer NAC	**1.28**	**1.19**	**1.19**	**1.18**	**1.19**
Total Support Estimate (TSE)	**2 856**	**4 065**	**3 702**	**4 044**	**4 448**
Transfers from consumers	2 092	3 094	2 935	3 059	3 289
Transfers from taxpayers	1 150	1 527	1 346	1 536	1 699
Budget revenues	-386	-557	-579	-551	-540
Percentage TSE (expressed as share of GDP)	**0.86**	**0.50**	**0.48**	**0.50**	**0.51**
GDP deflator 1995-1997=100	**100**	**148**	**146**	**147**	**150**

Note: p: provisional. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
MPS commodities for Israel are: wheat, cotton, groundnuts tomatoes, peppers, potatoes, avocados, bananas, oranges, grapefruit, grapes, apples, milk, beef and veal, sheepmeat, poultry and eggs. Market Price Support is net of producer levies and Excess Feed Cost.
The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
1. A (area planted), An (animal numbers), R (receipts), I (income).
Source: OECD, *PSE/CSE Database*, 2012.

StatLink http://dx.doi.org/10.1787/888932654448

Description of policy developments

Main policy instruments

There were no changes in main policy instruments in 2011. Since the late 1980s Israel has gradually diminished the scope of policies based on the provision of subsidies, central planning of agricultural industries, allocation of production quotas, price controls and import protection. But the government continues to be involved in the allocation of key factors of production: land, water and foreign workers. While some sectors, such as milk and eggs, have been covered by sector specific reforms, they continue to benefit from guaranteed prices and quotas aiming at securing profitability for producers. Minimum prices are also provided for wheat producers. On the other hand, consumer price controls are applied to several basic food products, mainly to dairy products, eggs and bread.

Egg and broiler producers in peripheral areas benefit from direct payments. Income support measures are provided to wheat producers to support rain-fed agriculture and to preserve open space.

Water remains subsidised. Farmers have been given access to water at lower rates compared to other users and benefit from compensation for the cut in the freshwater quota allocation to agriculture, as well as from a concession on the water extraction levy.

Capital grants are provided to develop the agricultural export sector and to encourage the uptake of advanced technologies. Farmers who participate in the investment support scheme are also entitled to income tax exemptions and accelerated depreciation. As from 2009, an investment support programme is being implemented to partly replace foreign workers in agriculture.

Insurance schemes for farmers are subsidised and the government intends to deepen this policy measure through increased state participation in subsidising premiums and to extend it through inclusion of new crops. Currently, farmers receive 80% compensation of the premium to participate in the multi-risk insurance scheme and 35% compensation to participate in the insurance scheme against natural damages.

As a result of the implementation of the Uruguay Round Agreement on Agriculture (URAA), Israel maintains now a more transparent and open trade regime. However, high border tariff protection on agro-food products remains a key tool supporting agricultural producers. Under the URAA, Israel has established TRQs for wheat, fats and oils, walnuts, prunes, maize, orange and other citrus juices, beef and sheep meat and various dairy products.

Israel's tariff profile for agricultural products is highly uneven – with very high, sometimes prohibitive, tariffs for such products as dairy, meat, eggs and some fruits and vegetables, and low, sometimes duty-free, tariffs for other commodities such as coarse grains, oilseeds and frozen beef. The tariff system is complicated, involving a large number of non-*ad valorem* tariffs. According to the latest WTO trade policy report on Israel, the simple average MFN tariff for agricultural products (WTO definition) was 32.9% in 2005 compared with the average for non-agricultural products at 5.1%. However, a large part of agro-food trade takes place under various free trade agreements (the most important ones are with the EU and the US) which allow preferential access to the Israeli market, in many cases duty free.

Domestic policy developments in 2011-12

In 2011, massive social protests against continuing **rise in food prices**, called "cottage cheese protests", led to the lowering of dairy product retail prices by local dairy sector monopolies, in

particular Tnuva, and to changes in Tnuva's leadership. The government reacted by the creation of several committees to examine the situation and to provide recommendations. *The Trajtenberg Committee* covered a wide range of issues and presented proposals to reorder budgetary priorities and tax changes with very limited impacts on the agro-food sector. Two other committees, called *Kedmi Committees*, focused on the dairy sector and on food prices more generally. Proposals related to the dairy sector were submitted in August and included cutting the **guaranteed price** of raw **milk** paid to dairy farmers and partial opening of the dairy market to imports. More general food price reforms included tools to increase competition, increased exposure to imports, and infrastructure modifications. However, as of March 2012, the government has yet to approve initial conclusions on food prices and the High Court postponed the approval decision on the dairy sector reform until public hearing. Thus, as yet no policy changes have been made as a reaction to the social protests with the exception of limited cuts in import tariffs discussed briefly in the section below.

Israel applies **administered prices** for **milk**, **eggs** and **wheat**. For milk and eggs guaranteed prices are based on the average cost of production and while they are updated regularly, their level and direction of change diverge quite strongly from the level and evolution of prices on international markets. In 2011, despite social protests targeting dairy products which led to a fall in retail prices for dairy products, the guaranteed price for cow milk increased by almost 11% and remained significantly higher than the border reference price. Also for eggs the guaranteed price increased and remained higher than the border reference price, but the positive price differential was not as large as for milk. However, egg quota holders benefit also from payments within so called Galilee Law which amounted to NIS 54 million (USD 28 million) in 2011, roughly the same amount as in previous years. Minimum prices for wheat are based on the Kansas market price adjusted for quality and transportation costs. During the year there might be changes in price according to developments in international markets, but as these corrections are delayed, the level of prices and the direction of change may diverge. In 2011, as was the case in the two preceding years, domestic price for wheat remained on average at a higher level than on international markets.

The total number of foreign workers and their allocation are strictly regulated by the government, which is planning to reduce the number of working permits allocated to the agricultural sector to 18 900 by 2015. In 2011, the approved quota for foreign workers in agriculture was 26 000 employees, about 60% lower than the number or workers requested by farmers. As compensation, farmers are offered **investment support** over 5-6 years (grants up to 40% of investment) for replacing labour with machinery. In total, budgetary expenditures for this programme are to amount to ILS 250 million (USD 70 million) during 2009-14. In 2011, 844 farmers benefited from this support at the total cost of NIS 42 million (USD 12 million). Additional ILS 30 million (USD 8 million) is being provided for research and development to improve mechanisation during 2010-16. The government also supports the employment of 1 500 Israeli workers instead of foreign workers in the agricultural sector with ILS 30 000 per worker over three years. Total budgetary expenditures foreseen for this purpose amount to ILS 45 million (USD 13 million) in 2010-16 and the allocation in 2011 was NIS 4.5 million (USD 1.3 million) distributed to 160 Israeli employees and 60 employers.

In line with the agreement between the government and farmers in 2006 to further increase water charges paid by farmers so they eventually cover the average cost of water production by 2015 (operation and maintenance and fixed capital costs), farmers are receiving **support to invest in water saving** and in irrigation technologies. Support for this programme amounted to NIS 103 million (USD 29 million) in 2011 and was roughly at the same level as in the preceding two years.

Within general services, **investment in water projects** remains the most important item with an allocation of NIS 255 million (USD 72 million), slightly smaller than in previous two years.

A new **infrastructure rehabilitation** project started to be implemented in 2011/12 to cover 124 farming communities, both Kibbutzim and Moshavim. Total annual expenditure of NIS 100 million (USD 28 million) is planned, but in 2011 the actual expenditure on this purpose was negligible.

Trade policy developments in 2011-12

A **free trade agreement** between Israel and ***Mercosur***, signed at the end of 2007, entered into force in September 2011. The agreement distinguishes five categories of commodities differentiated by the scale of tariff reduction and the lengths of implementation periods. While the overall reduction is comprehensive with the immediate elimination of the majority of tariff lines by the two sides, the reduction on agro-food trade is much more limited. In the case of sensitive products, Israel will apply small TRQs subject to zero in-quota tariff or step-wise reduction of MFN rate. These products include meat, dairy products, some fruit and vegetables, roses, cereals and flour (wheat and maize) and their products.

Several amendments to the free trade agreement with the ***EU*** were adopted particularly with regard to starch lactose and ice cream. The FTA with the ***USA*** and ***EFTA*** are under revisions and current negotiations are focused on further trade liberalisation in agro-food products. New FTAs with several other countries are at varying stages of progress, including with ***India*** and ***Columbia***.

In January 2012, the *Committee to Examine Competitiveness in the Food and Consumer Goods Market* submitted its recommendations on **reductions of customs duties** of agro-food products to the Minister of Finance and the Minister of Industry, Trade and Labour. The Committee recommended a reduction of 40% to 80% in custom duties for fresh food products not manufactured in Israel or manufactured in negligible quantities as well as for significant reductions in duties for selected meat products, concentrated fruit juice and for other processed food products. Reductions are to be spread over different periods, most often within 2-4 years. The timing and scope of the reductions will be determined taking into account Israel's existing trade agreements. It has to be noted that dairy products, eggs and poultry meat, covered by commodity-specific support programmes in Israel, are not mentioned in the recommendations.

PART II

Chapter 10

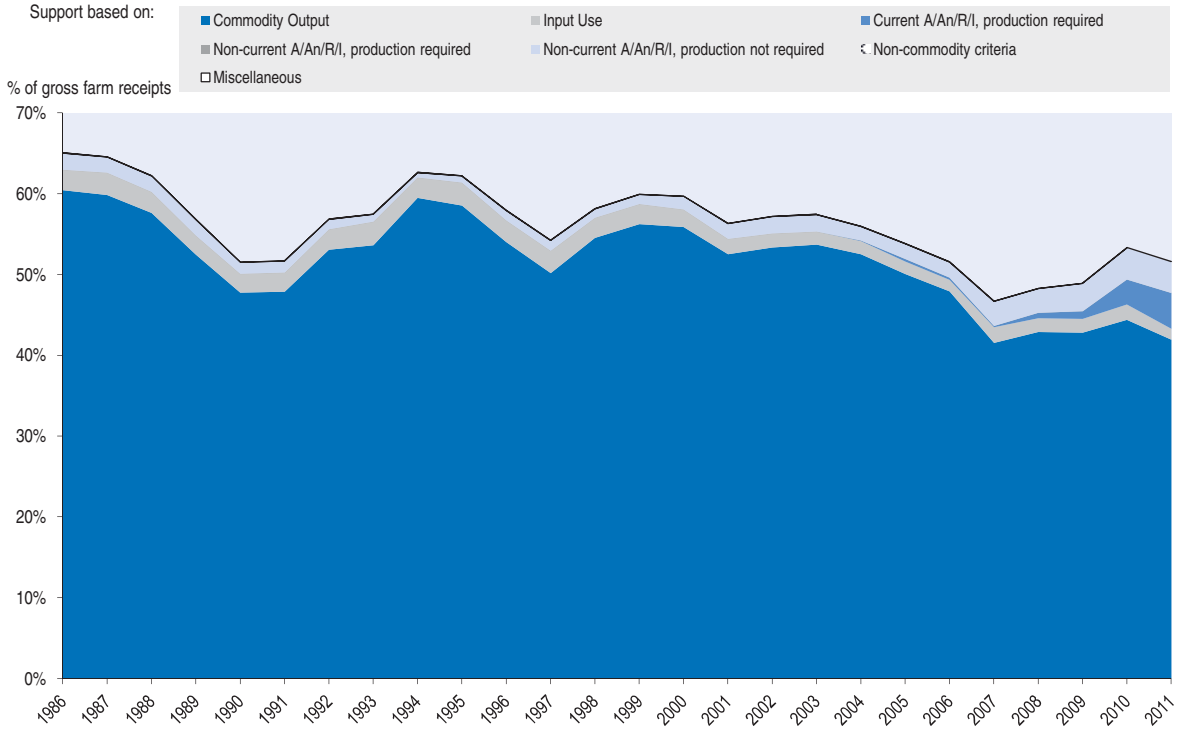
Japan

The Japan country chapter includes a brief evaluation of policy developments and related support to agriculture, contextual information on the framework in which agricultural policies are implemented and the main characteristics of the agricultural sector, an evaluation of support in 2010-11 and in the longer term perspective, and a brief description of the main policy developments in 2011-12.

Box 10.1. **Evaluation of policy developments**

- Overall, there has been little progress in market orientation with a reduction in the level of producer support since 1986-88, but it is still twice the OECD average. A significant share of support continues to be provided through market price support, in particular to rice. In addition to border measures, the production adjustment scheme for rice keeps price high through limiting supply. Approximately 90% of producer support is commodity specific, narrowing the farmer's choice what to produce.
- A new farm income support payment was launched as a pilot programme in 2010 for rice farms and for some upland crops in 2011. Most of the new income support payments are commodity specific and they are available for all commercial farms irrespective of farm size. This is a step away from the recent reform initiative to re-orient support to less commodity specific payments and to target support to certain farms with a farm size threshold.
- The announcement of the Basic Policy on Comprehensive Economic Partnerships to commit the government to pursue high-level EPAs as well as strengthen agricultural sector is a move toward more market oriented agricultural policy reform. A successful policy reform would bring more opportunities to farmers producing high-quality and high-value products, and allow government to target policy to specific policy objectives.
- Despite some progress, the proportion of support provided by the most distorting forms is still high. The new income support payments are not reducing the high market price support, particularly for rice. Further efforts are needed to reduce the high level of support and increase market access, while moving towards more decoupled policies that are better targeted to farm income, rural development, and environmental objectives.

Figure 10.1. **Japan: PSE level and composition by support categories, 1986-2011**



Source: OECD, *PSE/CSE Database*, 2012.

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Contextual information

Japan is a land scarce country, where only 30% of area is suitable for agriculture or urban use. The importance of agriculture in the Japanese economy is relatively low with its share in domestic product declined to 1.4% in 2010, while its share in employment is slightly below 4%. Japan is the largest net agro-food importer in the world. Its share of agro-food imports in total imports is around 8%, while the share of agro-food exports on total exports is less than 1%. The farms structure is based on relatively small family farms. Majority of farmland are irrigated paddy field. Livestock production largely depends on imported feed and its share in total agricultural production is increasing overtime.

Table 10.1. **Japan: Contextual indicators, 1995, 2010***

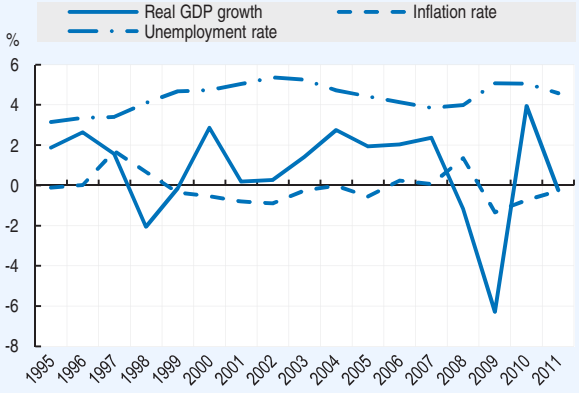
	1995	2010*
Economic context		
GDP (USD billion)	5 264	5 889
Population (million)	126	127
Land area (thousand km^2)	365	365
Population density (habitants/km^2)	329	335
GDP per capita, PPP (USD)	22 538	33 751
Trade as % of GDP	7.4	13.4
Agriculture in the economy		
Agriculture in GDP (%)	1.8	1.4
Agriculture share in employment (%)	5.2	3.7
Agro-food exports (% of total exports)	0.4	0.4
Agro-food imports (% of total imports)	12.3	7.7
Characteristics of the agricultural sector		
Agro-food trade balance (USD million)	–39 454	–50 445
Crop in total agricultural production (%)	79	65
Livestock in total agricultural production (%)	21	35
Agricultural area (AA) (thousand ha)	5 443	4 609
Share of arable land in AA (%)	85	93
Share of irrigated land in AA (%)	54	55
Share of agriculture in water consumption (%)	66	66
Nitrogen Balance, Kg/ha	175	186

* or latest available year.

Source: *OECD, Statistical Databases*, World Development Indicators and national data.

StatLink http://dx.doi.org/10.1787/888932654163

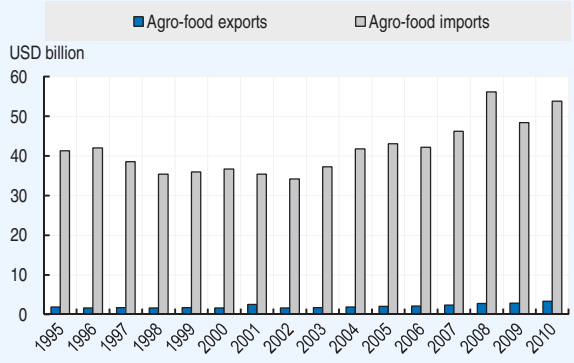
Figure 10.2. **Japan: Main macroeconomic indicators, 1995-2011**



Source: *OECD, Statistical Databases.*

StatLink http://dx.doi.org/10.1787/888932653612

Figure 10.3. **Japan: Agro-food trade, 1995-2010**



Source: *International Trade by Commodity Statistics (ITCS) Database.*

StatLink http://dx.doi.org/10.1787/888932653631

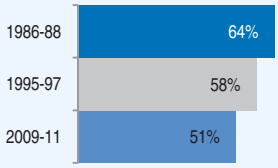
Note: Detailed definitions of contextual indicators and their sources are provided in the Annex II.A1.

Development of support to agriculture

Japan has progressively reduced its support to agriculture and more recently the share of most production and trade distorting forms of support. However, support remains twice the OECD average and most is delivered in production and trade distorting forms. Prices received by farmers have come closer to the world market prices as documented by the NPC. The share of direct payments in the PSE is increasing in recent years particularly in the form of area and income based payments.

PSE as % of receipts (%PSE)

Support to producers (%PSE) decreased gradually and consistently overtime, but it remains more than twice the OECD average. The reduction in %PSE in recent years is mainly due to a lower domestic rice price resulting from the abolition of administered price system and the contraction of domestic rice consumption.

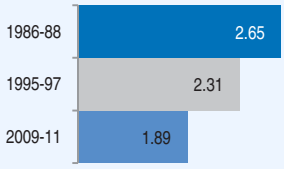


Potentially most distorting support as % of PSE

Japan reduced market price support mechanisms and increased direct payments to farmers. However, the most production and trade distorting policies (based on output and variable input use – without input constraints) still represent 85% of the PSE in 2009-11.

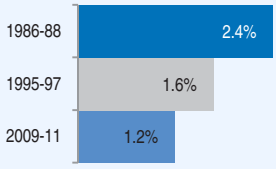
Ratio of producer price to border price (NPC)

Prices received by farmers were around 2.65 times higher than those in world markets in 1986-88, and this ratio was reduced to 1.89 in 2009-11.

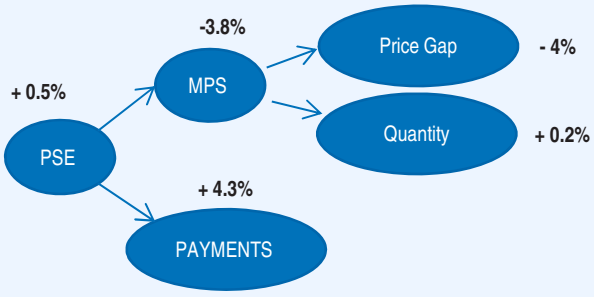


TSE as % of GDP

Total support was about 1.2% of GDP in 2009-11 and the expenditure on general services represented around 16% of the Total support.

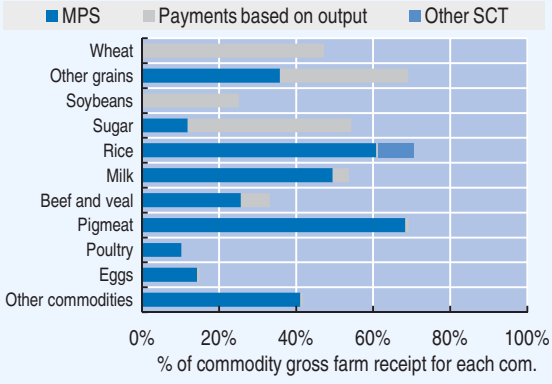


Decomposition of change in PSE, 2010 to 2011



The level of support increased slightly in 2011 mainly due to the introduction of new direct payments such as income support program for rice and upland crop farms.

Transfer to specific commodities (SCT), 2009-11



Single Commodity Transfers (SCT) represented 88% of the total PSE in 2009-11. Rice continued to be the most heavily supported commodity as measured by producer SCT and accounted for 32% of the total SCT in 2009-11.

Table 10.2. **Japan: Estimates of support to agriculture**

JPY billion

	1986-88	1995-97	2009-11	2009	2010	2011p
Total value of production (at farm gate)	**10 610**	**10 128**	**8 190**	**8 190**	**8 121**	**8 259**
of which: *share of MPS commodities, percentage*	68	68	66	67	65	66
Total value of consumption (at farm gate)	**14 298**	**15 070**	**11 835**	**11 691**	**12 055**	**11 760**
Producer Support Estimate (PSE)	**7 267**	**6 239**	**4 688**	**4 348**	**4 846**	**4 870**
Support based on commodity output	6 740	5 822	3 932	3 805	4 033	3 957
Market Price Support	6 519	5 651	3 743	3 651	3 883	3 697
Payments based on output	221	171	188	154	150	260
Payments based on input use	299	298	151	152	174	128
Based on variable input use	149	124	53	54	52	52
with input constraints	0	0	0	0	0	0
Based on fixed capital formation	129	153	42	55	34	38
with input constraints	0	0	0	0	0	0
Based on on-farm services	21	21	56	43	88	38
with input constraints	0	0	0	0	0	0
Payments based on current A/An/R/I, production required[1]	0	0	260	84	279	418
Based on Receipts / Income	0	0	79	76	76	84
Based on Area planted / Animal numbers	0	0	182	8	202	335
with input constraints	0	0	3	3	3	3
Payments based on non-current A/An/R/I, production required	0	0	0	0	0	0
Payments based on non-current A/An/R/I, production not required	228	119	345	308	360	366
With variable payment rates	0	0	0	0	0	0
with commodity exceptions	0	0	0	0	0	0
With fixed payment rates	228	119	345	308	360	366
with commodity exceptions	228	119	214	182	231	228
Payments based on non-commodity criteria	0	0	0	0	0	0
Based on long-term resource retirement	0	0	0	0	0	0
Based on a specific non-commodity output	0	0	0	0	0	0
Based on other non-commodity criteria	0	0	0	0	0	0
Miscellaneous payments	0	0	0	0	0	0
Percentage PSE	**64**	**58**	**51**	**49**	**53**	**52**
Producer NPC	**2.65**	**2.31**	**1.89**	**1.84**	**1.95**	**1.87**
Producer NAC	**2.78**	**2.40**	**2.06**	**1.96**	**2.14**	**2.07**
General Services Support Estimate (GSSE)	**1 267**	**2 057**	**864**	**1 007**	**738**	**847**
Research and development	46	69	83	87	83	79
Agricultural schools	29	29	36	38	35	35
Inspection services	8	10	11	11	11	12
Infrastructure	1 090	1 834	688	822	569	673
Marketing and promotion	22	27	7	7	2	13
Public stockholding	43	63	18	19	19	16
Miscellaneous	29	24	21	23	20	19
GSSE as a share of TSE (%)	**14.9**	**24.7**	**15.6**	**18.8**	**13.2**	**14.8**
Consumer Support Estimate (CSE)	**-8 910**	**-8 080**	**-5 117**	**-4 993**	**-5 280**	**-5 077**
Transfers to producers from consumers	-6 422	-5 603	-3 747	-3 655	-3 885	-3 700
Other transfers from consumers	-2 483	-2 503	-1 377	-1 347	-1 400	-1 384
Transfers to consumers from taxpayers	-16	26	2	2	1	1
Excess feed cost	11	0	5	5	5	5
Percentage CSE	**-62**	**-54**	**-43**	**-43**	**-44**	**-43**
Consumer NPC	**2.66**	**2.17**	**1.76**	**1.75**	**1.78**	**1.76**
Consumer NAC	**2.65**	**2.16**	**1.76**	**1.75**	**1.78**	**1.76**
Total Support Estimate (TSE)	**8 519**	**8 321**	**5 554**	**5 358**	**5 585**	**5 718**
Transfers from consumers	8 906	8 106	5 123	5 001	5 286	5 083
Transfers from taxpayers	2 096	2 718	1 807	1 703	1 700	2 018
Budget revenues	-2 483	-2 503	-1 377	-1 347	-1 400	-1 384
Percentage TSE (expressed as share of GDP)	**2.38**	**1.65**	**1.17**	**1.14**	**1.16**	**1.22**
GDP deflator 1986-1988=100	**100**	**109**	**93**	**95**	**93**	**91**

Note: p: provisional. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
MPS commodities for Japan are: wheat, other grains, rice, sugar, milk, beef and veal, pigmeat, poultry, eggs, apples, cabbage, cucumbers, grapes, mandarins, pears, spinach, strawberries and Welsh onions. Market Price Support is net of producer levies and Excess Feed Cost.
1. A (area planted), An (animal numbers), R (receipts), I (income).
Source: OECD, *PSE/CSE Database,* 2012.

StatLink http://dx.doi.org/10.1787/888932654467

Description of policy developments

Main policy instruments

Market price support provided through tariffs and tariff rate quotas (TRQs), and payments based on output serve as the basis for agricultural policies in Japan. Tariff-rate quota systems are applied to major commodities such as rice, wheat, barley and dairy products. The Agricultural Production Bureau within the Ministry of Agriculture, Forestry and Fisheries (MAFF) is responsible for importing rice under Japan's WTO URAA minimum-access commitment. In addition to the border measures, the production adjustment scheme for rice, which limits market supply, acts to maintain a higher domestic rice price.

Almost all the administered prices were abolished except for pig meat, beef and calves. In return, commodity specific payments were introduced for major commodities *(e.g.,* rice, wheat, barley and soybean). In 2007, these payments were transformed to less-commodity specific transfers such as payments based on historical land and income loss, while limiting the eligibility to certain core (potentially viable) farmers to promote structural adjustment. The *new Basic Plan on Food, Agriculture and Rural Areas* was elaborated in March 2010, envisioning a more ambitious self-sufficiency rate target of 50% in calorie supply by 2020 relative to 41% in 2008. It also announced the transformation of policy direction to ensure the reproduction by all motivated farmers rather than limiting support to certain core farmers. Based on the new Basic Plan, *Farm Income Support Payments* were formally implemented in 2011 for rice following the 2010 pilot program and also for upland crops reorganizing the previously implemented direct payments for core farmers. Unlike previous policy design of targeting support to certain core farmers, all farms with sales records became eligible for income support payment.

Budgetary support has been provided mainly towards infrastructure needs, such as irrigation and drainage facilities and the readjustment of agricultural land. However, the Government reduced the expenditure for infrastructure partly to finance new income support payments. Agri-environment programmes include measures to encourage farmers to adopt sustainable agricultural practices that reduce fertiliser and pesticide usage as well as direct payments to environmentally friendly farming. Direct payments to farmers in hilly and mountainous areas aim to prevent the abandonment of agricultural land and to ensure the multifunctional roles of agriculture.

Domestic policy developments in 2011-12

The Basic Plan 2010 announced a policy transformation to establish an agricultural business environment which ensures the reproduction by all motivated farms including part-time farmers and small-scale farmers. New farm **income support payments** were designed to bridge the gap between producer price and production cost. In 2011, this payment programme is formally implemented for rice following a pilot programme in 2010, and for upland crops reorganizing the previously implemented direct payment for core farmers. The payments cover **rice** and upland crops such as **wheat**, **barley** and **soybean**. All farms with sales records are eligible for payments. However, the payment for rice requires participating farms to meet the quantitative production target allocated to each farmer.

The **income support** payments for rice are based on the current area of rice production and have two components: predetermined and price contingent payments. The predetermined rate was made as JPY 15 000 (USD 188) per 0.1 hectare along with the rate in a pilot program in 2010. The price contingent payment triggers when average producer price of current crop year fell below the average of preceding three crop years. The price contingent payment triggered for 2010 crop year paying

additional JPY 15 100 (USD 189) per 0.1 hectare, but it did not trigger for 2011 crop years. Approximately 1.1 million rice farms participated in this program in 2011. The **income support** payments for **upland crops** were implemented as a combination of non-current area payment and output payment with quality differential, reorganizing direct payments for core farmers launched initially in 2007. The non-current area payment aims to maintain sound condition of farmland and the fixed rate of JPY 20 000 (USD 251) per 0.1 ha is paid based on the historical planted area. The rate of an output payment is set to bridge on average the difference between standard cost and sales price with quality differentials together with non-current area payment. The new income support payment program also includes several additional payments for farms expanding farm size, restoring abandoned land for upland crop production or lying fallow for soil quality improvement.

Box 10.1. **Japan's Regional Economic Integration and Agricultural Policy Reform**

In November 2010, Japan announced the Basic Policy on Comprehensive Economic Partnerships to pursue high-level EPAs more actively. The Basic Policy acknowledges that agriculture is the sector most likely to be negatively affected by trade agreements and stresses that it is imperative to institute bold policies that will realise the full potential of Japan's agriculture, for example, by improving their competitiveness and exploring new demand overseas. The Basic Policy also announced to promote agricultural policy reform, preceding the high-level economic partnership with major countries and regions. The *Headquarters for promoting the revitalization of food and agriculture* was established in the cabinet to take measures aimed at fostering sustainable and strong agriculture, which can achieve two policy objectives: expanding high-level EPAs, and increasing the food self-sufficiency rate and revitalising agricultural industry and rural communities.

The Headquarters announced the Basic Principle and Action Plan to Revitalize Japan's Food, Agriculture, Forestry and Fisheries in October 2011. The Basic Principle adopted four basic policy approaches: 1) rebuilding distinctive features of "delicious", "safe" and "environmentally friendly" towards needs-driven agriculture, 2) securing human resources that maintain Japanese agriculture, especially in the field crop agriculture, thus aiming at the structure where the majority of farm entities have 20-30 ha in flat land areas and 10-20 ha in hilly and mountainous areas, 3) reviewing the entire policies in a positive manner from the viewpoint of reinforcing strengths and overcoming weaknesses, and 4) providing a safety net for those engaged in the sector. In the light of basic approaches, concrete measures are elaborated into seven strategies including 1) increasing newcomers to agriculture and accelerating expansion of farming size through local consensus based on thorough discussions, 2) promoting agricultural business development into food value chain and 3) promoting renewable energy supply in rural areas. Also the Council preferentially considered possible measures to cope with the consequences of the Great East Japan Earthquake after March 2011, which is included in the above strategies as well.

Based on the strategies, the Action Plan was elaborated in November 2011 to illustrate policy reform steps until FY 2016. The plan includes development of indicators to assess individual farm management, establishment of a public-private partnership fund to finance farmer's diversification to new business areas, and elaboration of export promotion plan for domestic agricultural products. In addition, the Basic Principle left it for further consideration on policy options to gradually shift the current form of agricultural support largely financed at the cost of consumers through border measures toward more transparent support based on fiscal measures, reform of direct payment scheme and welfare redistribution mechanism associated with open economy.

The *rice production adjustment programme*, which limits supply by allocating production targets to rice farms and keeps prices above market equilibrium levels, reduced the quantitative target of rice production from 8 130 thousand in FY2010 to 7 950 thousand tonnes in FY2011 based on the demand projection. Due to the damage of the Great East Japan Earthquake and the planting restrictions imposed by the nuclear accident, the supply of rice was estimated to decrease by 140 thousand

tonnes. The production target was either reallocated to farmers within the same prefecture or traded across prefectures, which eventually maintained overall production level. In August 2011, Tokyo Grain Exchange and Kansai Commodities Exchange listed **rice futures** as a two year pilot project. The futures trading of rice has not been permitted in the past because the price of rice had been maintained by compulsory production adjustment program, and other various policy measures.

Box 10.2. **Restoration from the Great East Japan Earthquake in agriculture**

On 11 March 2011, massive earthquakes hit the Eastern part of Japan, causing extensive Tsunami disasters in the coastal area. Approximately 20 530 hectares of farmland were damaged and 6 690 farms lost their operation. By the end of November 2011, approximately 19% of farmland is restored and 26% of farms resumed their operation. The Government plan to restore farming in more than 90% of farmland by FY 2014 through various support programs. In addition to supporting infrastructure restoration (*i.e.* farmland and irrigation), the Government provided payments and credit concessions to affected farmers.

The accident at the Fukushima Daiichi Nuclear Power Plant caused by Tsunami raised concerns about contamination of foods by radionuclides. The Government immediately took measures to prevent the distribution of food which exceeds the provisional values of radionuclides in accordance with the Food Sanitation Act. On August 1 2011, the Government announced the provisional values of maximum radionuclides residues in agricultural production materials including fertiliser and feed to ensure that food produced does not exceed the provisional values of radionuclides. Based on the Government's loss evaluation scheme, the farmers who suffer from administrative restriction of farming or marketing are eligible to claim financial compensation to the Tokyo Electric Power. Farmers and related industries which had a consequential loss due to loss of market confidence also become eligible for financial compensation. As of December 2 2011, the power company paid approximately JPY 99.3 billion (USD 1.2 billion) in return to the total claim of JPY 128.5 billion (USD 1.6 billion).

Trade policy developments in 2011-12

The quantitative restrictions on rice imports were abolished and replaced by a **tariff-quota** system in 1999. In 2011, the over-quota tariff-rate was JPY 341 000 (USD 4 278) per tonne, the tariff-quota for rice was 767 000 tonnes (brown rice basis) and the maximum mark-up for rice imports was set at JPY 292 000 (USD 3 663) per tonne. **Food aid** to developing countries, which includes both domestically produced rice as well as imported rice, was approximately 198 thousand tonnes in FY 2009. Japan's tariff-rate-quotas continued to be under-filled in FY2010 for some products, including skimmed milk powder for school lunches and for feed, mineral concentrated whey, whey for infant formula and for feed, butter and butter oil for specific uses, and ground nuts. Japan used special safeguard measures in FY 2010 on rice, starches, inulin, cream, yogurt, tubers of konnyaku, rice flour, kidney beans, and certain food preparations.

Japan already concluded negotiations on the Economic Partnership Agreements with ***Singapore***, ***Mexico***, ***Malaysia***, ***Chile***, ***Thailand***, ***Indonesia***, ***Brunei***, ***ASEAN***, ***the Philippines***, ***Switzerland***, and ***Vietnam***, ***India*** and ***Peru***. The treatment of agricultural commodities was one of the main issues in many of these negotiations. In November 2010, Japan announced *the Basic Policy on Comprehensive Economic Partnerships* to promote high-level EPAs. It commits the government to increase its efforts to conclude the ongoing EPA negotiation with ***Australia***, resume the currently suspended Japan-Korea EPA negotiations, work towards the realisation of regional economic partnerships such as the ***China-Japan-Korea*** FTA, East Asian Free Trade Area (EAFTA) and Comprehensive Economic Partnership in East Asia (CEPEA), and expedited the arrangement to enter into negotiations with the EU at an early date. In November 2011, Japan announced to enter into consultations toward participating in the *Trans-Pacific Partnership (TPP)* negotiation with the countries concerned.

PART II

Chapter 11

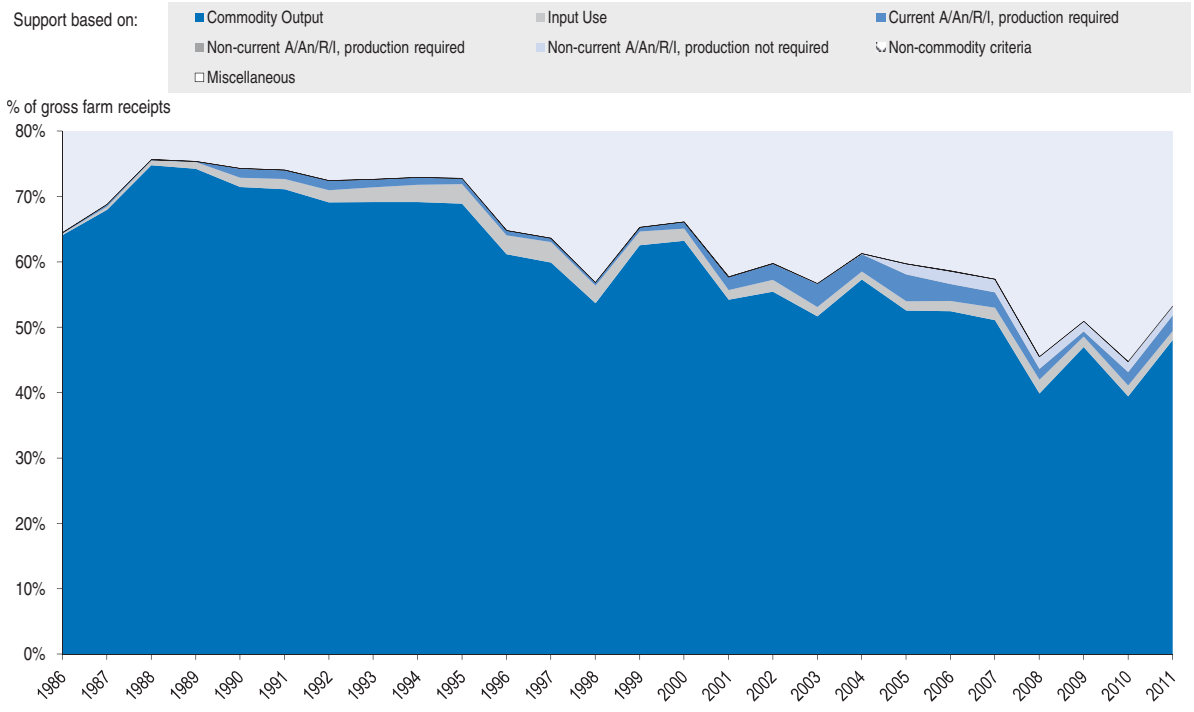
Korea

The Korea country chapter includes a brief evaluation of policy developments and related support to agriculture, contextual information on the framework in which agricultural policies are implemented and the main characteristics of the agricultural sector, an evaluation of support in 2010-11 and in the longer term perspective, and a brief description of the main policy developments in 2011-12.

Box 11.1. **Evaluation of policy developments**

- Overall, little progress has been made towards more market oriented policies with reduction in the producer support since 1986-88. The level of producer support, as measured by the %PSE, was reduced, but the share of potentially most distorting support remains above 90% of total support.
- After a reduction in support in 2010, the level of support in 2011 increased back to the 2009 level, due to a rebound in domestic rice prices and the levelling-of in the world rice prices. Market price support still dominates in producer support, although the share of support through budgetary payment schemes has gradually increased in most recent years.
- The recent policy focus on the seed industry could lead to a more effective R&D system and enhance competitiveness of the farming and agri-business sector.
- Although some progress has been made in reducing the level of support, the level of producer support is still twice of the OECD average. Future efforts need to focus not only on reducing the level of support but also on improving market access and better targeting of support.
- Efforts have been made to integrate various direct payment systems so as to improve efficiency of delivery, but the action plan has not yet taken definite form. Further efforts are needed to reduce the level of market price support and improve the targeting of direct payments.

Figure 11.1. **Korea: PSE level and composition by support categories, 1986-2011**



Source: OECD, *PSE/CSE Database*, 2012.

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Contextual information

Korea is a country with relatively high GDP per capita, with dynamic growth and low levels of unemployment. Korea is a land scarce country with high population density, where only 17% of area is being used for farmland. The importance of agriculture in the economy has been decreasing with its share in domestic GDP declining to 2.6% in 2010, while its share of employment is 6.3%. Korea is one of the largest net agro-food importers in the world. Its share of agro-food imports in total imports is around 4.5%, while that of exports is less than 1%. Most farms are small family farms with less than 2 hectares of agricultural land.

Table 11.1. **Korea: Contextual indicators, 1995, 2010***

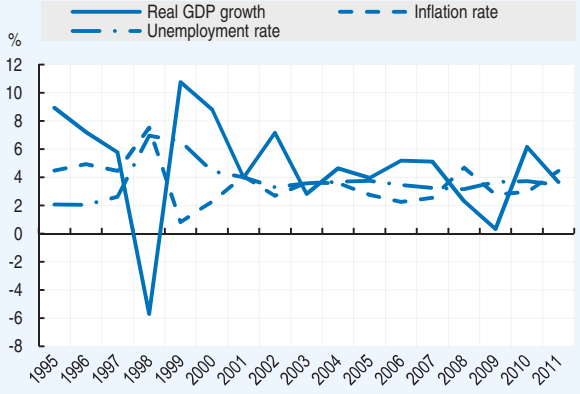
	1995	2010*
Economic context		
GDP (USD billion)	531	1 110
Population (million)	45	49
Land area (thousand km^2)	99	97
Population density (habitants/km^2)	449	484
GDP per capita, PPP (USD)	12 803	29 101
Trade as % of GDP	24.5	44.0
Agriculture in the economy		
Agriculture in GDP (%)	6.2	2.6
Agriculture share in employment (%)	11.2	6.3
Agro-food exports (% of total exports)	1.3	0.8
Agro-food imports (% of total imports)	6.9	4.3
Characteristics of the agricultural sector		
Agro-food trade balance (USD million)	–7 837	–14 286
Crop in total agricultural production (%)	79	74
Livestock in total agricultural production (%)	21	26
Agricultural area (AA) (thousand ha)	2 048	1 854
Share of arable land in AA (%)	87	86
Share of irrigated land in AA (%)	44	46
Share of agriculture in water consumption (%)	48	. .
Nitrogen Balance, Kg/ha	258	215

* or latest available year.

Source: OECD, Statistical Databases, World Development Indicators and national data.

StatLink http://dx.doi.org/10.1787/888932654182

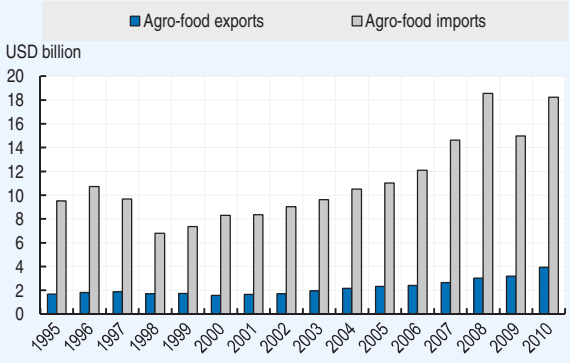
Figure 11.2. **Korea: Main macroeconomic indicators, 1995-2011**



Source: OECD, Statistical Databases.

StatLink http://dx.doi.org/10.1787/888932653669

Figure 11.3. **Korea: Agro-food trade, 1995-2010**



Source: International Trade by Commodity Statistics (ITCS) Database.

StatLink http://dx.doi.org/10.1787/888932653688

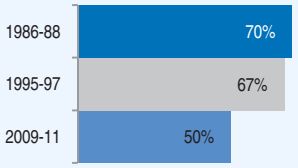
Note: Detailed definitions of contextual indicators and their sources are provided in the Annex II.A1.

Development of support to agriculture

Korea has reduced its support to agriculture especially in the last decade. However, support remains relatively high and the potentially most production and trade distorting forms of support are still above 90% of the support. Moreover, the level and developments of the MPS reflects fluctuations of the price gap between domestic and world market prices of a few commodities mainly rice. On average the gap between prices received by farmers and world prices has narrowed as documented by the NPC.

PSE as % of receipts (%PSE)

Korea has reduced its support to agriculture more substantially between 1995-97 and 2009-11. Despite this reduction the overall support remains relatively high (more than twice the OECD average) in 2009-11. After a drop in the %PSE to 45% in 2010, the PSE increased in 2011 back to the levels before 2010 (53%).

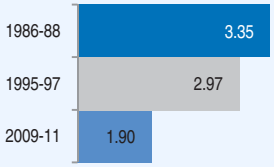


Potentially most distorting support as % of PSE

The potentially most production and trade distorting policies (based on output and variable input use – without input constraints) still dominate at around 90% of total support to farmers in 2009-11.

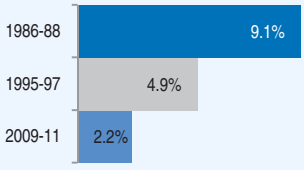
Ratio of producer price to border price (NPC)

The ratio of producer prices to border prices has been gradually reduced. Overall the prices paid to farmers were 1.9 times higher than world prices as measured by the NPC in 2009-11. The highest NPCs are for soybeans and pigmeat.

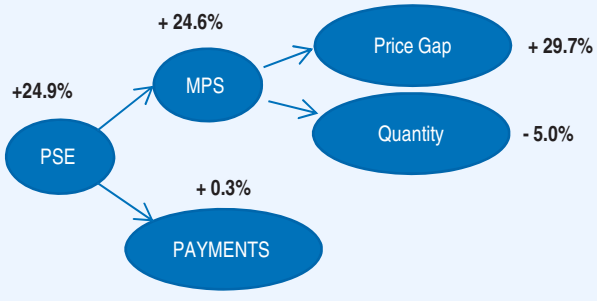


TSE as % of GDP

Total support as a share of GDP was substantially reduced and was 2.2% of GDP in 2009-11. The expenditure on general services represented 13% of the TSE in the same period.

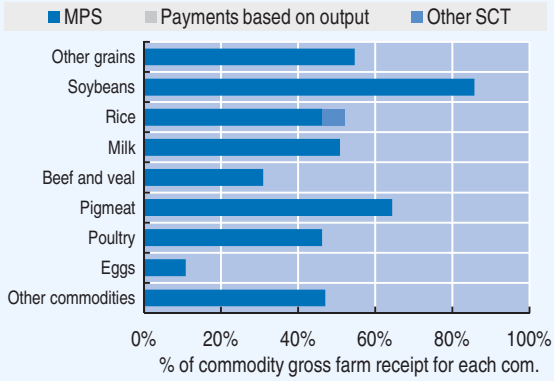


Decomposition of change in PSE, 2010 to 2011



The level of support increased in 2011 due to a rise of market price support. The expanded price gap is a result both of increased domestic prices and reduced border prices in national currency due to a strengthening of the currency.

Transfer to specific commodities (SCT), 2009-11



The single commodity transfer (SCT) represented 92% of the PSE. The share of the SCT in the commodity gross farm receipt is above 60% for soybeans and pigmeat, and the lowest for eggs at around 10%. For the remaining commodities it is around 45%.

Table 11.2. **Korea: Estimates of support to agriculture**

KRW billion

	1986-88	1995-97	2009-11	2009	2010	2011p
Total value of production (at farm gate)	**13 624**	**27 747**	**42 290**	**41 364**	**41 677**	**43 830**
***of which:** share of MPS commodities, percentage*	72	64	55	58	52	54
Total value of consumption (at farm gate)	**14 367**	**30 693**	**52 690**	**46 577**	**51 899**	**59 595**
Producer Support Estimate (PSE)	**9 605**	**19 277**	**22 084**	**21 925**	**19 707**	**24 620**
Support based on commodity output	9 511	18 199	19 940	20 236	17 362	22 221
Market Price Support	9 511	18 199	19 940	20 236	17 362	22 221
Payments based on output	0	0	0	0	0	0
Payments based on input use	70	871	689	689	735	641
Based on variable input use	23	136	310	325	332	271
with input constraints	3	11	75	63	86	76
Based on fixed capital formation	44	725	296	286	319	284
with input constraints	0	70	50	49	50	51
Based on on-farm services	3	10	83	78	84	86
with input constraints	0	0	0	0	0	0
Payments based on current A/An/R/I, production required[1]	24	206	783	347	903	1 099
Based on Receipts / Income	24	196	269	295	253	259
Based on Area planted / Animal numbers	0	11	514	52	649	840
with input constraints	0	0	49	52	54	41
Payments based on non-current A/An/R/I, production required	0	0	0	0	0	0
Payments based on non-current A/An/R/I, production not required	0	0	673	653	707	658
With variable payment rates	0	0	0	0	0	0
with commodity exceptions	0	0	0	0	0	0
With fixed payment rates	0	0	673	653	707	658
with commodity exceptions	0	0	0	0	0	0
Payments based on non-commodity criteria	0	0	0	0	0	0
Based on long-term resource retirement	0	0	0	0	0	0
Based on a specific non-commodity output	0	0	0	0	0	0
Based on other non-commodity criteria	0	0	0	0	0	0
Miscellaneous payments	0	0	0	0	0	0
Percentage PSE	**70**	**67**	**50**	**51**	**45**	**53**
Producer NPC	**3.35**	**2.97**	**1.90**	**1.96**	**1.71**	**2.03**
Producer NAC	**3.38**	**3.09**	**2.00**	**2.04**	**1.81**	**2.14**
General Services Support Estimate (GSSE)	**1 202**	**2 876**	**3 409**	**3 324**	**3 478**	**3 424**
Research and development	52	275	681	617	671	754
Agricultural schools	5	47	149	138	150	160
Inspection services	21	80	117	116	110	125
Infrastructure	374	2 121	1 817	1 969	1 797	1 683
Marketing and promotion	0	12	68	65	69	69
Public stockholding	394	341	578	419	680	634
Miscellaneous	357	0	0	0	0	0
GSSE as a share of TSE (%)	**11.2**	**12.8**	**13.4**	**13.1**	**15.0**	**12.2**
Consumer Support Estimate (CSE)	**-9 425**	**-19 748**	**-24 206**	**-21 835**	**-21 026**	**-29 757**
Transfers to producers from consumers	-9 304	-17 861	-19 940	-20 235	-17 362	-22 221
Other transfers from consumers	-181	-2 148	-4 319	-1 664	-3 711	-7 582
Transfers to consumers from taxpayers	59	260	53	64	48	46
Excess feed cost	0	0	0	0	0	0
Percentage CSE	**-66**	**-65**	**-46**	**-47**	**-41**	**-50**
Consumer NPC	**2.94**	**2.91**	**1.86**	**1.89**	**1.68**	**2.00**
Consumer NAC	**2.93**	**2.89**	**1.86**	**1.88**	**1.68**	**2.00**
Total Support Estimate (TSE)	**10 867**	**22 413**	**25 545**	**25 313**	**23 232**	**28 090**
Transfers from consumers	9 484	20 009	24 259	21 899	21 074	29 803
Transfers from taxpayers	1 563	4 552	5 606	5 078	5 869	5 869
Budget revenues	-181	-2 148	-4 319	-1 664	-3 711	-7 582
Percentage TSE (expressed as share of GDP)	**9.13**	**4.91**	**2.21**	**2.38**	**1.98**	**2.27**
GDP deflator 1986-1988=100	**100**	**190**	**267**	**259**	**268**	**274**

Note: p: provisional. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
MPS commodities for Korea are: other grains, garlic, red pepper, Chinese cabbage, rice, soybean, milk, beef and veal, pigmeat, poultry and eggs. Market Price Support is net of producer levies and Excess Feed Cost.

1. A (area planted), An (animal numbers), R (receipts), I (income).

Source: OECD, *PSE/CSE Database*, 2012.

StatLink http://dx.doi.org/10.1787/888932654486

Description of policy developments

Main policy instruments

Tariffs and a wide range of tariff rate quotas (TRQs) are applied based on multilateral and bilateral trade agreements. More recently, direct payment schemes have been introduced, while maintaining a public stockholding scheme for rice, which is a purchase and release mechanism based on current market price. Since 2009, five direct payment programmes have been implemented with different objectives including direct payment for rice income compensation, direct payment programme for environment-friendly agriculture, direct payment for less- favoured areas, and direct payment programme for rural landscape conservation. The basic law for agriculture, rural area and food industry was established in 2007 and lays out the basic policy principles in agriculture. Korea's rural development policies consist of two categories: improving living conditions of rural residents and enhancing economic vitality of the rural regions.

Domestic policy developments in 2011-12

A comprehensive plan to develop the seed industry was established in December 2011 and includes three main strategies: *Enhancing R&D foundation, Enlarging R&D investment and Encouraging private enterprises*. With these strategies, the government announced the *Golden Seed* project which aims to develop high quality varieties of crops, fruits and livestock breeds in order to curb imports of these high quality seeds and breeds where Korea has entirely relied on imports, and also with a perspective to promote export of these seeds and breeds to developing countries.

Programmes for protecting farm household income from **natural disasters,** pests and fire were reinforced. The eligible products of the **insurance scheme** for crops and fruits, which started in 2001, increased to 30 varieties in 2011, adding green chilli, squash, roses, chrysanthemum and raspberry. The government plans to extend the product coverage to 35 commodities in 2012. As for livestock, an insurance scheme has been in place since 1997. In 2011, this scheme covered most of the livestock categories with the budget amounting to KRW 33.1 billion (USD 29.9 million).

To respond to consumers' food safety concerns, the system of indication of origin for agricultural products (initiated in 1991) has been further enlarged to cover additional products. In 2011, the government included rice, Chinese cabbage, beef, pigmeat and poultry.

Within the *Rural Vitalization Promotion Project*, the government in cooperation with the private sector starts a new **education** project which aims to foster rural leaders with a potential to lead productivity growth and re-vitalisation of rural economies.

Trade policy developments in 2011-12

The **Free Trade Agreement** (FTA) with the ***European Union*** became effective on 1 July 2011, with ***Peru*** on 1 August 2011 and with the ***United States*** on 3 March 2012. Korea currently has five other bilateral and regional FTAs with ***Chile***, ***Singapore***, **EFTA**, **ASEAN** and ***India***. Korea concluded FTA with ***Turkey*** in March 2012. FTA negotiations are currently underway with ***Canada***, ***Mexico***, the Gulf Co-operation Council (***Saudi Arabia, UAE, Oman, Qatar, Bahrain, and Kuwait***), ***Australia***, ***New Zealand*** and ***Colombia***.

According to the WTO rice negotiation in 2004, the **Minimum Market Access** (MMA) of rice is scheduled to increase from 225 000 tonnes to 408 000 tonnes in 2014. The amount of the MMA reached 347 311 tonnes in 2011.

PART II

Chapter 12

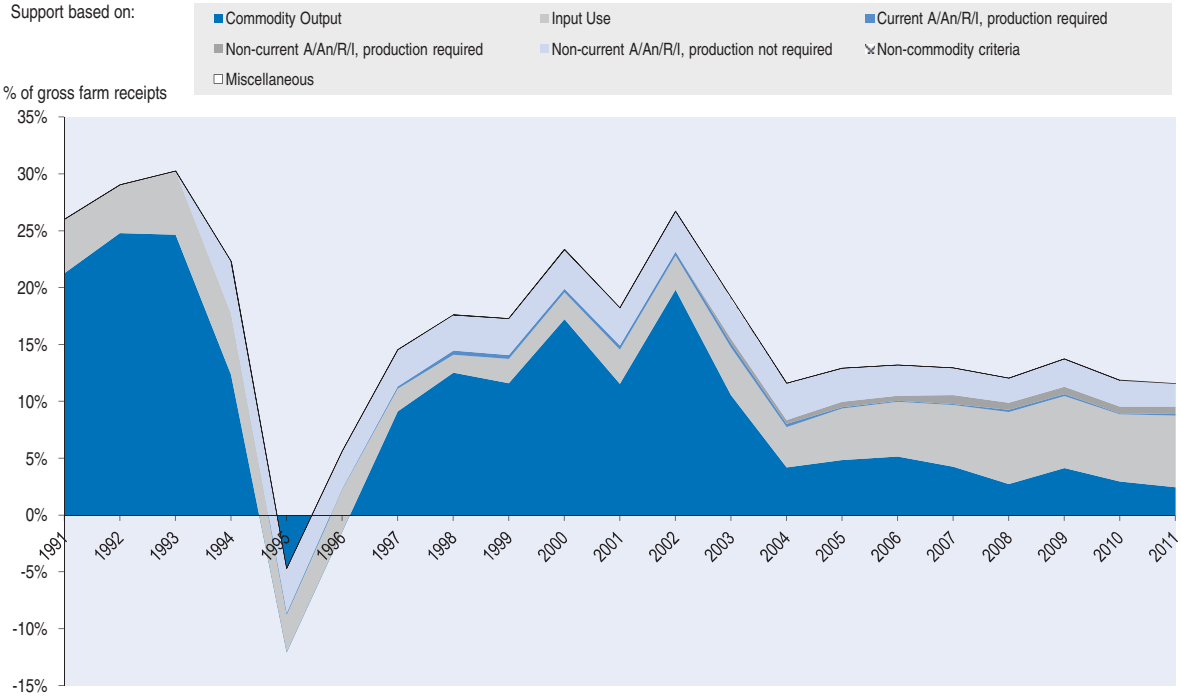
Mexico

The Mexico country chapter includes a brief evaluation of policy developments and related support to agriculture, contextual information on the framework in which agricultural policies are implemented and the main characteristics of the agricultural sector, an evaluation of support in 2010-11 and in the longer term perspective, and a brief description of the main policy developments in 2011-12.

Box 12.1. **Evaluation of policy developments**

- Mexico has significantly reformed its agricultural policies in the last two decades, reducing to half its level of support measured by the %PSE and the share of the potentially most distorting support. Reform has been driven by trade liberalisation through WTO and the North American Free Trade Agreement (NAFTA), and by a policy shift towards direct payments based on historical areas (PROCAMPO) and animal numbers (PROGAN).
- However since 2000 Mexico has significantly increased expenditure on variable inputs, in particular subsidies to energy (electricity and fuel) and to price hedging contracts. As a consequence the share of the potentially most distorting support has increased in recent years to half of the measured support.
- The large increase in subsidies to price hedging contracts requires a rigorous evaluation in terms of its cost effectiveness to manage risk at farm level. Recent drought highlights the importance of production risks and the need to efficiently use scarce budgetary resources for risk management tools.
- Mexico faces a double policy challenge. First, managing the duality of its rural development with investments in infrastructure and innovations while, at the same time, focussing public policy on poverty alleviation. Second, engaging in consistent agricultural and environmental objectives, implementing policies that enhance sustainability and efficient water management.

Figure 12.1. **Mexico: PSE level and composition by support categories, 1991-2011**



Source: OECD, *PSE/CSE Database*, 2012.

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Contextual information

Mexico is the twelfth largest economy in the world, and a large country in terms of population (109 million) and land area. After some years of monetary instability in the mid 1990s, the Mexican economy had been characterised by relatively low inflation and more stable exchange rate in recent years. The economy shrunk in 2009, but has been growing at a yearly rate of 4-5% in 2010 and 2011. The agricultural sector contributes 3.6% to GDP but employs 12.7% of people. Mexico is a net agro-food importer, and its share of agro-food import in total imports is 7%. Arable land represents 24% of total agricultural land, and irrigated land around 6%. There are two forms of land tenure in Mexico: private land and social property (*ejidos*). This later represents half of the territory of Mexico and, despite recent reforms, its sale requires approval from the *Ejido* assembly.

Table 12.1. **Mexico: Contextual indicators, 1995, 2010***

	1995	2010*
Economic context		
GDP (USD billion)	314	1 145
Population (million)	90	109
Land area (thousand km^2)	1 944	1 944
Population density (habitants/km^2)	47	58
GDP per capita, PPP (USD)	7 532	15 200
Trade as % of GDP	24.2	29.0
Agriculture in the economy		
Agriculture in GDP (%)	5.4	3.6
Agriculture share in employment (%)	22.2	12.7
Agro-food exports (% of total exports)	7.3	5.9
Agro-food imports (% of total imports)	7.2	7.0
Characteristics of the agricultural sector		
Agro-food trade balance (USD million)	574	–3 598
Crop in total agricultural production (%)	56	51
Livestock in total agricultural production (%)	44	49
Agricultural area (AA) (thousand ha)	107 200	102 833
Share of arable land in AA (%)	23	24
Share of irrigated land in AA (%)	6	6
Share of agriculture in water consumption (%)	85	77
Nitrogen Balance, Kg/ha	24	21

* or latest available year.

Source: OECD, Statistical Databases, World Development Indicators and national data.

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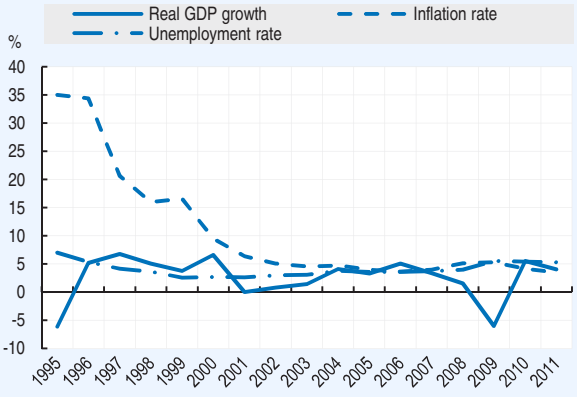
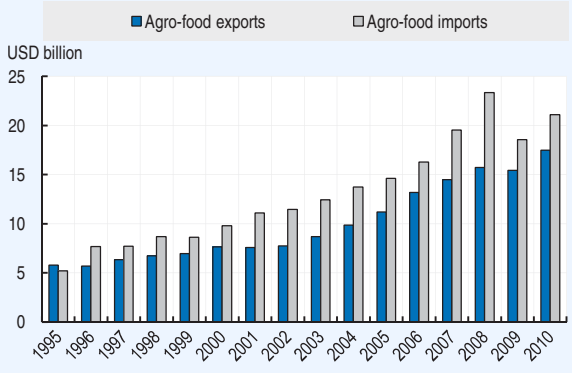
Figure 12.2. **Mexico: Main macroeconomic indicators, 1995-2011**



Source: OECD, Statistical Databases.

StatLink http://dx.doi.org/10.1787/888932653726

Figure 12.3. **Mexico: Agro-food trade, 1995-2010**



Source: International Trade by Commodity Statistics (ITCS) Database.

StatLink http://dx.doi.org/10.1787/888932653745

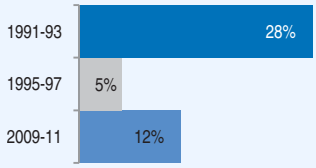
Note: Detailed definitions of contextual indicators and their sources are provided in the Annex II.A1.

Development of support to agriculture

Mexico has undertaken significant agricultural policy reform in the last two decades, reducing the amount of support by half since 1991-93, and reallocating remaining support to less distorting forms of support. The level of price distortions has been reduced consequently to only 4% in 2009-11 as documented by the Nominal Protection Coefficient. However, since the year 2000 Mexico has increased payments based on variable input use, in particular subsidies to electricity and to price hedging contracts.

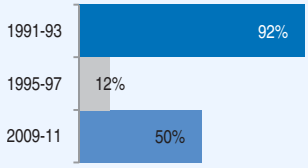
PSE as % of receipts (%PSE)

Support as measured by %PSE has been reduced from 28% in the reference period 1991-93 to 12% in 2009-11, well below the OECD average of 20%. Border protection and price intervention have been significantly reduced driven by trade liberalisation policies.



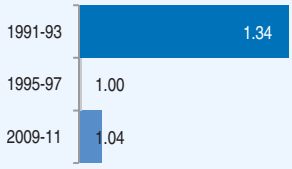
Potentially most distorting support as % of PSE

Market price support was reduced and reallocated to direct payments based on non current area and animal numbers and the potentially most distorting policies (based on output and variable input use – without input constraints) have been reduced. However, in the last decade support based on input used has increased as has the share of most distorting support to 50% in 2009-11.



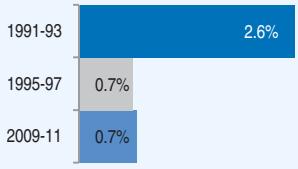
Ratio of producer price to border price (NPC)

Overall, prices received by farmers were 4% higher than world prices, compared with 34% in 1991-93. The commodities with relatively high NPC in 2009-11 were poultry (11%), milk (8%). and sugar (5%), The period 1995-97 shows very low and sometimes negative estimates of price support due to major financial and exchange rate instability.

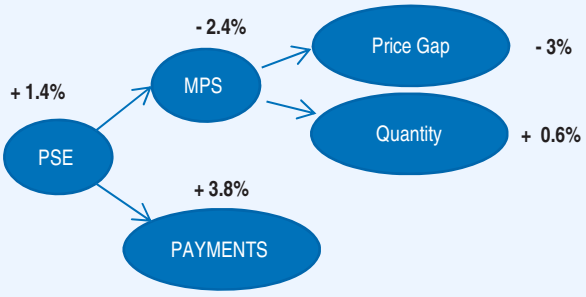


TSE as % of GDP

Total support was 0.7% of GDP, a bit below the OECD average of 0.9%. Support to general services represented 11% of TSE, well below the OECD average of 26%.

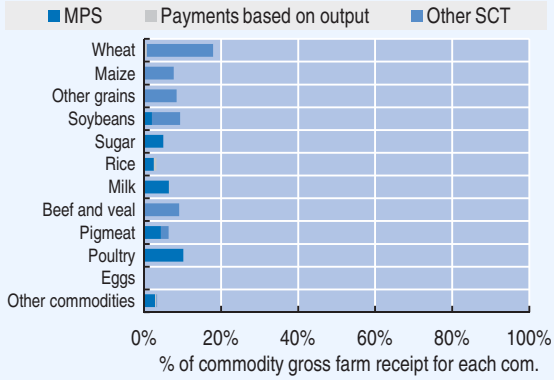


Decomposition of change in PSE, 2010 to 2011



The level of support increased slightly in 2011 mainly due to increased input payments, while price gaps were reduced.

Transfer to specific commodities (SCT), 2009-11



Only two commodities received specific policy transfers beyond 10% of gross commodity receipts: wheat (18%) and poultry (10%). The main staple food, maize, has reduced SCT to 8% in 2009-11 from 43% in 1991-93.

Table 12.2. **Mexico: Estimates of support to agriculture**

MXN million

	1991-93	1995-97	2009-11	2009	2010	2011p
Total value of production (at farm gate)	**86 539**	**182 276**	**571 705**	**531 707**	**580 102**	**603 306**
of which: *share of MPS commodities, percentage*	69	70	67	67	68	68
Total value of consumption (at farm gate)	**82 475**	**181 410**	**635 832**	**589 052**	**621 707**	**696 736**
Producer Support Estimate (PSE)	**25 995**	**12 953**	**77 915**	**81 074**	**75 802**	**76 871**
Support based on commodity output	21 540	289	19 822	24 372	18 857	16 236
Market Price Support	21 380	211	18 656	23 340	17 230	15 399
Payments based on output	160	79	1 166	1 032	1 628	837
Payments based on input use	4 445	5 729	39 079	37 415	37 853	41 969
Based on variable input use	2 296	2 373	18 926	15 818	17 738	23 223
with input constraints	0	0	0	0	0	0
Based on fixed capital formation	1 680	2 340	15 604	17 425	15 984	13 403
with input constraints	0	0	0	0	0	0
Based on on-farm services	469	1 016	4 549	4 172	4 132	5 343
with input constraints	0	0	0	0	0	0
Payments based on current A/An/R/I, production required[1]	10	234	788	879	489	996
Based on Receipts / Income	0	100	0	0	0	0
Based on Area planted / Animal numbers	10	134	788	879	489	996
with input constraints	0	0	0	0	0	0
Payments based on non-current A/An/R/I, production required	0	0	3 946	3 835	3 806	4 197
Payments based on non-current A/An/R/I, production not required	0	6 701	14 281	14 572	14 797	13 473
With variable payment rates	0	0	0	0	0	0
with commodity exceptions	0	0	0	0	0	0
With fixed payment rates	0	6 701	14 281	14 572	14 797	13 473
with commodity exceptions	0	9	0	0	0	0
Payments based on non-commodity criteria	0	0	0	0	0	0
Based on long-term resource retirement	0	0	0	0	0	0
Based on a specific non-commodity output	0	0	0	0	0	0
Based on other non-commodity criteria	0	0	0	0	0	0
Miscellaneous payments	0	0	0	0	0	0
Percentage PSE	**28**	**5**	**12**	**14**	**12**	**12**
Producer NPC	**1.34**	**1.00**	**1.04**	**1.05**	**1.03**	**1.03**
Producer NAC	**1.40**	**1.06**	**1.14**	**1.16**	**1.13**	**1.13**
General Services Support Estimate (GSSE)	**3 407**	**3 529**	**10 091**	**10 315**	**9 406**	**10 553**
Research and development	339	637	1 434	1 641	1 216	1 445
Agricultural schools	550	849	3 506	3 409	3 267	3 843
Inspection services	0	156	967	507	999	1 395
Infrastructure	809	866	2 943	3 357	2 609	2 862
Marketing and promotion	322	218	1 224	1 350	1 316	1 006
Public stockholding	1 210	487	0	0	0	1
Miscellaneous	177	317	17	51	0	0
GSSE as a share of TSE (%)	**10.6**	**..**[c]	**11.0**	**10.8**	**10.6**	**11.6**
Consumer Support Estimate (CSE)	**-19 400**	**-760**	**-16 478**	**-19 903**	**-17 102**	**-12 431**
Transfers to producers from consumers	-21 871	-1 829	-18 510	-23 906	-16 733	-14 890
Other transfers from consumers	-770	-3 513	-1 536	0	-3 724	-884
Transfers to consumers from taxpayers	2 629	4 515	3 548	3 974	3 356	3 313
Excess feed cost	612	67	20	29	0	30
Percentage CSE	**-24**	**1**	**-3**	**-3**	**-3**	**-2**
Consumer NPC	**1.38**	**1.02**	**1.03**	**1.04**	**1.03**	**1.02**
Consumer NAC	**1.32**	**0.99**	**1.03**	**1.04**	**1.03**	**1.02**
Total Support Estimate (TSE)	**32 032**	**20 997**	**91 555**	**95 362**	**88 564**	**90 737**
Transfers from consumers	22 642	5 342	20 046	23 906	20 458	15 774
Transfers from taxpayers	10 160	19 169	73 045	71 457	71 831	75 847
Budget revenues	-770	-3 513	-1 536	0	-3 724	-884
Percentage TSE (expressed as share of GDP)	**2.63**	**0.65**	**0.71**	**0.80**	**0.68**	**0.64**
GDP deflator 1991-93=100	**100**	**202**	**633**	**605**	**631**	**664**

Note: p: provisional. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
MPS commodities for Mexico are: wheat, maize, other grains, coffee beans, tomatoes, rice, oilseeds, sugar, milk, beef and veal, pigmeat, poultry and eggs. Market Price Support is net of producer levies and Excess Feed Cost.
1. A (area planted), An (animal numbers), R (receipts), I (income).
Source: OECD, *PSE/CSE Database*, 2012.

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Description of policy developments

Main policy instruments

The direction and instruments of agricultural policies in Mexico are determined by the *Sectoral Development Programme on Agriculture 2007-12* with broad objectives related to rural development, food supply, farm income and improved sustainability. Additionally, there are other documents that also frame agricultural policies: the overall rural development programme PEC (*Programa Especial Concurrente*) 2007-12 is a budget program that assembles a set of policy initiatives from different government departments with an involvement in rural development such as agriculture, infrastructure, health, education, social and environmental policies; the *Mexican Climate Change Strategy 2009-12;* and set challenging objectives for agriculture; and the Law of sustainable rural development of 2001.

Mexico has significantly reduced border protection in the last two decades through WTO, NAFTA and other trade agreements. However, Mexico provides market price support to some commodities, and payments based on output (the *Ingreso Objetivo* programme). Mexico has two large direct payment programmes based on historical parameters: PROCAMPO is based on historical area and was established in 1994; PROGAN is based on historical livestock numbers, imposes environmental conditions for production and started in 2003. Mexico also provides payments based on on-farm investment or fixed capital and farm credit support. Support for energy consumption (electricity and fuel) and to subsidise price hedging contracts have recently increased and become important agricultural programmes. Subsidies to crop insurance are also provided through AGROASEMEX. Consumption subsidies for basic staples targeted at poor families are provided through the DICONSA rural shops and through LICONSA (for milk). Overall, Mexico has significantly reduced market price support in favour of direct historical payments and more recently increased expenditure on payments based on inputs.

Domestic policy developments in 2011-12

There were no significant changes in the agricultural policies in Mexico during 2011 and 2012 will be the last year of application of the current sectoral, rural development and climate change strategies. The Sectoral Programme 2007/12 decided to continue **PROCAMPO** beyond its original deadline of 2008 until 2012, but no decision has been taken about its continuation after 2012. Total expenditure in this direct payment is estimated to be MXN 13 473 million (USD 1 083 million) in 2011.

The Ministry of Agriculture, Livestock, rural development, fisheries and food (SAGARPA) manages a set of programmes related with **price risk management**. The *Ingreso Objetivo* programme used to be the main policy tool between 2001 and 2006, but it has hardly been triggered since. New output payments to induce production of **safflower**, yellow **maize** for feed and bread-making **wheat** in certain areas were implemented only in 2010 with a total expenditure of MXN 687 million (USD 54 million) and interrupted in 2011. In the last six years the **Price Hedging** programme has expanded from MXN 421 million (USD 39 million) in 2005 to MXN 11 243 million (USD 904 million) in 2011, with an increase of 47% in the last year. This programme has become the second largest programme by expenditure after PROCAMPO. It offers farmers and buyers a contract with stable prices in US dollars, plus the opportunity of benefiting from price rises at harvest through "call" options. The programme supports between 40% and 100% of the costs of the options in the US futures markets.

The *Soil and Water Conservation* programme grouped in 2008 several programmes supporting farmers' investments on infrastructures that improved the efficiency of water management; expenditure has increased in 2011 to MXN 855 million (USD 69 million). However, at the same time the support to electricity, mainly trough preferential rates, is expected to increase from MXN 5 824 million (USD 461 million) in 2010 to MXN 8 074 million (USD 649 million) in 2011.

The expenditure on the Agricultural diesel programme increased to MXN 1 707 million (USD 137 million) in 2011. In response to concerns about the impact of this program, on CO_2 emissions, the programme has been significantly re-oriented giving producers the option to use this support to renew their machinery. There is a strong incentive to take this option because it can provide access to bigger amount of total support and, in any case, the MXN 2 (USD 0.16) subsidy per litre will be gradually reduced to zero at the end of 2014.

Drought affected the centre and northern states of Mexico in 2011 and it is persisting in 2012. The Government has implemented policy actions to mitigate its effects on producers and the rural poor. Existing budgetary resources are being mobilised to make advanced payments of PROCAMPO, PROGAN and diesel subsidies, and to accelerate the delivery of indemnities from the insurance policies of AGROASEMEX.

The expenditure on **extension services** in Mexico has significantly increased in 2011, in particular with a new Capacities Development and Extension Programme with an expenditure of MXN 460 million (USD 37 million). The programme supports viable farmers and research and extension institutions to organise meetings or seminars to transfer technological knowledge and to provide technical assistance services. The *Strategic Project for Food Security (PESA),* in technical collaboration with FAO, provides support to small farms and farm households in highly marginal rural areas. It has three components: investment in production equipment and infrastructure, extension services through one of the Rural Development Agencies (ADRs) and investment in sustainable land and water use and conservation. The project exists since 2004, but the budgetary expenditure has increased significantly since 2010 in response to concerns about the impacts of high prices on food security in marginal rural areas. The expenditure was MXN 1 250 million (USD 100 million) in 2011. Other new programmes follow this same three component approach, investment-extension-conservation, putting together resources from previous programmes such as the Investing in Productive Assets, SOPORTE and Sustainable Use of Soil and Water programmes. This includes MASAGRO (a joint effort between SAGARPA and the International Center for Maize and Wheat Improvement CIMMYT), and PRODEZA (focused on arid and semi-arid areas).

Trade policy developments in 2011-12

In December 2008, Mexico and Canada requested consultations on the ***United States*** mandatory country of origin labelling (COOL) provisions in the Food, Conservation, and Energy Act 2008 (2008 Farm Bill). These measures contain an obligation to inform consumers at the retail level of the country of origin of covered commodities, including beef and pork. Upon Canada's request, a WTO panel was established in November 2009. The panel's report was circulated on November 18, 2011. The panel found that the COOL measure is a technical regulation under the WTO's TBT Agreement, and that it is inconsistent with the United States' WTO obligations. The United States notified its decision to appeal by 23 March 2012 before WTO's dispute settlement body adopts the panel report.

The **tariff reductions** to confront high prices in May 2008 have remained active since. This includes zero import tariffs for all imported wheat, maize and rice; halved out of quota tariff on

milk powder (62%); tariff exemptions for sorghum and soya meal; and a new zero tariff rate quota of 100 thousand tons of dried beans.

In 2011, a new **trade agreement** was signed with ***Peru*** and the trade agreements with ***Costa Rica***, ***Nicaragua*** and, ***Guatemala***, ***Honduras*** and ***El Salvador***, were unified under a new single agreement. Both agreements will enter into force in 2012. Mexico has expressed interest in joining to the *Trans-Pacific Partnership* (TPP).

PART II

Chapter 13

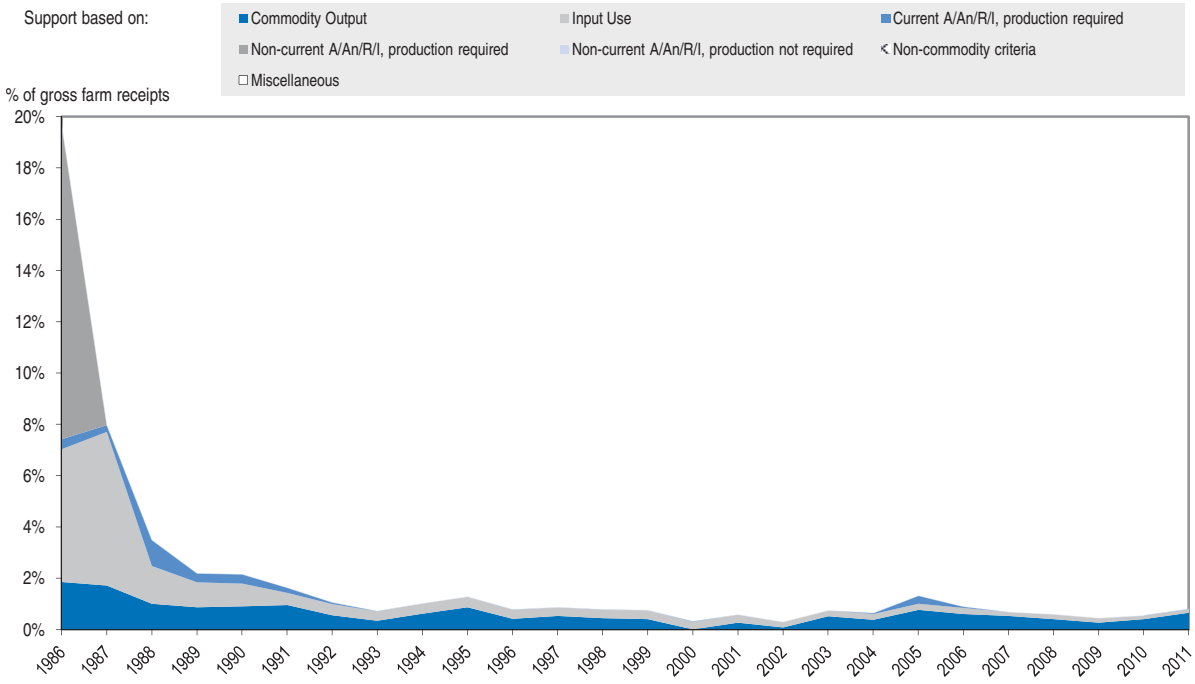
New Zealand

The New Zealand country chapter includes a brief evaluation of policy developments and related support to agriculture, contextual information on the framework in which agricultural policies are implemented and the main characteristics of the agricultural sector, an evaluation of support in 2010-11 and in the longer term perspective, and a brief description of the main policy developments in 2011-12.

Box 13.1. **Evaluation of policy developments**

- Very few of New Zealand's agricultural production and trade distorting policies from pre 1986-88 remain today. The level of producer support has been the lowest across the OECD since its reforms in the mid-1980s. Most domestic prices are aligned with the world prices and payments are only provided for animal disease control and relief in the event of large scale climate and natural disasters.
- Almost all sectors have been deregulated following statutory producer organisation and marketing board reforms. Restrictions on who could export dairy products have been eliminated since the end of 2010. The kiwifruit sector is an exception, as Zespri, a New Zealand company, is the only company that has automatic rights to export New Zealand produced kiwifruit to markets other than Australia. Other groups can export in collaboration with Zespri or independently to Australia.
- New Zealand has established national frameworks for land and water quality and allocation to enhance the sustainable management of biological and natural resources. Agriculture has started mandatory reporting to the Emissions Trading Scheme in 2012 and is scheduled to fully enter it by 2015. It will extend the price-based mechanism to encourage reduction of agriculture green house gas emissions. Efforts to develop additional market-based approaches to environmental issues offer opportunities to enhance environmentally sustainable development.

Figure 13.1. **New Zealand: PSE level and composition by support categories, 1986-2011**



Source: OECD, *PSE/CSE Database*, 2012.

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Contextual information

New Zealand is an economy with relatively high dependency on international trade. New Zealand is a consistent net exporter of agro-food products; its share of agro-food imports in total imports is around 11%, while the share of agro-food exports on total exports is close to 55%. New Zealand is the world's largest dairy and sheep meat exporter. The relative importance of agriculture in the New Zealand economy is higher than in most other OECD countries, with agriculture accounting for some 5% of New Zealand's GDP and 7% of its total employment. New Zealand's farming systems are based primarily on year-round grass fed livestock.

Table 13.1. **New Zealand: Contextual indicators, 1995, 2010***

	1995	2010*
Economic context		
GDP (USD billion)	62	163
Population (million)	4	4
Land area (thousand km^2)	263	263
Population density (habitants/km^2)	14	16
GDP per capita, PPP (USD)	17 560	29 871
Trade as % of GDP	22.3	21.5
Agriculture in the economy		
Agriculture in GDP (%)	7.1	5.4
Agriculture share in employment (%)	9.4	6.9
Agro-food exports (% of total exports)	50.8	54.9
Agro-food imports (% of total imports)	7.8	10.6
Characteristics of the agricultural sector		
Agro-food trade balance (USD million)	5 649	13 792
Crop in total agricultural production (%)	23	21
Livestock in total agricultural production (%)	77	79
Agricultural area (AA) (thousand ha)	14 975	11 490
Share of arable land in AA (%)	11	4
Share of irrigated land in AA (%)	. .	4
Share of agriculture in water consumption (%)	24	46
Nitrogen Balance, Kg/ha	34	43

* or latest available year.

Source: OECD, Statistical Databases, World Development Indicators and national data.

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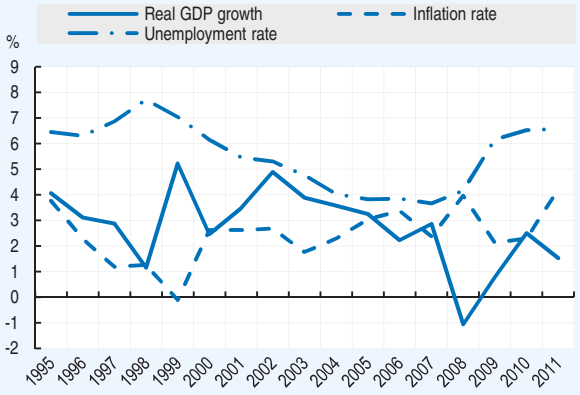
Figure 13.2. **New Zealand: Main macroeconomic indicators, 1995-2011**



Source: OECD, Statistical Databases.

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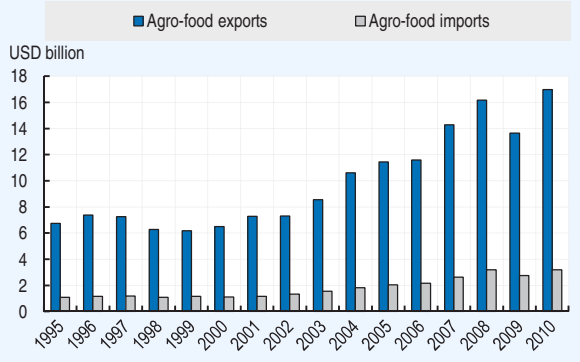
Figure 13.3. **New Zealand: Agro-food trade, 1995-2010**



Source: International Trade by Commodity Statistics (ITCS) Database.

StatLink http://dx.doi.org/10.1787/888932653802

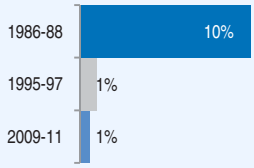
Note: Detailed definitions of contextual indicators and their sources are provided in the Annex II.A1.

Development of support to agriculture

New Zealand's agriculture is a market- and export-oriented sector and domestic prices of virtually all agricultural products are aligned with world market prices. The level of support is consistently the lowest among OECD countries and most of policy measures are sector-wide general services improving the economic environment for agriculture.

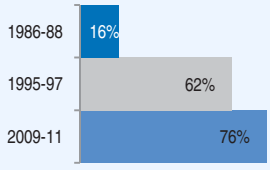
PSE as % of receipts (%PSE)

Support to producers (%PSE) was less than 1% in 2009-11, down from 10% in 1986-88 and has been the lowest in the OECD since the agricultural reforms in the mid-1980s.



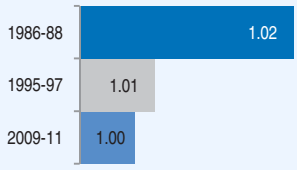
Potentially most distorting support as % of PSE

The combined share of most distorting forms of support policies (based on output and variable input use – without input constraints) in the PSE increased from 15% in 1986-88 to 76% in 2009-11. However, this share should be seen in the context of very low levels of total support.



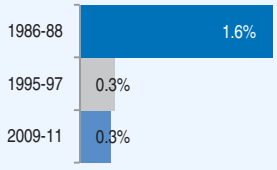
Ratio of producer price to border price (NPC)

Total receipts of the farming sector were almost identical to what they would have been at world prices in 2009-11 with the only exception being poultry, where sanitary measures result in import restrictions.

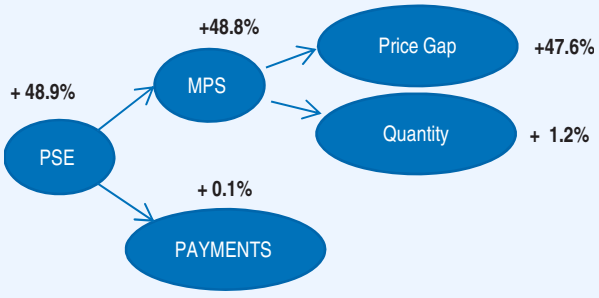


TSE as % of GDP

Total support was about 0.3% of GDP in 2009-11 and the expenditure on general services represented around 76% of the Total support.

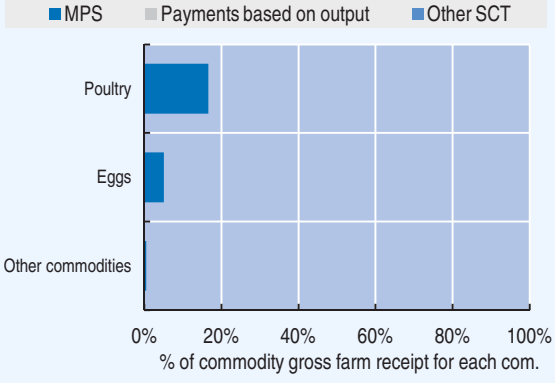


Decomposition of change in PSE, 2010 to 2011



The level of support increased in 2011 due to the wider gap between domestic and border prices (MPS), mainly due to a stronger New Zealand Dollar and hence lower international eggs and poultry prices when expressed in the local currency.

Transfer to specific commodities (SCT), 2009-11



Producer SCT by commodity was 17% for poultry, 5% for egg and zero for all the other commodities in 2009-11.

Table 13.2. **New Zealand: Estimates of support to agriculture**

NZD million

	1986-88	1995-97	2009-11	2009	2010	2011p
Total value of production (at farm gate)	**6 860**	**9 669**	**20 043**	**17 989**	**20 833**	**21 308**
of which: *share of MPS commodities, percentage*	72	72	76	74	77	77
Total value of consumption (at farm gate)	**1 683**	**2 333**	**3 747**	**3 615**	**3 758**	**3 867**
Producer Support Estimate (PSE)	**786**	**94**	**121**	**80**	**114**	**169**
Support based on commodity output	114	58	91	49	84	139
Market Price Support	112	58	91	49	84	139
Payments based on output	3	0	0	0	0	0
Payments based on input use	314	35	30	30	29	29
Based on variable input use	3	0	0	0	0	0
with input constraints	0	0	0	0	0	0
Based on fixed capital formation	271	0	0	0	0	0
with input constraints	0	0	0	0	0	0
Based on on-farm services	40	35	30	30	29	29
with input constraints	0	0	0	0	0	0
Payments based on current A/An/R/I, production required[1]	42	1	1	1	0	1
Based on Receipts / Income	42	1	1	1	0	1
Based on Area planted / Animal numbers	0	0	0	0	0	0
with input constraints	0	0	0	0	0	0
Payments based on non-current A/An/R/I, production required	315	0	0	0	0	0
Payments based on non-current A/An/R/I, production not required	0	0	0	0	0	0
With variable payment rates	0	0	0	0	0	0
with commodity exceptions	0	0	0	0	0	0
With fixed payment rates	0	0	0	0	0	0
with commodity exceptions	0	0	0	0	0	0
Payments based on non-commodity criteria	0	0	0	0	0	0
Based on long-term resource retirement	0	0	0	0	0	0
Based on a specific non-commodity output	0	0	0	0	0	0
Based on other non-commodity criteria	0	0	0	0	0	0
Miscellaneous payments	0	0	0	0	0	0
Percentage PSE	**10**	**1**	**1**	**0**	**1**	**1**
Producer NPC	**1.02**	**1.01**	**1.00**	**1.00**	**1.00**	**1.01**
Producer NAC	**1.12**	**1.01**	**1.01**	**1.00**	**1.01**	**1.01**
General Services Support Estimate (GSSE)	**203**	**183**	**385**	**312**	**384**	**460**
Research and development	102	110	108	73	119	131
Agricultural schools	0	6	26	29	24	25
Inspection services	54	43	158	120	145	208
Infrastructure	46	22	93	89	94	96
Marketing and promotion	0	0	0	0	0	0
Public stockholding	0	0	0	0	0	0
Miscellaneous	0	1	0	0	0	0
GSSE as a share of TSE (%)	**26.4**	**66.2**	**76.6**	**79.7**	**77.1**	**73.1**
Consumer Support Estimate (CSE)	**-110**	**-51**	**-88**	**-49**	**-80**	**-135**
Transfers to producers from consumers	-106	-51	-88	-49	-80	-135
Other transfers from consumers	-3	0	0	0	0	0
Transfers to consumers from taxpayers	0	0	0	0	0	0
Excess feed cost	0	0	0	0	0	0
Percentage CSE	**-7**	**-2**	**-2**	**-1**	**-2**	**-3**
Consumer NPC	**1.07**	**1.02**	**1.02**	**1.01**	**1.02**	**1.04**
Consumer NAC	**1.07**	**1.02**	**1.02**	**1.01**	**1.02**	**1.04**
Total Support Estimate (TSE)	**989**	**277**	**506**	**391**	**497**	**629**
Transfers from consumers	110	51	88	49	80	135
Transfers from taxpayers	882	226	418	343	418	495
Budget revenues	-3	0	0	0	0	0
Percentage TSE (expressed as share of GDP)	**1.65**	**0.28**	**0.25**	**0.21**	**0.25**	**0.30**
GDP deflator 1986-1988=100	**100**	**131**	**181**	**175**	**180**	**186**

Note: p: provisional. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
MPS commodities for New Zealand are: wheat, maize, other grains, milk, beef and veal, sheep meat, wool, pig meat, poultry and eggs.
Market Price Support is net of producer levies and Excess Feed Cost.
1. A (area planted), An (animal numbers), R (receipts), I (income).
Source: OECD, *PSE/CSE Database*, 2012.

StatLink http://dx.doi.org/10.1787/888932654524

Description of policy developments

Main policy instruments

New Zealand largely limits its agriculture support to expenditures on general services such as agricultural research and biosecurity controls for pests and diseases. A significant share of the costs of regulatory and operational functions, including border control, is charged to beneficiaries.

In the event of natural disasters beyond the response capacity of private insurance, local farmer organisations or territorial local authorities, farmers may receive restricted assistance to help replace production capacity. In the event of a medium or large scale natural disaster farmers whose income falls below a threshold level may, for a limited period and if the farmer cannot support themselves with cash assets or with other sources of income, be eligible for the equivalent of the unemployment benefit.

New Zealand requires Import Health Standards (IHS) for all risk goods before they can be imported into New Zealand. Some products (representing a small share of New Zealand's agricultural output: eggs, uncooked poultry and some bee products) cannot be imported for sanitary reasons. These measures lead to some market price support for the mentioned products.

Starting in the 1980s, New Zealand has largely removed controls of agricultural production and exports. Regulations are maintained in exports of kiwifruit: the New Zealand company Zespri has the default but not sole right to export kiwifruit to all markets other than Australia, while other groups willing to export can do so independently to Australia or in collaboration with Zespri to other countries. In case of objection by Zespri to collaborative marketing applications, Kiwifruit New Zealand (the regulator) can still approve collaborative marketing applications if it expects overall wealth of New Zealand kiwifruit suppliers to increase.

"Industry good" activities (such as research and development, forming and developing marketing strategies, and providing technical advice) previously undertaken by statutory marketing boards are now managed through producer levy-funded industry organisations under the Commodity Levies Act 1990. Under this legislation, levies can only be imposed if they are supported by producers, and producers themselves decide how levies are spent. With a very limited number of exceptions, levy funds may not be spent on commercial or trading activities. The levying organisations must seek a new mandate to collect levies every six years through a referendum of levy payers.

Two key policy measures that address agri-environmental issues are the *Resource Management Act1991* (RMA) and the *Sustainable Farming Fund* (SFF). The objective of the RMA is to promote the sustainable management of natural and physical resources, including soil, water, air, biodiversity and the coastal environment. RMA responsibilities are generally assigned to regional and district councils. They include environmental regulation, soil conservation, flood control and drainage works, and plant and animal pest control. The SFF, which was set up in 2000, supports community-driven projects aimed at improving the productive and environmental performance of the land-based sectors. In 2011 the SFF was expanded to include aquaculture reflecting MAF's new responsibility for fisheries as well as agriculture, forestry and food safety. The Fund has backed around 800 projects over 11 years, supporting sustainability and resilience in the primary sector.

Domestic policy developments in 2011-12

2010/11 Policy developments that may impact on agricultural production include encouraging innovation and sustainable growth, managing water and land resources, greenhouse gas initiatives and biosecurity.

A 2010 amendment of the Dairy Industry Restructuring Act of 2001 (DIRA), allowed the Minister of Agriculture to use an auction system, or alternative methods, for determining the price and allocation of regulated raw milk. Another review was initiated in 2011 to improve transparency of Fonterra's price setting, improve tradability of Fonterra shares, and to encourage competitiveness in the New Zealand dairy market. As a consequence of DIRA the share of milk collected by Fonterra Cooperative has declined from about 96% of the New Zealand total in 2002/03 to approximately 89% in the 2010/11 season.

The *Primary Growth Partnership* (PGP) programme was introduced in September 2009 and is administered by the Ministry of Agriculture and Forestry. With industry contributions at least equal to Crown funding, the PGP will invest in research and innovation to boost productivity, economic growth and the sustainability of New Zealand's primary, forestry and food sectors.

The *Irrigation Acceleration Fund* (IAF) was announced in the 2011/12 budget. It intends to provide a comprehensive approach to the investigation of regional scale rural **water infrastructure** development. The IAF superseded the Community Irrigation Fund established in 2007 and additionally builds on the grant funding support previously provided to irrigation-related projects through the Sustainable Farming Fund. With a budget of NZD 35 million, spread over five years, the IAF will support projects promoting efficient use of water and environmental management, and demonstrating a commitment to good industry practice.

Agriculture began mandatory reporting in the *New Zealand Emissions Trading Scheme* (NZ ETS) in 2012 and is scheduled to enter fully into the scheme from 2015. Ministers have signalled, however, that the New Zealand government needs to consider its efforts relative to other countries. The NZ ETS introduces a price-based mechanism for greenhouse gases and is a key part of New Zealand's climate change policy. The ETS (Agriculture) accounts for methane and nitrous oxide. Emitters of these gases must either reduce their emissions or purchase emission rights (New Zealand Units, NZUs) from 2015; they are, however, eligible to receive a free allocation of NZUs from the government, thus reducing participation costs. This free allocating will start at 90% of the average emissions per production unit and will be reduced by 1.3% per annum from 2016. With some exemptions, participants for agriculture are meat processors, milk or colostrum processors, exporters of live animals, fertiliser importers and manufacturers, and egg producers. A first review of the ETS was held in 2011; the government has yet to make any decisions on the review's recommendations.

New Zealand Government announced on 10 March 2011 a **merger of the Ministry** of Agriculture and Forestry and the Ministry of Fisheries, as part of a programme to improve performance across the state sector. The legal merger took place on 1 July 2011, with full integration into the new Ministry taking place later in 2011/12. This closely follows the amalgamation of MAF and the New Zealand Food Safety Authority on 1 July 2010, when the two agencies became one legal department called the "Ministry of Agriculture and Forestry". From 30 April 2012 MAF will become the Ministry for Primary Industries.

The New Zealand Government's Ministry of Agriculture and Forestry is supporting the industry-led programme for managing the **kiwifruit disease Psa**. (*Pseudomonas syringae pv actinidiae*). The industry strategy has developed from intensive containment through cutting out affected vines, to preventing the disease spreading with other methods. Government supported a rapid biosecurity response and helped with funding of $25 million for the initial containment.

New Zealand's mandatory *National Animal Identification and Tracing* (NAIT) scheme is scheduled to commence for cattle on 1 July 2012 and for deer on 1 March 2013. NAIT Ltd sought submissions on proposed levy amounts and how they are collected from cattle and deer farmers in 2011. About

$7 million will need to be collected during the scheme's first year. The NAIT Bill sets out the legal framework for collecting information on livestock location, movement and other history. To support the development of NAIT, MAF has developed FarmsOnLine, a web-based system that will supply the contact and location detail of rural properties in New Zealand. FarmsOnLine started as scheduled in March 2011. It will give MAF instant access to information and contact details for rural properties in New Zealand so it can respond quickly to a biosecurity alert or natural disaster.

Trade policy developments in 2011-12

New Zealand agriculture trade policy focuses on accomplishing more liberal rules-based trade in agriculture and related products, while preventing the introduction of unjustified trade barriers inconsistent with agreed trade rules. This is pursued through the WTO Doha Round negotiation and bilateral and multi-party trade agreements.

During the year New Zealand has been heavily involved in negotiating **Free Trade Agreements** (FTA) with: countries under the *Trans-Pacific Partnership* (TPP); ***Russia-Belarus-Kazakhstan***; and ***India***. The New Zealand ***Hong KongChina*** Closer Economic Partnership Agreement (the "CEP") was signed in Hong Kong on 29 March 2010 and entered into force on 1 January 2011. The ASEAN ***Australia*** and New Zealand Free Trade Agreement (AANZFTA) entered into force for all signatories on 10 January 2012 following ***Indonesia*** notifying completion of its internal ratification procedures on 11 November 2011.

PART II

Chapter 14

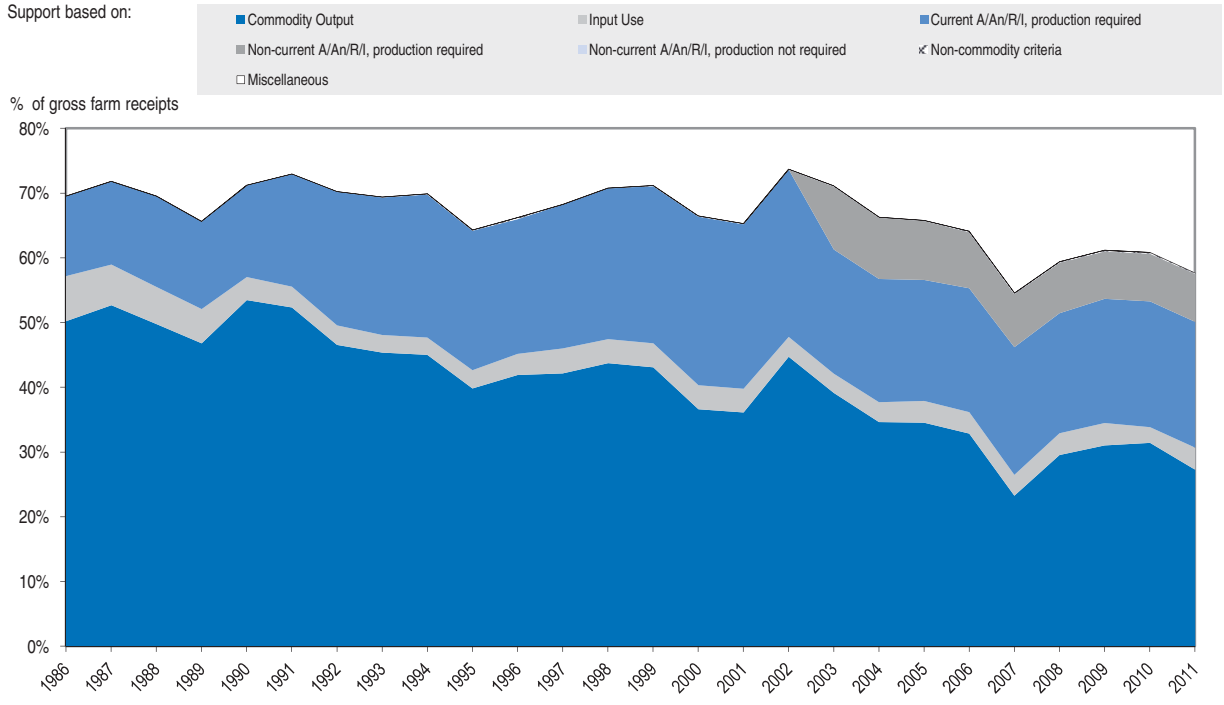
Norway

The Norway country chapter includes a brief evaluation of policy developments and related support to agriculture, contextual information on the framework in which agricultural policies are implemented and the main characteristics of the agricultural sector, an evaluation of support in 2010-11 and in the longer term perspective, and a brief description of the main policy developments in 2011-12.

Box 14.1. **Evaluation of policy developments**

- In the longer term there has been modest policy reform since 1986-88 towards market orientation. The level of support has been reduced but agriculture in Norway remains among the most highly protected in the OECD area and greater efforts are required to reduce the share of production-linked support and increase market access.
- There has also been a move away from support based on commodity output, particularly with respect to payments based on output, but on the other hand payments based on current production factors have increased. While the share of most distorting support has declined significantly, it continues to account for more than half of overall support.
- Policy reforms such as the removal of the administered price for beef and increased flexibility in milk quota leasing are welcome steps to improve market orientation.
- Measures to improve environmental performance of agriculture, such as the action plan to reduce risk related to the use of pesticides with a stronger focus on integrated plant management, provide important opportunities to further improve sustainability in production. Also the increased role of regional programmes within the National Environmental Programme has a potential to improve the targeting of policy measures.
- Overall, Norway should continue its effort to reach its various policy objectives (food security, maintain agriculture across the whole country, services provided by agriculture such as landscape amenities) at the lowest possible costs to consumers and taxpayers. A more market orientation of the sector and better targeted direct payments are avenues to be further explored.

Figure 14.1. **Norway: PSE level and composition by support categories, 1986-2011**



Source: OECD, *PSE/CSE Database*, 2012.

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Contextual information

Norway has the highest GDP per capita in the OECD region. It has relatively low inflation and unemployment rates. Given the cold climate and the widespread incidence of thin soils and mountainous areas, only a small fraction of the land is cultivated. Agriculture constitutes a relatively small share of Gross Domestic Product (1.6%) and employment (2.0%). Norway is consistently an agro-food net importing country. The farm structure is based on relatively small family farms, many of which are in remote locations. The share of water consumption in agriculture includes fisheries, where fresh water use for primary processing is particularly important.

Table 14.1. **Norway: Contextual indicators, 1995, 2010***

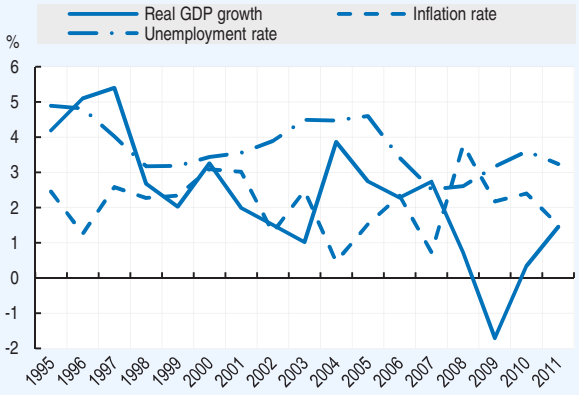
	1995	2010*
Economic context		
GDP (USD billion)	149	477
Population (million)	4	5
Land area (thousand km^2)	304	305
Population density (habitants/km^2)	11	13
GDP per capita, PPP (USD)	23 619	57 231
Trade as % of GDP	25.0	25.3
Agriculture in the economy		
Agriculture in GDP (%)	3.1	1.6
Agriculture share in employment (%)	4.3	2.0
Agro-food exports (% of total exports)	1.3	0.6
Agro-food imports (% of total imports)	6.1	7.6
Characteristics of the agricultural sector		
Agro-food trade balance (USD million)	–1 493	–5 071
Crop in total agricultural production (%)	25	24
Livestock in total agricultural production (%)	75	76
Agricultural area (AA) (thousand ha)	1 127	1 014
Share of arable land in AA (%)	88	82
Share of irrigated land in AA (%)	. .	. .
Share of agriculture in water consumption (%)	. .	. .
Nitrogen Balance, Kg/ha	108	95

* or latest available year.

Source: OECD, Statistical Databases, World Development Indicators and national data.

StatLink http://dx.doi.org/10.1787/888932654239

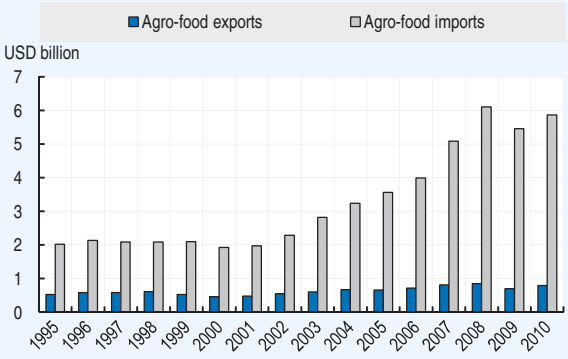
Figure 14.2. **Norway: Main macroeconomic indicators, 1995-2011**



Source: OECD, Statistical Databases.

StatLink http://dx.doi.org/10.1787/888932653840

Figure 14.3. **Norway: Agro-food trade, 1995-2010**



Source: International Trade by Commodity Statistics (ITCS) Database.

StatLink http://dx.doi.org/10.1787/888932653859

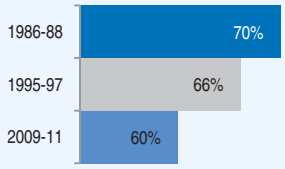
Note: Detailed definitions of contextual indicators and their sources are provided in the Annex II.A1.

Development of support to agriculture

In Norway, there has been modest but regular progress in reducing the level and shifting the composition of support. However, the commodity based support (mainly market price support) still represents around a half of total support. Support based on output has in recent years declined to about one third of the level in 1986-88, mainly due to reduced price distortions. On the other hand payments based on current production factors continue to account for an important share of the PSE.

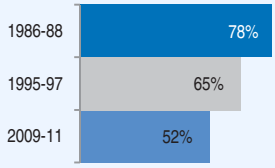
PSE as % of receipts (%PSE)

Support to farmers has been reduced by 10 percentage points, from 70% in 1986-88 to 60% in 2009-11. The % PSE has been stable around 60% in the last few years, it has slightly declined from 61% in 2009 and 2010 to 58% in 2011.



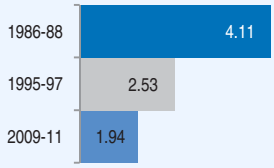
Potentially most distorting support as % of PSE

While the share of potentially most distorting support policies (based on output and variable input use – without input constraints) in the PSE has decreased, it nevertheless continues to account for more than half of total support. Market price support continues to dominate the share of this form of support.



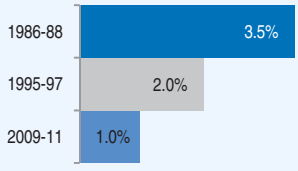
Ratio of producer price to border price (NPC)

Prices received by farmers (NPC) were 1.9 times higher than those on the world market in 2008-10. This is a significant reduction of price distortions compared with the 1986-88 situation. NPC's are highest for poultry and wool.

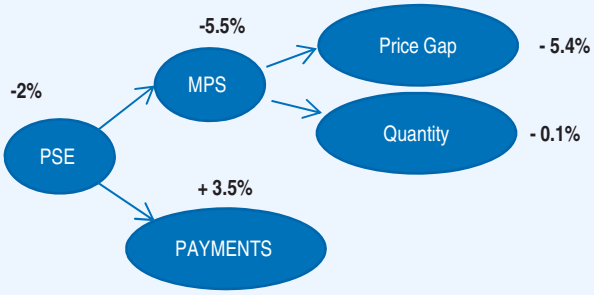


TSE as % of GDP

Total support was 1% of GDP in 2009-11, compared to 3.5% in 1986-88. Expenditures on general services (GSSE) represented 9% of the Total Support Estimate.

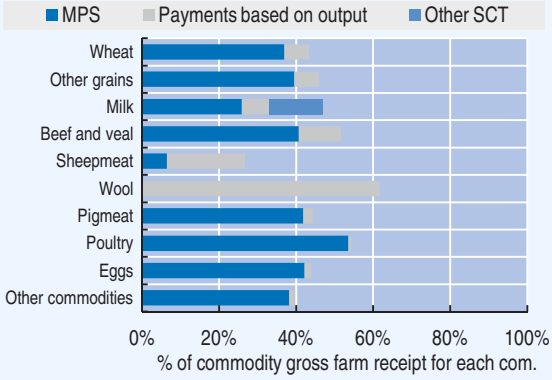


Decomposition of change in PSE, 2010 to 2011



The level of support declined slightly in 2011, due to a reduction in MPS (due to reduced price gap), which was only partly compensated by increased budgetary payments.

Transfer to specific commodities (SCT), 2009-11



Single Commodity Transfers accounted for 55% of the total PSE in 2009-11. The share of the SCT in the commodity gross receipts was highest for wool and poultry. But the spread between relative commodity SCTs is rather moderate between 40 to 60%.

Table 14.2. **Norway: Estimates of support to agriculture**

NOK million

	1986-88	1995-97	2009-11	2009	2010	2011p
Total value of production (at farm gate)	**17 354**	**18 232**	**23 769**	**22 868**	**23 999**	**24 439**
of which: *share of MPS commodities, percentage*	73	77	77	77	77	78
Total value of consumption (at farm gate)	**17 899**	**18 129**	**24 714**	**23 961**	**24 539**	**25 641**
Producer Support Estimate (PSE)	**19 175**	**19 246**	**21 759**	**21 437**	**22 145**	**21 696**
Support based on commodity output	13 877	11 997	10 865	10 881	11 445	10 269
Market Price Support	9 274	8 444	9 183	9 267	9 750	8 530
Payments based on output	4 603	3 554	1 682	1 613	1 695	1 739
Payments based on input use	1 721	960	1 124	1 216	887	1 267
Based on variable input use	1 020	551	571	671	332	710
with input constraints	0	1	0	0	0	0
Based on fixed capital formation	628	339	467	461	468	471
with input constraints	0	0	0	0	0	0
Based on on-farm services	73	70	86	84	87	87
with input constraints	2	0	0	0	0	0
Payments based on current A/An/R/I, production required[1]	3 577	6 254	7 031	6 717	7 068	7 308
Based on Receipts / Income	0	0	837	795	857	860
Based on Area planted / Animal numbers	3 577	6 254	6 194	5 922	6 211	6 448
with input constraints	0	104	570	541	560	608
Payments based on non-current A/An/R/I, production required	0	0	2 684	2 568	2 685	2 798
Payments based on non-current A/An/R/I, production not required	0	0	0	0	0	0
With variable payment rates	0	0	0	0	0	0
with commodity exceptions	0	0	0	0	0	0
With fixed payment rates	0	0	0	0	0	0
with commodity exceptions	0	0	0	0	0	0
Payments based on non-commodity criteria	0	34	56	55	60	53
Based on long-term resource retirement	0	0	0	0	0	0
Based on a specific non-commodity output	0	34	52	50	54	53
Based on other non-commodity criteria	0	0	4	5	6	0
Miscellaneous payments	0	0	0	0	0	0
Percentage PSE	**70**	**66**	**60**	**61**	**61**	**58**
Producer NPC	**4.11**	**2.53**	**1.94**	**2.04**	**1.98**	**1.81**
Producer NAC	**3.38**	**2.97**	**2.50**	**2.58**	**2.55**	**2.36**
General Services Support Estimate (GSSE)	**848**	**1 053**	**2 215**	**2 139**	**2 362**	**2 143**
Research and development	472	630	950	1 006	911	933
Agricultural schools	0	0	0	0	0	0
Inspection services	33	173	226	163	318	197
Infrastructure	133	78	311	307	305	322
Marketing and promotion	210	150	135	74	240	91
Public stockholding	0	22	0	0	0	0
Miscellaneous	0	0	593	591	587	600
GSSE as a share of TSE (%)	**3.9**	**5.1**	**9.1**	**8.9**	**9.5**	**8.8**
Consumer Support Estimate (CSE)	**-9 141**	**-8 343**	**-9 958**	**-10 265**	**-10 269**	**-9 340**
Transfers to producers from consumers	-11 381	-9 038	-10 538	-10 808	-10 876	-9 930
Other transfers from consumers	-959	-548	-552	-728	-424	-504
Transfers to consumers from taxpayers	1 522	542	466	468	441	489
Excess feed cost	1 677	700	665	803	588	605
Percentage CSE	**-56**	**-47**	**-41**	**-44**	**-43**	**-37**
Consumer NPC	**3.24**	**2.13**	**1.82**	**1.93**	**1.85**	**1.69**
Consumer NAC	**2.27**	**1.91**	**1.70**	**1.78**	**1.74**	**1.59**
Total Support Estimate (TSE)	**21 545**	**20 840**	**24 440**	**24 045**	**24 948**	**24 328**
Transfers from consumers	12 340	9 585	11 090	11 536	11 299	10 434
Transfers from taxpayers	10 164	11 803	13 902	13 237	14 072	14 398
Budget revenues	-959	-548	-552	-728	-424	-504
Percentage TSE (expressed as share of GDP)	**3.51**	**2.03**	**0.98**	**1.03**	**1.00**	**0.91**
GDP deflator 1986-1988=100	**100**	**128**	**237**	**223**	**237**	**251**

Note: p: provisional. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
MPS commodities for Norway are: wheat, other grains, milk, beef and veal, sheepmeat, wool, pigmeat, poultry and eggs. Market Price Support is net of producer levies and Excess Feed Cost.
1. A (area planted), An (animal numbers), R (receipts), I (income).
Source: OECD, *PSE/CSE Database*, 2012.

StatLink http://dx.doi.org/10.1787/888932654543

Description of policy developments

Main policy instruments

The White paper (2011-2012) *On Norwegian agriculture and food production* was approved by the Norwegian Parliament (the Storting) in April 2012 and represents the basis for agricultural policy. It defines the direction of Norwegian agricultural policy through four main objectives: food security; agriculture throughout all of Norway; creating more added-value; and sustainable agriculture.

Border measures and budgetary payments are the main policy instruments supporting agriculture in Norway. Market price support, in the form of wholesale target prices, is provided for most commodities. These target prices and the budgetary framework for payments to farmers are negotiated annually between the government and producer representatives. Producer levies are used for marketing activities, including export subsidies for livestock products. Exports of processed products to the EU and marketing activities for horticultural products are financed directly by the government.

Milk production quotas were introduced in 1983 and a system of buying and selling quotas was introduced in 1997. Most of Norway's tariff-rate-quotas were eliminated in 2000 when the WTO bound tariff rates became equal to the in-tariff quota rates. Tariffs for most products are set between 100-400% although there is a system of "open periods" for imports at reduced tariff rates when domestic prices rise above threshold levels.

A variety of direct payments to farmers, including area, headage, and deficiency payments continue to be implemented. Many of these payments are differentiated by region and farm size in order to provide adequate income support across all type of farms and regions. Environmental levies on agricultural pesticides are applied. These levies are differentiated according to the health and environmental risk characteristics of the product and the degree of exposure.

Domestic policy developments in 2011-12

An agreement was reached between the government and the two farmers' organisations in the agricultural negotiation in May 2011, to specify the agriculture policy settings to be implemented in 2011/12. The main changes relative to the previous agreement in May 2010 were:

- An increase in **target prices** with a total budgetary effect of NOK 580 million (USD 103 million) from 1 July 2011, and NOK 280 million (USD 50 million) from 1 January 2012.
- An increase in budgetary support of NOK 365 million (USD 65 million) from 2011 to 2012.
- Increased farmers contributions to social security on one side and increased value of income tax reliefs granted to farmers on the other side.
- Removal of the food production tax that partly finances the Food Safety Authority, for the agro food industry.
- Increased support to small grass based farms, grain farms and in the rural areas.
- Increased support through the National **Environmental Programme** to maintain the cultural landscapes over the country at a total of NOK 189 million (USD 34 million). Counties with water pollution problems are prioritised in terms of increased budget funding of the regional measures.

The **milk quota** system serves to regulate the milk production. For the quota year starting 1 March 2012, there will be a one per cent quota increase. Farmers will also be allowed to produce 4 percent above their quota as a temporary increase within this quota year. Farmers willing to sell

their quotas in 2011 were allowed to half of their quota to other producers at free prices, while the remaining half has to be sold to the government at a fixed price of NOK 3.5 (USD 0.6) per litre. From 1 March 2009 a quota rental system is applied. About 106 million litres (50 per cent more than in 2010) were leased by 1 640 farmers in 2011.The Norwegian Ministry of Agriculture and Food introduced a new administrative regulation of the milk quota system in December 2011. The new system is designed to allow milk farmers more flexibility in their milk production decisions.

Marketing fees paid by producers are used to stabilise and balance the market of some agricultural products. In 2011, the marketing fee for meat increased related to meat overproduction. On the other side marketing fees for milk and grains were reduced.

Since 2006, the Norwegian authorities together with Norwegian food producers have been working together in a nation-wide **food traceability** project (*eTrace*). The project has ambition developed a national, electronic infrastructure for efficient exchange of information in the food chain. Terms and prerequisites to handling over the system to the industry are now discussed.

The *Commission to investigate the effects of recent and possible future developments in the food supply chain* delivered its report "The powerful and the powerless in the food supply chain" in 2011. According to the report, the Norwegian food supply chain is characterised by heavy concentration in the retail, wholesale and supply links. The commission concludes that the trade's umbrella chains have increased their bargaining power over suppliers. Proposals from the commission include an act relating to negotiations and fair trading practices in the grocery sector, an ombudsman for the grocery sector, a grocery web portal, food labelling, amendments to the merger control provisions in the Competition Act and a study of ownership restrictions in the grocery trade. The government will decide on these suggestions in 2012.

The **agri-environmental measures** are mostly included in the National Environmental Programme (NEP). They are including various forms of payments such as Acreage Cultural Landscape Support, payments to extensive grazing and for grazing animals, organic agriculture and Regional Environmental programmes. The role of the regional programmes is increasing as they have a stronger environmental focus with more measures directed towards specific (site specific) environmental challenges. In 2011 the payments in Regional Environmental programmes represented 10% of the NEP budget.

The **rural development** aspects of Norwegian agricultural policy include several programmes designed to stimulate innovation and establishment of alternative businesses on farms and alternative employment in rural areas. A national framework provides guidelines for regional strategies, which forms the basis for financing of local projects for business and rural development. Most of the funding is financed through the Agricultural Development Fund (ADF). For 2011, the proposal of the total allocation of ADF was NOK 1 163 million (USD 207.5 million) and for 2012 the budgeted sum is of NOK 1 201 million (USD 214 million).

Trade policy developments in 2011-12

Article 19 of the ***European Economic Area*** (EEA) agreement provides that contracting parties will carry reviews of the conditions of trade in agricultural products at two year intervals. In April 2011, the ***European Union*** and Norway signed a bilateral trade agreement covering meat and dairy products, fruits, vegetables, ornamental plants and pet food. Under this agreement, which will enter into force in January 2012, Norway has granted the European Union zero or lower duties under tariff quotas for meats and cheese, while the European Union has granted Norwegian exports better access for cheese, potato chips and berries.

There are ongoing **free trade negotiations** between ***EFTA*** and respectively ***India, Indonesia,*** the customs union of ***Russia/Belarus/Kazakhstan*** and ***Bosnia-Herzegovina;*** and between ***Norway*** and ***China***. The most recent agreements are those with ***Hong Kong*** and ***Montenegro*** signed in 2011**.** These free trade agreements include all processed agricultural products and a range of primary agricultural products.

PART II

Chapter 15

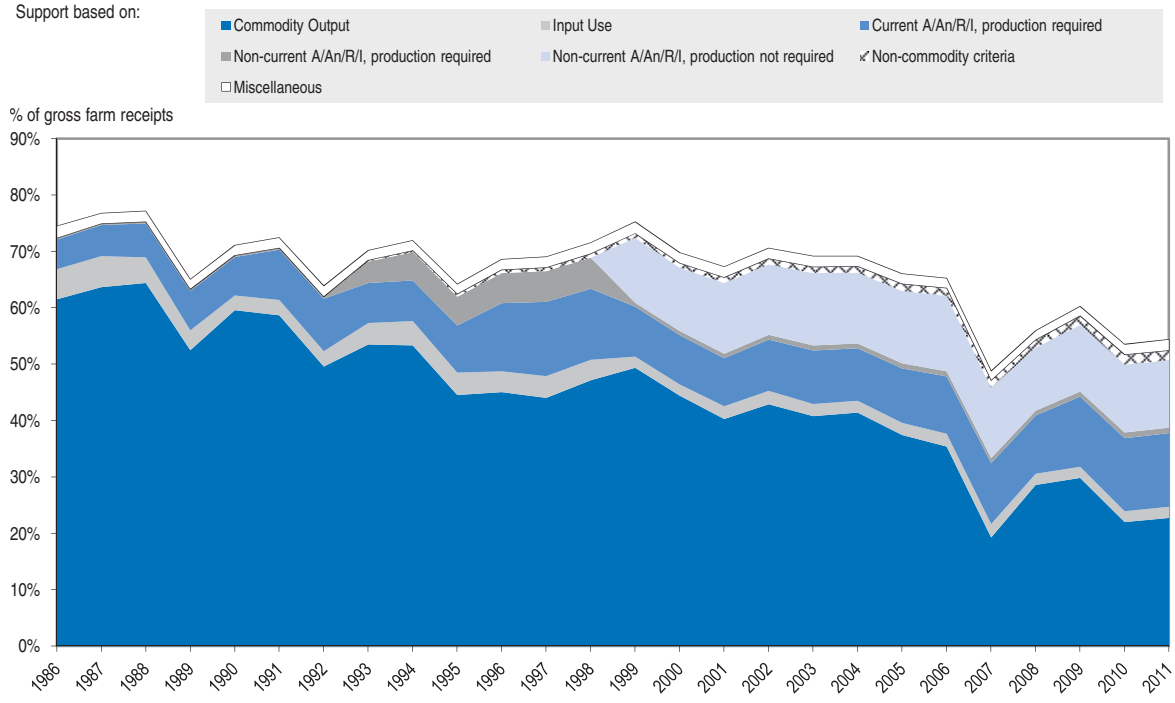
Switzerland

The Switzerland country chapter includes a brief evaluation of policy developments and related support to agriculture, contextual information on the framework in which agricultural policies are implemented and the main characteristics of the agricultural sector, an evaluation of support in 2010-11 and in the longer term perspective, and a brief description of the main policy developments in 2011-12.

Box 15.1. **Evaluation of policy developments**

- Overall, progress has been achieved in market orientation, although the level of support remains relatively high. There has been a gradual fall in support since 1986-88, with the share of market price support gradually decreasing. Production and trade distorting policies accounted for slightly less than a half of the support in 2009-11.
- The removal of milk price controls and the elimination of the milk quota system in 2009 have a potential to improve the economic efficiency of the sector.
- The elimination of export subsidies to primary agricultural products in 2010 and the adoption of greater flexibility and transparency in the administration of the tariff rate quota system together with further reduction for some tariff barriers will also strengthen the role of markets in improving economic efficiency.
- The continuation of the gradual move away from market price support measures and the increase in direct payments (as a part of the Agriculture Policy 2011 reform) are consistent with OECD Ministerial policy reform principles. However, further efforts are still needed to reduce the overall level of support and better target direct payments to meet societal concerns more efficiently.

Figure 15.1. **Switzerland: PSE level and composition by support categories, 1986-2011**



Source: OECD, *PSE/CSE Database*, 2012.

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Contextual information

Switzerland is an economy with one of the highest GDP per capita and relatively low inflation and unemployment rates. The relative importance of agriculture in the Swiss economy is low with its share in domestic product falling to around 1%, while its share in employment is slightly below 4%. This is mainly due to highly developed industrial and services sectors in the economy. Switzerland has consistently been a net agro-food importer; its share of agro-food imports in total imports is around 6%, while the share of agro-food exports on total exports is around 3%. The farm structure is dominated by relatively small family farms. Most of farming areas in hills and mountains are used extensively, while most of farming areas in lowlands are used intensively. Arable land represents 26% and irrigated land around 2% of agricultural area.

Table 15.1. **Switzerland: Contextual indicators, 1995, 2010***

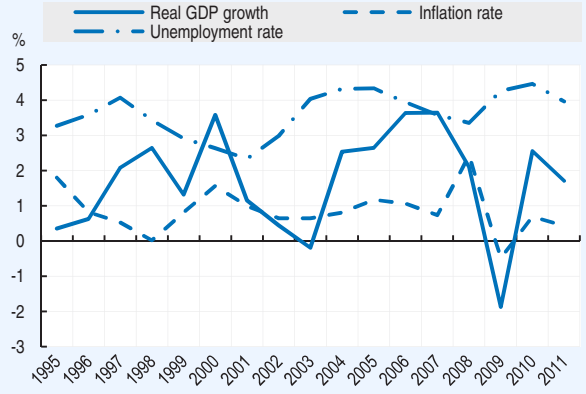
	1995	2010*
Economic context		
GDP (USD billion)	316	638
Population (million)	7	8
Land area (thousand km^2)	40	40
Population density (habitants/km^2)	170	186
GDP per capita, PPP (USD)	26 647	46 622
Trade as % of GDP	25.6	35.2
Agriculture in the economy		
Agriculture in GDP (%)	2.1	1.1
Agriculture share in employment (%)	4.4	3.7
Agro-food exports (% of total exports)	3.3	3.9
Agro-food imports (% of total imports)	7.0	6.1
Characteristics of the agricultural sector		
Agro-food trade balance (USD million)	–2 937	–3 042
Crop in total agricultural production (%)	30	31
Livestock in total agricultural production (%)	70	69
Agricultural area (AA) (thousand ha)	1 581	1 525
Share of arable land in AA (%)	27	27
Share of irrigated land in AA (%)	2	2
Share of agriculture in water consumption (%)	. .	. .
Nitrogen Balance, Kg/ha	73	68

* or latest available year.

Source: OECD, Statistical Databases, World Development Indicators and national data.

StatLink http://dx.doi.org/10.1787/888932654258

Figure 15.2. **Switzerland: Main macroeconomic indicators, 1995-2011**



Source: OECD, Statistical Databases.

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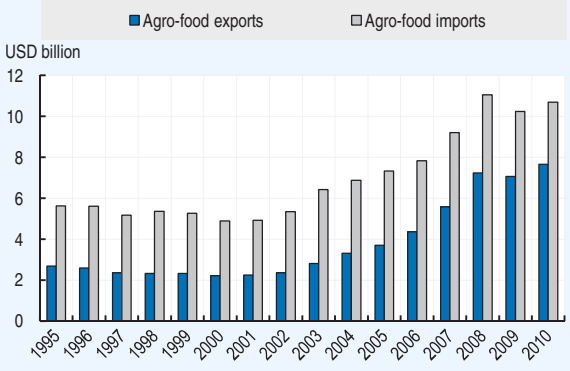
Figure 15.3. **Switzerland: Agro-food trade, 1995-2010**



Source: International Trade by Commodity Statistics (ITCS) Database.

StatLink http://dx.doi.org/10.1787/888932653916

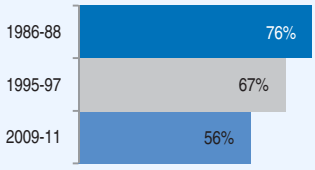
Note: Detailed definitions of contextual indicators and their sources are provided in the Annex II.A1.

Development of support to agriculture

Switzerland has progressively reduced its support to agriculture and especially its most trade and production distorting forms of support since 1986-88. However, support remains relatively high in the OECD area. The level of price distortions has been significantly reduced as shown by the NPC, although the domestic prices remain on average 60% above world prices. Within direct payments, the area and headage payments dominate, but an increasing share of payments is targeted towards environment and animal welfare.

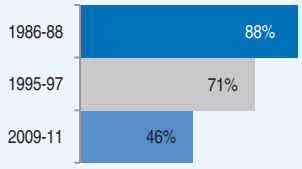
PSE as % of receipts (%PSE)

Switzerland has reduced its support to farmers by 20 percentage points between 1986-88 and 2009-11. Despite a gradual reduction in the long term, overall support remains high (more than two times the OECD average) in 2009-11. The % PSE dropped by 6 percentage points in 2010 (54%) and remained around that level in 2011.



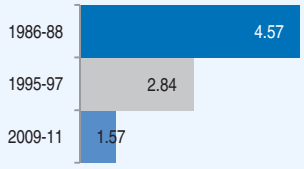
Potentially most distorting support as % of PSE

Budgetary expenditures financing market price support measures were further reallocated to direct payments as part of the AP 2011 reforms and the share of potentially most production and trade distorting forms of support (based on output and variable input use – without input constraints) dropped below half of the PSE.



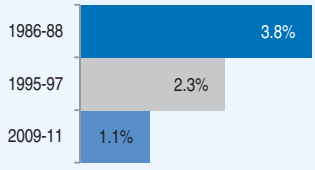
Ratio of producer price to border price (NPC)

In the long term the ratio of producer price to border price was substantially reduced. Overall, the prices paid to the farming sector were on average 1.6 times higher than world prices in 2009-11 as measured by the NPC. The highest NPCs are for poultry and eggs.

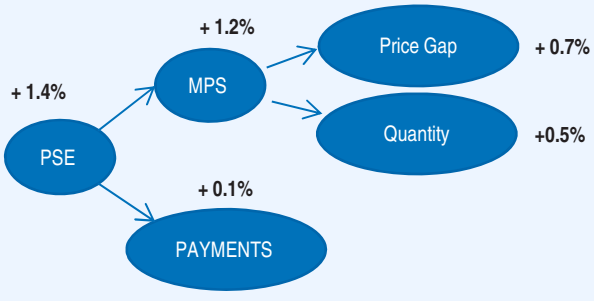


TSE as % of GDP

Total support was 1.1% of GDP in 2009-11 and the expenditure on general services represented around 8% of the Total support estimate.

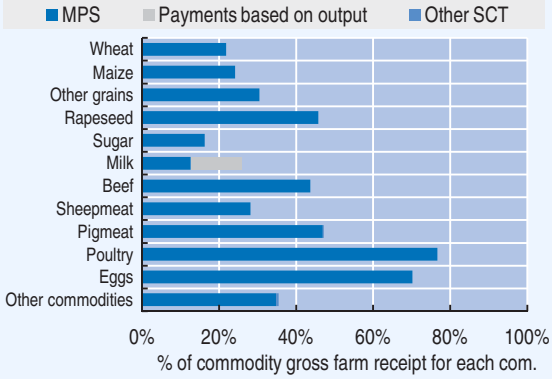


Decomposition of change in PSE, 2010 to 2011



The level of support increased slightly in 2011 due to increased market price support combining moderate increase of the price gap and quantity. The rise of world prices (in USD) was almost compensated by the strengthening of the Swiss Frank, which explains the slight increase of the price gap.

Transfer to specific commodities (SCT), 2009-11



The Single Commodity Transfers (SCT) represented 44% of the total PSE. The share of the SCT in the commodity gross farm receipt is lowest for sugar (16%) and grains at around 20% of commodity receipts, and above 70% for poultry and eggs.

Table 15.2. **Switzerland: Estimates of support to agriculture**

CHF million

	1986-88	1995-97	2009-11	2009	2010	2011p
Total value of production (at farm gate)	**9 482**	**8 236**	**6 735**	**6 940**	**6 651**	**6 613**
of which: *share of MPS commodities, percentage*	84	84	72	74	71	72
Total value of consumption (at farm gate)	**11 661**	**9 613**	**8 265**	**8 627**	**8 152**	**8 017**
Producer Support Estimate (PSE)	**8 335**	**7 240**	**5 728**	**6 256**	**5 427**	**5 500**
Support based on commodity output	6 918	4 796	2 543	3 097	2 231	2 300
Market Price Support	6 876	4 713	2 256	2 817	1 942	2 008
Payments based on output	42	83	287	280	289	292
Payments based on input use	561	411	201	207	198	199
Based on variable input use	454	309	84	90	81	81
with input constraints	0	180	14	15	14	14
Based on fixed capital formation	70	78	115	113	116	116
with input constraints	0	0	0	0	0	0
Based on on-farm services	36	24	2	4	1	1
with input constraints	0	0	0	0	0	0
Payments based on current A/An/R/I, production required[1]	612	1 203	1 306	1 289	1 311	1 317
Based on Receipts / Income	15	0	0	0	0	0
Based on Area planted / Animal numbers	597	1 203	1 306	1 289	1 311	1 317
with input constraints	340	1 050	1 294	1 277	1 300	1 306
Payments based on non-current A/An/R/I, production required	28	569	100	98	101	101
Payments based on non-current A/An/R/I, production not required	0	0	1 218	1 226	1 221	1 208
With variable payment rates	0	0	0	0	0	0
with commodity exceptions	0	0	0	0	0	0
With fixed payment rates	0	0	1 218	1 226	1 221	1 208
with commodity exceptions	0	0	0	0	0	0
Payments based on non-commodity criteria	0	61	171	162	175	175
Based on long-term resource retirement	0	0	0	0	0	0
Based on a specific non-commodity output	0	61	171	162	175	175
Based on other non-commodity criteria	0	0	0	0	0	0
Miscellaneous payments	216	200	189	178	188	200
Percentage PSE	**76**	**67**	**56**	**60**	**54**	**54**
Producer NPC	**4.57**	**2.84**	**1.57**	**1.80**	**1.46**	**1.46**
Producer NAC	**4.20**	**3.07**	**2.29**	**2.52**	**2.15**	**2.19**
General Services Support Estimate (GSSE)	**688**	**591**	**486**	**481**	**489**	**488**
Research and development	135	126	100	98	101	102
Agricultural schools	38	38	21	20	21	21
Inspection services	14	15	11	11	11	11
Infrastructure	137	84	84	83	85	83
Marketing and promotion	45	45	55	55	56	55
Public stockholding	103	83	40	39	40	40
Miscellaneous	216	200	175	175	175	175
GSSE as a share of TSE (%)	**6.8**	**6.7**	**7.8**	**7.1**	**8.3**	**8.1**
Consumer Support Estimate (CSE)	**-7 609**	**-4 910**	**-2 848**	**-3 680**	**-2 496**	**-2 366**
Transfers to producers from consumers	-7 097	-5 047	-2 218	-2 897	-1 882	-1 875
Other transfers from consumers	-1 975	-1 244	-689	-856	-685	-526
Transfers to consumers from taxpayers	1 089	1 052	11	25	3	6
Excess feed cost	374	328	48	48	68	28
Percentage CSE	**-72**	**-57**	**-34**	**-43**	**-31**	**-30**
Consumer NPC	**4.52**	**2.89**	**1.55**	**1.77**	**1.46**	**1.43**
Consumer NAC	**3.57**	**2.35**	**1.54**	**1.75**	**1.44**	**1.42**
Total Support Estimate (TSE)	**10 113**	**8 883**	**6 225**	**6 762**	**5 919**	**5 994**
Transfers from consumers	9 072	6 291	2 907	3 753	2 567	2 401
Transfers from taxpayers	3 016	3 836	4 007	3 865	4 037	4 120
Budget revenues	-1 975	-1 244	-689	-856	-685	-526
Percentage TSE (expressed as share of GDP)	**3.77**	**2.35**	**1.13**	**1.26**	**1.08**	**1.06**
GDP deflator 1986-1988=100	**100**	**125**	**141**	**141**	**141**	**142**

Note: p: provisional. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
MPS commodities for Switzerland are: wheat, maize, other grains, oilseeds, sugar, milk, beef and veal, sheepmeat, pigmeat, poultry and eggs. Market Price Support is net of producer levies and Excess Feed Cost.
1. A (area planted), An (animal numbers), R (receipts), I (income).
Source: OECD, *PSE/CSE Database*, 2012.

StatLink http://dx.doi.org/10.1787/888932654562

Description of policy developments

Main policy instruments

The period 2010-11 saw the continuation of the implementation of policy reforms decided under the *Agricultural policy reform 2011* (AP 2011) which started in 2008. The key feature of AP 2011 is a further reduction of 30% in budgetary expenditures for market price support (2008-11 in comparison with 2004-07). The outlays were transferred to direct payments for roughage consuming cattle, to compensate for difficult production conditions, to enhance sustainable use of natural resources and animal welfare. All export subsidies for primary agricultural products were eliminated by 1 January 2010, while those for some processed agricultural products were maintained. All state guarantees for prices and sales had already been abolished in 1999. For feed grains and animal feed, imports remain subject to variable custom duties based on threshold prices. Despite some gradual reductions, import measures consist of a combination of low in-quota tariffs and high out-of quota tariffs within a system of tariff rate quotas (TRQs) for most products. The resulting Market Price Support is around 40% of the estimated support to agriculture.

There are two main categories of direct payments. *General direct payments* are mainly granted in the form of payments per hectare of farmland and payments per cattle head. They also include payments to farmers operating in difficult conditions. *Ecological direct payments* are mainly granted in the form of area and headage payments to farmers who voluntarily apply stricter farming practices than those required by public regulations and the ecological proof of performance (*Prestations écologiques requises – PER*) which is compulsory to both general and ecological direct payments (cross-compliance). A relatively important share of the ecological direct payments is provided in the form of payments to stimulate voluntary adoption of practices to improve animal welfare. Overall, the share of direct payments in total PSE is gradually increasing and represented 60% of the support in 2009-11.

Domestic policy developments in 2011-12

The **milk quota** system was abolished for all dairy farmers as of 1 May 2009 following a transition period from 1 May 2006 to 30 April 2009. Since 1 May 2009, all dairy farmers are obliged to conclude milk delivery contracts with their milk purchasers. The obligation remains in force until 30 April 2015; exempted are those farmers who sell their milk directly to final consumers and farmers who produce cheeses and other dairy products on farm. A **temporary levy** on milk producers (CHF 0.01/kg of milk delivered to dairies, from 1st March to 30 April 2010) was introduced to finance the disposal of surplus butter stocks. The levy is based on a private-law decision by the inter-branch milk organisation (*Interprofession Lait* – IPLait). A regulation of the Federal Council extended the collection of the levy to producers who are not members of the IPLait. Due to border measures the price paid to milk producers remains on average 42% above the world market prices (producer NPC) in 2009-11.

Price support expenditures for dairy products consist from 2010 only for the allowance for milk transformed into cheese and the additional allowance when milk was produced without silage feed. These payments reached CHF 289 million (USD 277 million) in 2010 and CHF 292 million (USD 329 million) in 2011.

The structure of the programmes and the eligibility conditions applied within the *General direct payments* and the *Ecological direct payments* have remained largely unchanged under the AP 2011

(implemented from 2008). Also the level of these payments in 2011 remained at the 2010 level. Almost 80% of the total payments is granted under *General direct payments*, which increased by 0.5% in 2010 and declined by 0.7% in 2011, mainly due to a reduction of general area and headage payments. On the other side the payments to animals raised under difficult conditions increased by 1% in 2011. *Ecological Direct Payments* increased by 5.5% in 2010 and 2.6% in 2011, mainly reflecting the increasing funding of regional programmes of *Sustainable use of natural resources*.

Trade policy developments in 2011-12

Agro-food imports to Switzerland are regulated either by single tariffs or, for a certain number of products, by combination of relatively low in-quota tariffs and high out-of quota **import tariffs** within a system of **Tariff Rate Quotas** (TRQ). These cover a number of basic agricultural and food products, in particular, meat, milk products, potatoes, fruits, vegetables, bread cereals and wine. Since 1999, allocated TRQ volumes have been transferable from one importer to another. The auctioning system has been used to allocate some of the TRQs. The Special Safeguard Clause was not invoked during 2010-11.

All **export subsidies** for basic agricultural products were phased-out at the end of 2009. Nevertheless, Switzerland compensates the price handicap of exported processed products due to higher prices of incorporated domestic basic agricultural products (such as milk products, wheat flour or eggs) through a system of ***import duties and price compensation mechanism for processed agricultural products*** according to the products incorporated. Export refunds under this scheme have been phased out for eggs in 2012.

In November 2008, Switzerland and EU launched negotiations on full trade liberalisation in the agro-food sector. So far, three comprehensive rounds of negotiations have taken place. The negotiations have however slowed down due among other things to open institutional issues. As a member of EFTA, Switzerland participates in ongoing free trade negotiations between EFTA and, respectively, ***India, Indonesia,Vietnam,*** the customs union ***Russia/Belarus/Kazakhstan, and Bosnia-Herzegovina***. Started negotiations with ***Algeria*** and ***Thailand*** are on hold for the moment. Negotiations with ***Hong Kong*** and ***Montenegro*** have been completed. On a bilateral basis, Switzerland started free trade negotiations with ***China***. The mentioned Free Trade Agreements and the negotiations include all processed agricultural products and a range of basic agricultural products.

Preferential tariff rates are applied to imports from developing countries under a system of preferences scheme. In the context of the initiative of the Swiss government to grant zero tariffs on all products imported from least developed countries (LDC), since September 2009 all agricultural imports from LDC countries are duty and quota free.

PART II

Chapter 16

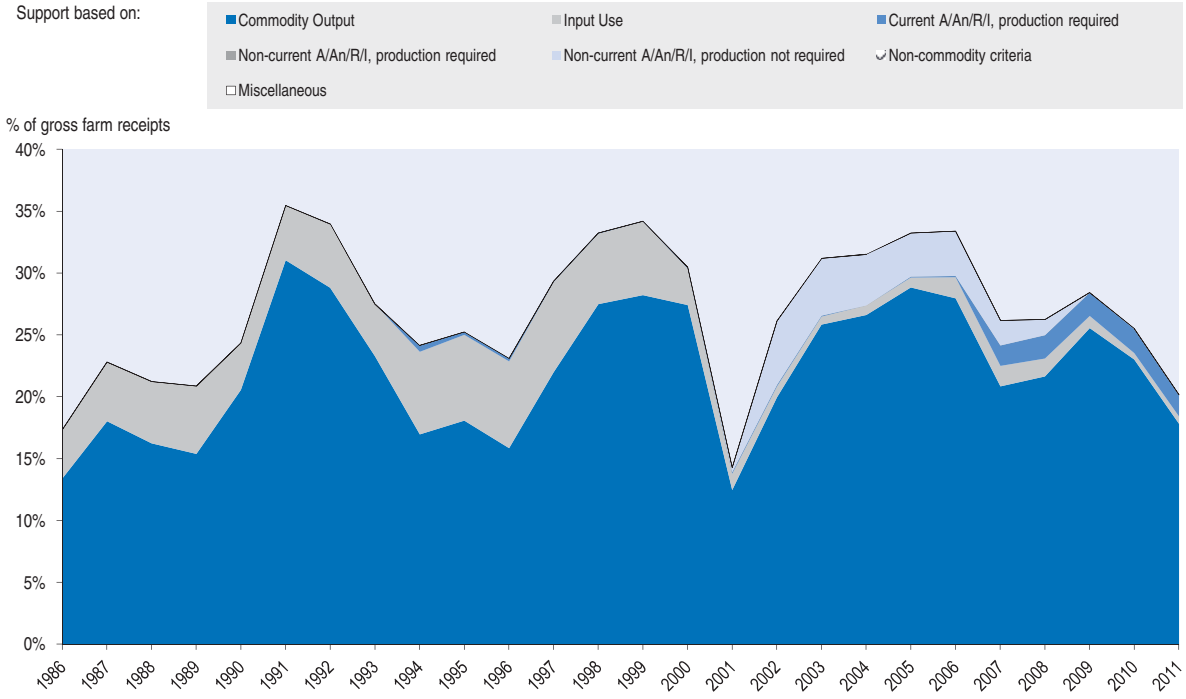
Turkey

The Turkey country chapter includes a brief evaluation of policy developments and related support to agriculture, contextual information on the framework in which agricultural policies are implemented and the main characteristics of the agricultural sector, an evaluation of support in 2010-11 and in the longer term perspective, and a brief description of the main policy developments in 2011-12.

Box 16.1. **Evaluation of policy developments**

- Overall, progress in policy reform since 1986-88 aimed at improving market orientation has been variable. Frequent *ad hoc* changes to policy settings have been made, within a macroeconomic context of high inflation. The share of producer support in gross farm receipts (% PSE) increased from 20% over 1986-88 to 25% over 2009-11, which is higher than the OECD average.
- Turkey is the world's 7th -largest agricultural producer, and notwithstanding the considerable progress achieved in recent years towards strengthening agriculture's legal and institutional framework, more stable and targeted policies are necessary if the sector is to realise its full potential.
- Government initiatives to prevent the fragmentation of agricultural land resulting from the inheritance laws and the advancement of structural reform are to be welcomed and should be broadened in scope in order to boost productivity growth and competitiveness.
- Efforts to strengthen the legal and institutional framework concerning food safety are going in the right direction and it is imperative that the momentum be maintained.

Figure 16.1. **Turkey: PSE level and composition by support categories, 1986-2011**



Source: OECD, *PSE/CSE Database*, 2012.

StatLink http://dx.doi.org/10.1787/888932653935

Contextual information

Turkey experienced very strong growth in 2011, driven by private consumption and investment. The sharp exchange rate depreciation in 2011 should help to gradually rebalance domestic and external demand and narrow the large current account deficit, which approached 10% of GDP in 2011. On the other hand, it may also put upward pressure on the already high-level of inflation. The level of unemployment is also relatively high. Turkey is largely self-sufficient in foodstuffs. Agricultural production, particularly crop production, has grown rapidly over the past two decades. Notwithstanding various structural bottlenecks, such as the predominance of small-sized and subsistence/semi-subsistence farms, and the high rates of illiteracy rates among farmers, Turkey ranks, globally, as a significant agricultural exporter (the world's 7th largest agricultural producer). Turkey's main trading partners are the European Union, the United States and the Middle East.

Table 16.1. **Turkey: Contextual indicators, 1995, 2010***

	1995	2010*
Economic context		
GDP (USD billion)	228	779
Population (million)	62	74
Land area (thousand km^2)	770	770
Population density (habitants/km^2)	75	93
GDP per capita, PPP (USD)	7 133	15 666
Trade as % of GDP	12.6	20.3
Agriculture in the economy		
Agriculture in GDP (%)	11.9	9.4
Agriculture share in employment (%)	44.1	25.1
Agro-food exports (% of total exports)	19.9	10.4
Agro-food imports (% of total imports)	9.9	5.3
Characteristics of the agricultural sector		
Agro-food trade balance (USD million)	790	2 105
Crop in total agricultural production (%)	68	74
Livestock in total agricultural production (%)	32	26
Agricultural area (AA) (thousand ha)	39 493	38 911
Share of arable land in AA (%)	62	55
Share of irrigated land in AA (%)	8	9
Share of agriculture in water consumption (%)	75	82
Nitrogen Balance, Kg/ha	33	31

* or latest available year.

Source: OECD, Statistical Databases, World Development Indicators and national data.

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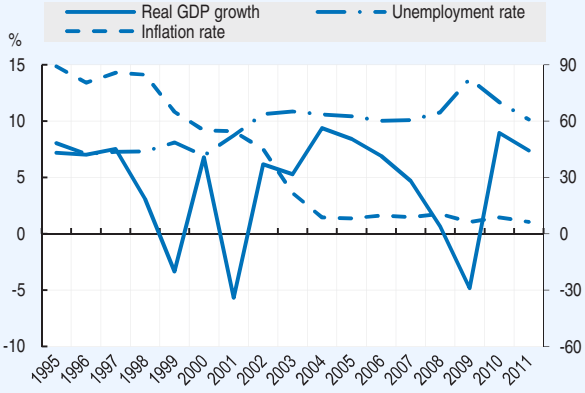
Figure 16.2. **Turkey: Main macroeconomic indicators, 1995-2011**



Source: OECD, Statistical Databases.

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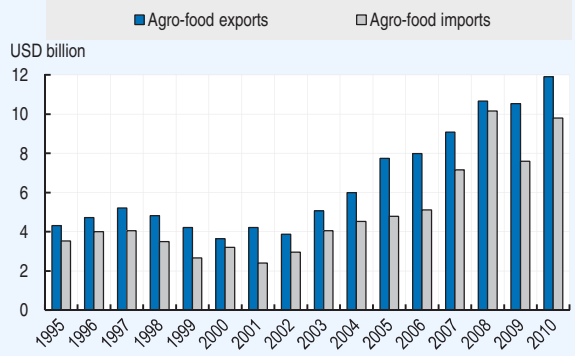
Figure 16.3. **Turkey: Agro-food trade, 1995-2010**



Source: International Trade by Commodity Statistics (ITCS) Database.

StatLink http://dx.doi.org/10.1787/888932653973

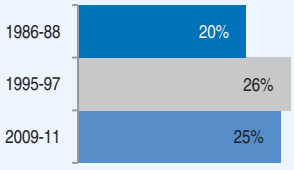
Note: Detailed definitions of contextual indicators and their sources are provided in the Annex II.A1.

Development of support to agriculture

Turkey has implemented a series of ambitious reforms since the late 1990s. However, the level of support made available varies from year to year and remains higher than the average for the OECD area, and the most distorting forms of support prevail. Decoupled direct payments were abolished in 2009, while payments based on commodity output have increased since then.

PSE as % of receipts (%PSE)

Support to producers (% PSE) decreased by six percentage points to 20% in 2011, compared to 2010. It increased from 20% in 1986-88 to 25% in 2009-11, which is higher than the OECD average.

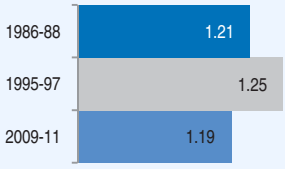


Potentially most distorting support as % of PSE

While the most production- and trade-distorting policies (based on commodity output and variable input use – without constraints) accounted for 99% of producer support in 1986-88, in 2009-11 it was 91%. Reductions of the most distorting forms of support have been offset by increases in the Direct Income Support payment (although this was phased out in 2009). In 2011, payments based on output increased.

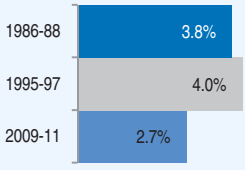
Ratio of producer price to border price (NPC)

Prices received by farmers in 2009-11 were about 19% higher than those received on the world market. They were 21% higher during 1986-88.

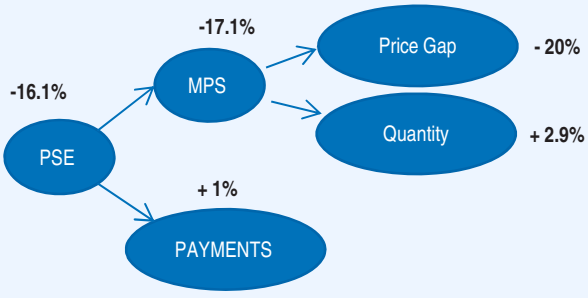


TSE as % of GDP

Support for general services provided to agriculture was around 7% in 2009-11. The share of total support to agriculture in GDP in 2009-11 was 2.7%, one percentage point lower than that of the 1986-88 period.

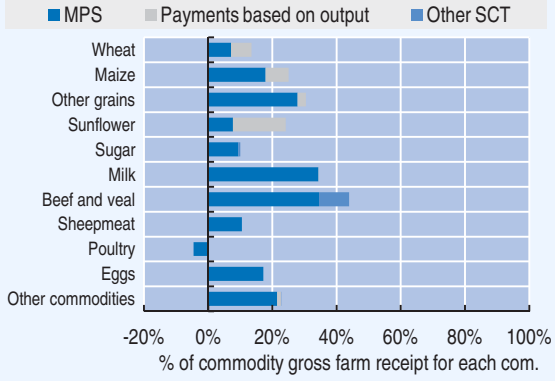


Decomposition of change in PSE, 2010 to 2011



The level of support decreased in 2011 due to the narrowing of the gap between domestic and border prices (MPS).

Transfer to specific commodities (SCT), 2009-11



The share of single commodity transfers increased from 78% of producer support in 1986-88 to 92% in 2009-11. In terms of the share on commodity farm receipts the SCT was the highest for beef (44%) and milk (34%).

Table 16.2. **Turkey: Estimates of support to agriculture**

New Turkish Lira,TRY million

	1986-88	1995-97	2009-11	2009	2010	2011p
Total value of production (at farm gate)	**18**	**2 440**	**109 693**	**88 429**	**116 707**	**123 942**
of which: *share of MPS commodities, percentage*	56	75	61	65	59	61
Total value of consumption (at farm gate)	**15**	**2 227**	**94 153**	**76 541**	**101 991**	**103 926**
Producer Support Estimate (PSE)	**4**	**707**	**27 838**	**26 335**	**31 097**	**26 081**
Support based on commodity output	3	514	24 923	23 674	28 049	23 047
Market Price Support	3	505	22 901	22 134	25 938	20 632
Payments based on output	0	10	2 022	1 540	2 110	2 415
Payments based on input use	1	189	771	910	633	769
Based on variable input use	1	182	462	452	369	566
with input constraints	0	0	0	0	0	0
Based on fixed capital formation	0	6	279	413	243	182
with input constraints	0	0	0	0	0	0
Based on on-farm services	0	1	30	45	22	22
with input constraints	0	0	0	0	0	0
Payments based on current A/An/R/I, production required[1]	0	4	2 143	1 751	2 414	2 263
Based on Receipts / Income	0	0	132	65	99	233
Based on Area planted / Animal numbers	0	4	2 011	1 687	2 315	2 030
with input constraints	0	0	10	4	10	16
Payments based on non-current A/An/R/I, production required	0	0	0	0	0	0
Payments based on non-current A/An/R/I, production not required	0	0	1	1	1	1
With variable payment rates	0	0	0	0	0	0
with commodity exceptions	0	0	0	0	0	0
With fixed payment rates	0	0	1	1	1	1
with commodity exceptions	0	0	0	0	0	0
Payments based on non-commodity criteria	0	0	0	0	0	0
Based on long-term resource retirement	0	0	0	0	0	0
Based on a specific non-commodity output	0	0	0	0	0	0
Based on other non-commodity criteria	0	0	0	0	0	0
Miscellaneous payments	0	0	0	0	0	0
Percentage PSE	**20**	**26**	**25**	**28**	**26**	**20**
Producer NPC	**1.21**	**1.25**	**1.19**	**1.26**	**1.21**	**1.10**
Producer NAC	**1.26**	**1.35**	**1.33**	**1.40**	**1.34**	**1.25**
General Services Support Estimate (GSSE)	**0**	**222**	**2 088**	**2 318**	**1 557**	**2 388**
Research and development	0	4	36	44	32	32
Agricultural schools	0	0	0	0	0	0
Inspection services	0	7	71	66	72	76
Infrastructure	0	1	0	0	0	0
Marketing and promotion	0	202	1 980	2 208	1 453	2 280
Public stockholding	0	0	0	0	0	0
Miscellaneous	0	6	0	0	0	0
GSSE as a share of TSE (%)	**7.2**	**23.7**	**7.1**	**8.1**	**4.8**	**8.4**
Consumer Support Estimate (CSE)	**-3**	**-492**	**-15 121**	**-15 535**	**-19 591**	**-10 236**
Transfers to producers from consumers	-3	-493	-13 384	-15 826	-16 019	-8 308
Other transfers from consumers	0	-28	-2 054	-124	-4 013	-2 024
Transfers to consumers from taxpayers	0	0	0	0	0	0
Excess feed cost	0	29	317	415	441	96
Percentage CSE	**-19**	**-21**	**-16**	**-20**	**-19**	**-10**
Consumer NPC	**1.26**	**1.29**	**1.21**	**1.26**	**1.24**	**1.11**
Consumer NAC	**1.24**	**1.27**	**1.20**	**1.25**	**1.24**	**1.11**
Total Support Estimate (TSE)	**4**	**929**	**29 925**	**28 653**	**32 654**	**28 469**
Transfers from consumers	3	521	15 438	15 950	20 032	10 332
Transfers from taxpayers	1	436	16 541	12 827	16 635	20 162
Budget revenues	0	-28	-2 054	-124	-4 013	-2 024
Percentage TSE (expressed as share of GDP)	**3.71**	**4.01**	**2.72**	**3.01**	**2.96**	**2.18**
GDP deflator 1986-1988=100	**100**	**13 840**	**414 817**	**384 965**	**409 215**	**450 269**

Note: p: provisional. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
MPS commodities for Turkey are: wheat, maize, other grains, oilseeds, sugar, potatoes, tomatoes, grape, apple, cotton, tobacco, milk, beef and veal, sheepmeat, poultry and eggs. Market Price Support is net of producer levies and Excess Feed Cost.
1. A (area planted), An (animal numbers), R (receipts), I (income).
Source: OECD, *PSE/CSE Database*, 2012.

StatLink http://dx.doi.org/10.1787/888932654581

Description of policy developments

Main policy instruments

The strategic objectives of agricultural policies are to ensure sustainable food security and safety and to form an agricultural structure that is harmonised with that of the European Union. The 2010-14 Strategic Plan defines five strategic areas in the agricultural sector; *i)* agricultural production and supply security; *ii)* food safety; *iii)* phytosanitary and animal health; *iv)* rural development; and *v)* institutional capacity building.

The tools of agricultural support to be used for achieving the strategic objectives include direct payments, deficiency payments, compensatory payments, livestock support (for fodder crops, artificial insemination, milk premiums, risk-free livestock regions, bee-keeping, fisheries), support for crop insurance, rural development support and environmental set-aside. In addition, funds will be allocated to selected credit supports and to research and development.

Import tariffs – complemented by purchasing prices fixed for cereals, sugar and tobacco – provide support for domestic production. Export subsidies are applied to a number of products, including fresh and processed fruit and vegetables, derived food products, poultry meat and eggs. Production quotas at processing plant level are applied for sugar beet.

Deficiency payments ("premium payments") are provided for the products that are in short domestic supply. Producers of oilseeds, olive oil, cotton, cereals and tea (since 2005) and pulses (in 2009) benefit from such payments, while tobacco and hazelnut farmers receive payments to compensate for their income losses due to shifting to alternative crops. Payments are also provided for fodder crops, organic farming, certified seeds, gasoline and fertiliser use implemented on area basis. Most farmers are exempt from income tax.

Input subsidies are provided mainly in the form of interest concessions and payments to improve animal breeds and farm production capacity (*e.g.* field levelling, drainage, soil improvement and protection, and land consolidation). Financial aid is granted to assist in the restructuring and transformation of the Agricultural Sales Co-operatives (ASC) and their unions (ASCU) into independent, financially autonomous and self-managed co-operatives.

A number of regulations control water and soil pollution, and provide protection to wetlands. The government plays a major role in providing infrastructure investment, especially for irrigation. Harmonisation of food safety, veterinary services and phytosanitary legislation with the EU *acquis* and international standards are proceeding within the scope of the opening criteria of Chapter 12, which is the negotiation chapter on Food Safety, Veterinary and Phytosanitary in EU accession process.

For a detailed analysis of policy developments in Turkey, see OECD (2011), *Evaluation of Policy Reforms in Turkey*.

Domestic policy developments in 2011-12

The system of **direct income support** (DIS) was phased out in 2009. Nevertheless, each farmer registered under the National Farmer Registration System (NFRS) received a so-called "diesel payment" of TRY 32.5 (USD 19.4) per hectare and a "fertiliser payment" of TRY 42.5 (USD 25.4) per hectare, on average, in 2011. The share of animal husbandry supports, which was 7% in total support budget in 2004, as defined by the Ministry of Food, Agriculture and Livestock, increased to 24% in 2011 and is estimated to further increase to 26% in 2012.

Implementation of **transition payment** programmes (aimed at helping farmers to switch from tobacco and hazelnut production to other commodities) continued. As from 2005, there has been a growing interest in producing **energy crops** in Turkey. The government supports production of canola through a deficiency payment scheme.

An **insurance support scheme** is in operation since 2006. The scheme is open to all producers and covers crops, orchards on fields, greenhouses, cattle, poultry and apiculture. The government reimburses 50% of the premium costs. As of October 2010, 575 000 insurances related to the risks under assurance especially on subjects such as hail, frost, and animal life were issued. It is estimated that by the end of 2011 630 000 insurances were issues and TRY 240 million (USD 144 million) has been paid.

Farmers benefit from **loans** offered at concessional rates by the *Ziraat Bank* (TCZB) and *Agricultural Credit Co-operatives* (ACC), with a subsidy rate that varies between 50% and 100% of the TCZB's current agricultural credit rate. The difference between the current rates and the rates applied to farmers ("duty loss") is paid by the Treasury to the TCZB and ACC. Agricultural enterprises and farmers are entitled to interest concessions.

With regard to **agricultural state economic enterprises**, Turkey's 9thDevelopment Plan (2007-13) foresees the absolute withdrawal of the state from the activity areas of sugar, tobacco and tea processing by the end of 2013. Although the privatisation process of the public sugar factories is in progress, legislative work, to complete the institutional arrangement in the sector and to make quota management and control effective, is yet to be concluded.

Within the 2009 **investment** framework, tax reductions, incentives for employers' social security premium contributions, free land allocation, VAT exemption, customs duty exemption and interest support are being provided for selected sector projects on a regional basis, including agricultural projects. Sectoral incentives for the less-developed regions are higher compared to the relatively developed ones. Works on the establishment of land parcel identification system, which is the main instrument of Integrated Management and Control System for agricultural supports, were started within the framework of 2011 Annual Investment Programme of the Government.

On **rural development**, implementation of the "Support of Rural Development Investments" programme, which aims to support community-based activities in small-scale agricultural processing, marketing, machinery equipment and other off-farm businesses as well as the rehabilitation of public infrastructure related to the provision of public services in remote rural areas, continues.

Several projects have been implemented to harmonise domestic **food safety and quality** standards with those of the European Union. The *Veterinary Services, Phytosanitary, Food and Feed Law* was enacted in 2010 to bring the Turkish legislation into line with that of the EU. In addition to the **bovine identification system**, established in 2004 for the first time in Turkey, the identification system for **sheep** and **goats** was initiated in 2009. The second phase of the Control of Rabies Project and of the Foot and Mouth Disease Control Project were launched in 2011. The Border Inspection Posts Project and Control of Rabies Project, which was set up in 2007 with Turkish-EU Financial Co-operation, was completed at the end of 2010.

A law related to the establishment and duties of the Ministry of Food, Agriculture and Livestock, aimed at increasing the **institutional capacity** of the public sector in the process of structural transformation, was put into force in June 201. Under this law, the practical arrangements for providing services (particularly those concerning plant health, veterinary and food safety) closely follow EU legislation. Furthermore, agricultural R&D and extension services are

considered in an integrated way and policy development capacity for soil conservation and land use is established. The rural Development Programme and a wider set of investment support activities are extended.

Trade policy developments in 2011-12

The average rate of **customs duties** for agricultural products increased from 50% in 2010 to 59.5% in 2011. Customs duties on live cattle and live sheep, as well as on meat from bovine animals (fresh/chilled/frozen carcasses) decreased.

Export subsidies for agricultural products were announced in the Official Gazette in 2011 and were applied on exports during the 2011 calendar year. In 2011, 16 commodity groups, out of the 44 groups eligible under Turkey's WTO commitments, received export subsidies. The subsidies are provided to exporters in the form of deductions to their payments to public corporations such as taxes, or the costs of social insurance premiums, telecommunications or energy. Export subsidies are set at 10-20% of the export values, on 15% and 100% of exports of eligible products.

PART II

Chapter 17

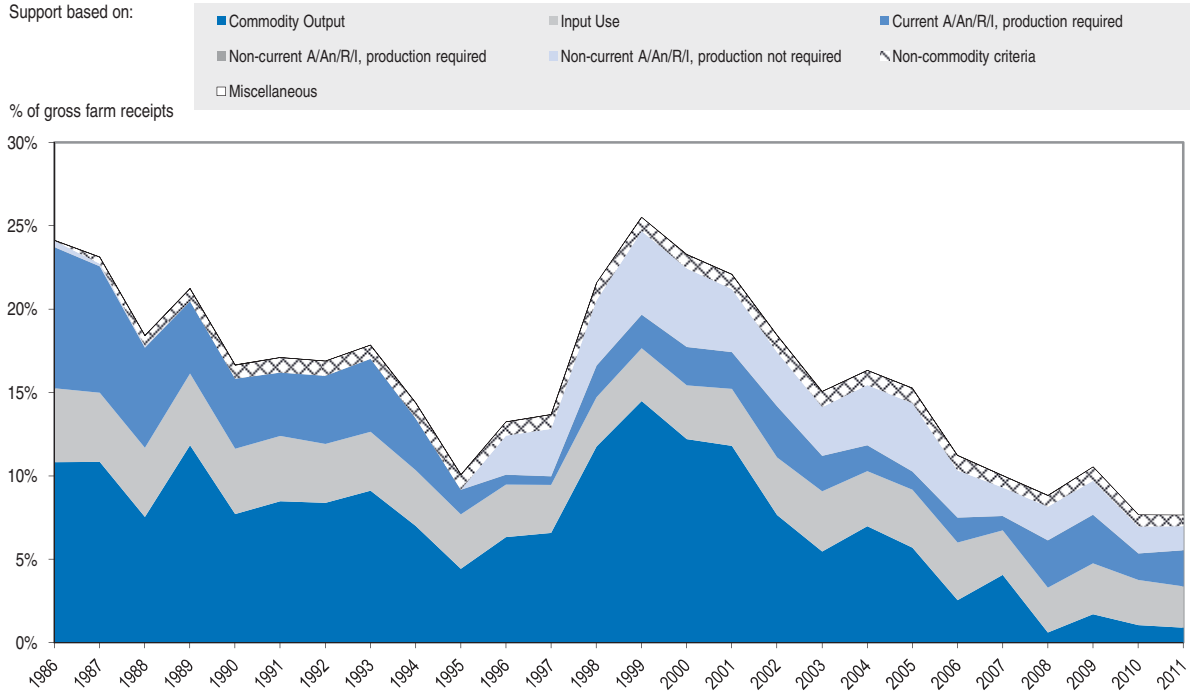
United States

The United States country chapter includes a brief evaluation of policy developments and related support to agriculture, contextual information on the framework in which agricultural policies are implemented and the main characteristics of the agricultural sector, an evaluation of support in 2010-11 and in the longer term perspective, and a brief description of the main policy developments in 2011-12.

Box 17.1. **Evaluation of policy developments**

- Levels of producer support and border protection have substantially decreased since 1986-88 and the level of producer support is now the fourth-lowest in the OECD area. However, since 2002 the decline has been primarily due to higher world commodity prices, as several of the support policies in place are linked to changes in prices.
- The termination of the various tax concessions and tariffs on biofuels moves US policy in a more market-oriented direction, but further market-based approaches will facilitate sustainable renewable energy development.
- Overall, the Food, Conservation and Energy Act of 2008, which encapsulates the basic legislation governing farm policy for the 2008-12 period, shows that little additional progress has been made towards achieving market orientation. Preparations of the next Farm Act should also seize the opportunity to enhance the reform process by increasing the cost-effectiveness of commodity programmes.

Figure 17.1. **United States: PSE level and composition by support categories, 1986-2011**



Source: OECD, *PSE/CSE Database*, 2012.

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Contextual information

The United States is the world's biggest economy, with a high GDP per capita and low levels of inflation and unemployment (although the latter has increased in the most recent years). The country is currently recovering from a severe recession and restoring fiscal sustainability is a key macroeconomic policy challenges. The United States is one of the most important producers of agricultural commodities in the world, and, in addition to having a very large domestic market, it is the world's largest exporter of agricultural products. US agricultural policies therefore may exert a strong influence on world agricultural markets. Agriculture is dominated by grains, oilseeds, cattle, dairy, poultry, and fruits and vegetables. The primary sector, however, plays only a minor (and declining) role in the US economy as a whole.

Table 17.1. **United States: Contextual indicators, 1995, 2010***

	1995	2010*
Economic context		
GDP (USD billion)	7 338	15 201
Population (million)	263	313
Land area (thousand km^2)	9 159	9 147
Population density (habitants/km^2)	28	32
GDP per capita, PPP (USD)	27 606	46 588
Trade as % of GDP	9.2	11.2
Agriculture in the economy		
Agriculture in GDP (%)	1.6	1.0
Agriculture share in employment (%)	2.9	1.6
Agro-food exports (% of total exports)	10.9	9.5
Agro-food imports (% of total imports)	4.4	4.5
Characteristics of the agricultural sector		
Agro-food trade balance (USD million)	29 671	32 381
Crop in total agricultural production (%)	53	59
Livestock in total agricultural production (%)	47	41
Agricultural area (AA) (thousand ha)	420 139	403 451
Share of arable land in AA (%)	43	40
Share of irrigated land in AA (%)	5	5
Share of agriculture in water consumption (%)	41	40
Nitrogen Balance, Kg/ha	37	28

* or latest available year.

Source: OECD, Statistical Databases, World Development Indicators and national data.

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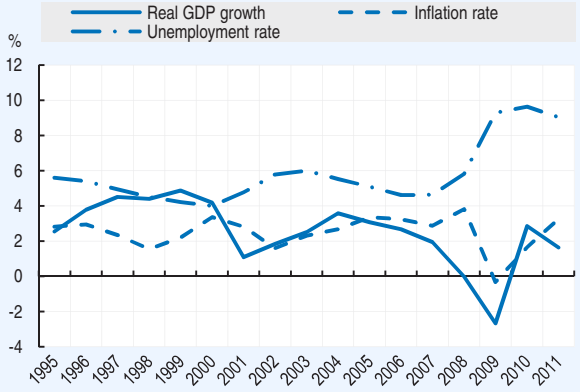
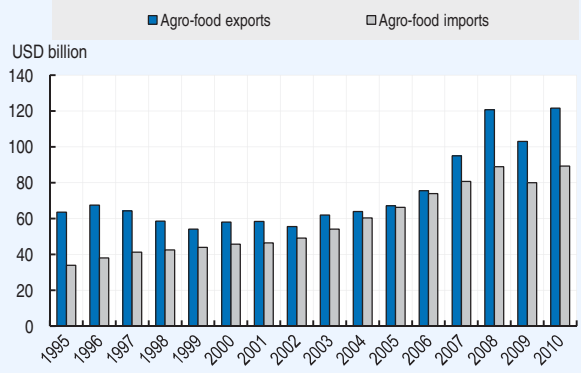
Figure 17.2. **United States: Main macroeconomic indicators, 1995-2011**



Source: OECD, Statistical Databases.

StatLink http://dx.doi.org/10.1787/888932654011

Figure 17.3. **United States: Agro-food trade, 1995-2010**



Source: International Trade by Commodity Statistics (ITCS) Database.

StatLink http://dx.doi.org/10.1787/888932654030

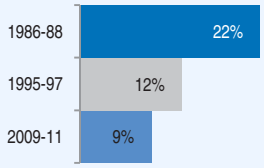
Note: Detailed definitions of contextual indicators and their sources are provided in the Annex II.A1.

Development of support to agriculture

Support to farmers in the United States is low, in comparison with other OECD countries. Over the 2009-11 period, producer support in the US was the forth-lowest in the OECD area, and less than half the OECD average. The reform process has been characterised by a shift towards the adoption of less production- and trade-distorting forms of support.

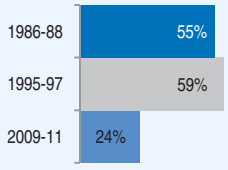
PSE as % of receipts (%PSE)

In 2011, support to producers (%PSE) remained unchanged as in 2010 at 8%. The %PSE fell from 22% in 1986-88 to 9% in 2009-11, which is less than half the OECD average.



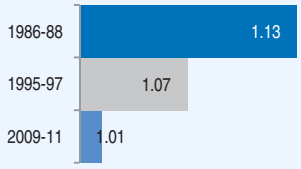
Potentially most distorting support as % of PSE

The share of the potentially most distorting types of policies (based on commodity output and variable input use – without input constraints) in the PSE decreased from 55% in 1986-88 to 24% in 2009-11



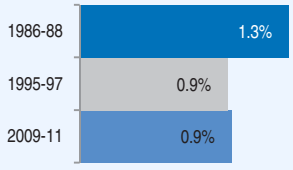
Ratio of producer price to border price (NPC)

Producer prices were 13% higher than world prices in 1986-88 and only 1% higher in 2009-11.

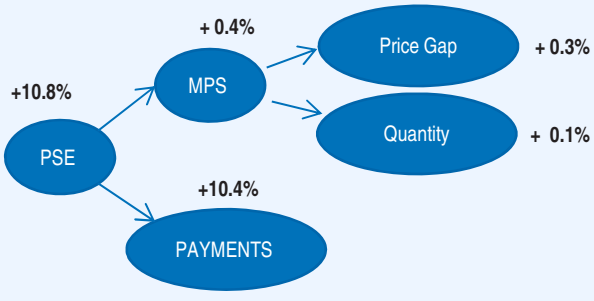


TSE as % of GDP

Total support to agriculture represents 0.9% of GDP in 2009-11. Support for general services provided to agriculture increased from 23% of total support in 1986-88 to 50% in 2009-11, mainly due to the increase in the Supplemental Nutrition Assistance Program (formerly Food Stamps) and reduction in the PSE.

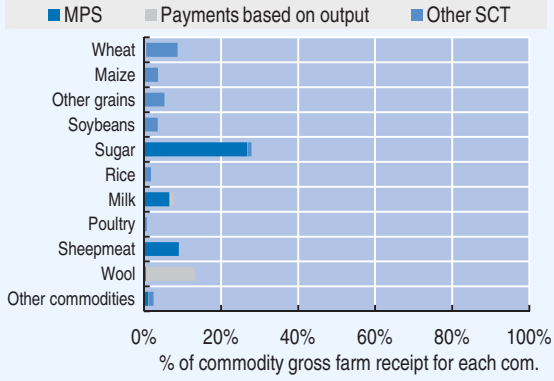


Decomposition of change in PSE, 2010 to 2011



The nominal level of support increased in 2011 due to the increase in payments, particularly for crop insurance.

Transfer to specific commodities (SCT), 2009-11



The share of single commodity transfers to producers decreased from 71% of PSE in 1986-88 to 29% in 2009-11. The highest share of SCT in farm receipts was for sugar.

Table 17.2. **United States: Estimates of support to agriculture**

USD million

	1986-88	1995-97	2009-11	2009	2010	2011p
Total value of production (at farm gate)	**143 469**	**200 325**	**330 560**	**284 502**	**334 918**	**372 261**
***of which:** share of MPS commodities, percentage*	72	70	74	71	75	76
Total value of consumption (at farm gate)	**132 032**	**176 428**	**280 473**	**240 124**	**282 346**	**318 951**
Producer Support Estimate (PSE)	**36 411**	**26 614**	**30 395**	**33 016**	**27 591**	**30 579**
Support based on commodity output	16 188	12 488	4 247	5 364	3 787	3 590
Market Price Support	13 077	12 337	3 843	4 568	3 423	3 538
Payments based on output	3 111	151	404	796	364	51
Payments based on input use	7 061	6 638	9 696	9 531	9 686	9 871
Based on variable input use	3 697	3 088	3 115	3 045	3 068	3 233
with input constraints	739	264	363	259	440	390
Based on fixed capital formation	1 233	553	1 622	1 555	1 657	1 656
with input constraints	1 233	536	1 564	1 472	1 605	1 613
Based on on-farm services	2 131	2 997	4 958	4 931	4 961	4 983
with input constraints	349	543	1 171	1 130	1 178	1 206
Payments based on current A/An/R/I, production required[1]	12 231	1 825	7 851	9 126	5 775	8 653
Based on Receipts / Income	912	721	1 019	1 352	791	912
Based on Area planted / Animal numbers	11 319	1 104	6 833	7 774	4 984	7 740
with input constraints	2 565	557	6 724	7 674	4 909	7 590
Payments based on non-current A/An/R/I, production required	0	0	0	0	0	0
Payments based on non-current A/An/R/I, production not required	338	3 824	5 971	6 381	5 735	5 798
With variable payment rates	0	0	74	205	17	0
with commodity exceptions	0	0	74	205	17	0
With fixed payment rates	338	3 824	5 897	6 176	5 718	5 798
with commodity exceptions	0	3 824	4 943	5 222	4 764	4 844
Payments based on non-commodity criteria	592	1 839	2 630	2 614	2 608	2 668
Based on long-term resource retirement	592	1 839	2 520	2 479	2 513	2 566
Based on a specific non-commodity output	0	0	0	0	0	0
Based on other non-commodity criteria	0	0	110	135	95	101
Miscellaneous payments	0	0	0	0	0	0
Percentage PSE	**22**	**12**	**9**	**11**	**8**	**8**
Producer NPC	**1.13**	**1.07**	**1.01**	**1.02**	**1.01**	**1.01**
Producer NAC	**1.28**	**1.14**	**1.09**	**1.12**	**1.08**	**1.08**
General Services Support Estimate (GSSE)	**13 682**	**25 678**	**67 324**	**56 651**	**69 846**	**75 476**
Research and development	1 131	1 479	2 287	2 245	2 293	2 324
Agricultural schools	0	0	0	1	0	0
Inspection services	384	570	1 049	1 004	1 065	1 079
Infrastructure	422	395	3 822	2 912	4 297	4 257
Marketing and promotion	10 645	21 715	57 999	48 318	60 015	65 664
Public stockholding	0	52	15	20	24	1
Miscellaneous	1 100	1 468	2 152	2 151	2 152	2 151
GSSE as a share of TSE (%)	**22.8**	**36.8**	**49.6**	**45.8**	**51.6**	**51.4**
Consumer Support Estimate (CSE)	**-3 794**	**4 452**	**32 372**	**28 590**	**32 794**	**35 732**
Transfers to producers from consumers	-12 746	-12 129	-3 793	-4 526	-3 384	-3 469
Other transfers from consumers	-1 432	-1 243	-1 388	-851	-1 872	-1 442
Transfers to consumers from taxpayers	10 089	17 816	37 553	33 967	38 050	40 643
Excess feed cost	294	8	0	0	0	0
Percentage CSE	**-3**	**3**	**13**	**14**	**13**	**13**
Consumer NPC	**1.12**	**1.08**	**1.02**	**1.02**	**1.02**	**1.02**
Consumer NAC	**1.03**	**0.97**	**0.88**	**0.88**	**0.88**	**0.89**
Total Support Estimate (TSE)	**60 182**	**70 108**	**135 273**	**123 634**	**135 486**	**146 698**
Transfers from consumers	14 177	13 372	5 181	5 377	5 255	4 911
Transfers from taxpayers	47 436	57 979	131 480	119 109	132 103	143 229
Budget revenues	-1 432	-1 243	-1 388	-851	-1 872	-1 442
Percentage TSE (expressed as share of GDP)	**1.28**	**0.90**	**0.92**	**0.88**	**0.93**	**0.97**
GDP deflator 1986-1988=100	**100**	**128**	**172**	**169**	**171**	**175**

Note: p: provisional. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
MPS commodities for the United States are: wheat, maize, other grains, rice, oilseeds, sugar, milk, beef and veal, sheepmeat, wool, pigmeat, poultry and eggs. Market Price Support is net of producer levies and Excess Feed Cost.
1. A (area planted), An (animal numbers), R (receipts), I (income).
Source: OECD, *PSE/CSE Database,* 2012.

StatLink http://dx.doi.org/10.1787/888932654600

Description of policy developments

Main policy instruments

The Food, Conservation and, Energy Act of 2008 (the 2008 Farm Act), provides the basic legislation governing farm policy for the period 2008-12. Discussions for preparing the next Farm Act are under way. The 2008 Farm Act largely maintains the farm commodity price and income structure of support in the 2002 Farm Act for programme crops (*i.e.* grains, oilseeds, rice and cotton), with certain modifications. It places continued emphasis on direct payments, counter-cyclical payments and marketing assistance loan programmes for the 2008-12 crop years, with adjustments to target prices and loan rates for certain commodities.

The main policy instruments for the crop sector are Direct Payments (DP), Counter-Cyclical Payments (CCP), Average Crop Revenue Election (ACRE), and support-price provisions operating through non-recourse marketing loans for cereals, rice, upland cotton, oilseeds, peanuts and pulses (small and large chickpeas, lentils and dry peas). DPs are based on pre-determined rates and historical production. CCPs are based on current prices and historical production. Neither requires any current production as a basis for payment eligibility. ACRE is based on planted acreage and moving-average benchmark revenues. Sugar is supported by a tariff-rate-quota (TRQ), together with provisions for non-recourse loans and marketing allotments. Milk and dairy products are supported by minimum prices with government purchases of butter, SMP and cheddar cheese, as well as by tariffs, TRQs and export subsidies. When prices fall below target levels, a payment is made per tonne of milk marketed below a per-farm production limit. There are marketing loans for wool, mohair and honey, and border measures (including TRQs) for beef and sheepmeat. Since the enactment of the 1985 Farm Act, eligibility of most federal commodity programme payments is subject to cross-compliance requirements.

Environmental programmes form an important and increasing part of agricultural policy, focusing on measures to convert highly erodible cropland to approved conservation uses (including long-term retirement), to re-convert farmland back into wetlands, and to encourage crop and livestock producers to adopt practices that reduce environmental problems. While land retirement remains a key strategy, increasingly the emphasis has shifted towards the environmental protection of agricultural lands that are in production (working lands). Ethanol production is mainly supported in the form of mandated fuel use, tax incentives, loan and grant programmes. Research and advice are increasingly focused on food safety and promoting sustainable farming practices. Payments and loans for natural disasters, support for public grazing land management and irrigation infrastructures, interest concessions and tax concessions are also provided. The 2008 Farm Act also mandates increased funding for most domestic food assistance programmes, particularly the former food stamps, now renamed the Supplemental Nutrition Assistance Program (SNAP). For a detailed analysis of the 2008 Farm Act see OECD (2011), *Evaluation of Agricultural Policy Reforms in the United States*.

The 2008 Farm Act will expire at the end of 2012. A number of formal proposals were presented by stakeholders and members of Congress in conjunction with the budget deliberations of the *Joint Select Committee on Deficit Reduction* in late 2011. However, since the Joint Committee was unable to reach bi-partisan consensus, Farm Act deliberations have returned to a more traditional legislative process centred on the agriculture committees. The timing of a new Farm Act remains uncertain, since budget deliberations still present challenges and stakeholder interests remain divided. The Congressional agriculture committees continue to work toward finding consensus on new legislation, but there remains the possibility of extending the current law if consensus cannot be reached.

Domestic policy

Many of the policy developments reported for 2011 reflect further implementation of 2008 Farm Act programmes, but there were a few new developments in the areas of crop insurance for organic crops and biofuel feedstocks. However, legislation to allow the implementation of several trade agreements was passed and several new food safety rules concerning imported food were introduced.

The 2008 Farm Bill authorised USD 15 million for payments to asparagus producers to partially compensate for revenue losses during the 2004 through 2007 crop years – under the *Asparagus Revenue Market Loss Assistance Payment (ALAP) Program*. The programme provided payments to producers of the 2007 crop year, based on the production levels of 2003. Half of the USD 15 million was disbursed for fresh market asparagus production, and the other half for processed market asparagus production. Payments were calculated by dividing the funds available for each marketing category (USD 7.5 million for each) by the total eligible quantity of crop production in 2003 for each marketing category submitted for payment. The payment rate for each marketing category could not exceed the actual rate of revenue loss, and there is a cap of USD 100 000 per producer, per marketing category (fresh and processed).

The *Risk Management Agency* (RMA) began to offer **crop insurance** for four organic crops during the 2011 production year – cotton, maize, soybeans and processing tomatoes. In conjunction with this, RMA released three reports that provide the framework for improvements to crop insurance programmes that are available to producers of certified organic crops. The RMA has contracted with external researchers to conduct three studies (dedicated energy crops, maize stover/crop residue and woody biomass) to determine the feasibility of creating insurance programmes for biofuel crops (feedstocks). The studies have indicated that few of the biofuel crops are being grown at a commercial capacity sufficient to sustain a crop insurance programme. RMA has recently implemented a crop insurance programme for camelina in Montana and North Dakota. A non-reinsured supplement product for maize stover was also recently approved for Iowa and Minnesota.

On **renewable energy**, several key biofuel incentives – including import duty for ethanol, tax credits for biodiesel, renewable diesel and ethanol – expired at the end of 2011. The Renewable Fuel Standard mandate, which requires that the nation's fuel supply contains a specified amount of blended biofuel, remains.

On **food safety**, two rules governing imported foods that were developed by the *Food and Drug Administration* (FDA) to implement the Food Safety Modernization Act, took effect in July 2011. The first rule strengthens FDA's ability to prevent potentially unsafe food from entering commerce. The products will be kept out of the marketplace for 30 days while the agency determines whether an enforcement action such as seizure, or injunction against distribution of the product in commerce, is necessary. Previously, the FDA's ability to detain food products applied only when the agency had credible evidence that a food product presented was contaminated or mislabelled in a way that presented a threat of serious adverse health consequences or death to humans or animals. The second rule requires FDA to be informed of the identity of any country to which an article of imported food, including food for animals, has been refused entry. This new requirement will provide the agency with more information about foods that are being imported, which can help FDA to make better decisions in managing the potential risks related to those imported foods. This new reporting requirement will be administered through the FDA's prior notice system for incoming shipments of imported food, which was established under the 2002 Public Health Security and Bioterrorism Preparedness and Response Act.

The *Food Safety and Inspection Service* (FSIS) has amended the federal regulations concerning the inspection of meat and poultry products to establish a new voluntary co-operative programme under which state-inspected establishments with 25 or fewer employees will be eligible to ship meat and poultry products in inter-state commerce. In participating states, state-inspected establishments selected to take part in this programme will be required to comply with all federal standards under the federal Meat Inspection Act and the Poultry Products Inspection Act. The FSIS has determined *non-O157 Shiga-toxin producing* Escherichia *Coli (STEC)* as being contaminants by the US food safety laws.

On **labelling**, the USDA's *BioPreferred Labeling Program* – authorised under the 2002 and 2008 Farm Acts – provides for voluntary product certification and labelling for qualifying bio-based products. The new label, "USDA Certified Biobased Product," was introduced in 2011 and clearly identifies bio-based products made from renewable resources and promotes the increased sale and use of these products in the commercial market and for consumers.

On **biotechnology**, The US Department of Agriculture's Animal and Plant Health Inspection Service (APHIS) granted non-regulated status for alfalfa that has been genetically engineered to be resistant to the herbicide commercially known as Roundup.

Trade policy

On **trade agreements**, legislation was signed in October authorising the implementation of the US-***Korea***, US-***Colombia***, and US-***Panama*** trade agreements, the Generalised System of Preferences and the Andean Trade Preference Act. The legislation also re-authorised the *Trade Adjustment Assistance (TAA) for Farmers Program*, although no funds were appropriated. The United States is also in negotiations of a regional Asia-Pacific trade agreement, known as the *Trans-Pacific Partnership (TPP)* agreement, with the objective of enhancing trade and investment among the partners, promote innovation, economic growth and development, and support the creation and retention of jobs.

ANNEX II.A1

Sources and definitions of contextual indicators

Table X.1. Contextual indicators

Gross Domestic Product – GDP (USD million): OECD National Accounts, Gross domestic product, national currency, current prices. Spot exchange rates used for conversion in USD.

Population (million): OECD.stat, Demography and population, Population statistics, Population and vital statistics, series on Total population mid-year estimates. For EU member countries, data come from EUROSTAT, population/demography/demography national data/population.

Land area (thousands km^2): FAO, Land use Database, Land area (000 ha) recalculated to thousands km^2. Land area excludes water areas.

Population density (habitants/ km^2): U.N. *World population prospects, 2010 Revision*, Population density by major area, region and country, 1950-2010 (persons per square km). For EU members calculated from EUROSTAT population and area.

GDP per capita, PPP (USD): OECD.stat, National accounts, Main aggregates, Gross domestic product (output approach), per head, USD, current prices, current PPPs. EU countries, EUROSTAT, GDP and main components – Current prices.

Trade as % of GDP: Trade data from *OECD ITCS Database*. Customs data; Average trade: (exports+imports)/2. EU does not account for intra-EU trade.

Agriculture share in GDP (%): OECD.stat, Country statistical profiles 2011; Value added in agriculture, hunting, forestry and fishing as % total value added. EU countries: EUROSTAT, Gross value added – Agriculture and fishing – % of all branches (NACE).

Agriculture share in employment(%): OECD.stat, Employment by activities and status (ALFS), share of Agriculture, hunting, forestry (ISIC rev.3, A), Employment ('000) (which does not include fishing) in Employment in all activities (ISIC rev.3, A-X) ('000). EUROSTAT for the European Union corresponds to the share of employed persons aged 15-64, in agriculture, hunting and forestry in total NACE activities.

Agro-food exports in total exports (%): Comtrade SAS extraction (March 2012) from *OECD ITCS Database*. Extraction does not include fish and fish products.

Agro-food imports in total imports (%): Comtrade SAS extraction (March 2012) from *OECD ITCS Database*. Extraction does not include fish and fish products.

Agro-Databasefood trade balance (USD million): Comtrade SAS extraction (March 2012) from *OECD ITCS database*. Extraction does not include fish and fish products.

Crop in total agricultural production (%): Share of value of total crop production (including horticulture) in total agricultural production. National data.

Livestock in total agricultural production (%): Share of value of total livestock production in total agricultural production. National data.

Agricultural area (AA) (thousand ha): FAO, Land use database, Agricultural area.

Share of arable land in AA (%): FAO, Land use database, arable land in percentage of agricultural area.

Share of irrigated area in AA (%): OECD, Environmental indicators.

Share of agriculture in water consumption (%): OECD Environmental indicators.

Nitrogen balance (Kg/ha): OECD, Environmental indicators.

Figure X.2 Main macroeconomic indicators

Real GDP growth (%): OECD.stat, Country statistical profiles 2011, real GDP growth

Inflation rate (%): *OECD Analytical Database* (ADB), Annual average rate of change in Harmonized Indices of Consumer Prices (HICPs), EUROSTAT for the European Union

Unemployment rate (%): *OECD Analytical Database* (ADB), labour force statistics; EUROSTAT for the European Union.

Figure X.3. Agro-food trade

Agro-food exports (USD billion): Comtrade SAS extraction (March 2012) from *OECD ITCS Database*. Extraction does not include fish and fish products.

Agro-food imports (USD billion): Comtrade SAS extraction (March 2012) from *OECD ITCS Database*. Extraction does not include fish and fish products.

PART III

Summary tables of estimates of support for OECD countries

Table III.1. **OECD: Producer Support Estimate by country**

	1986-88	1995-97	2009-11	2009	2010	2011p
Australia						
USD mn	1 447	1 284	1 248	989	1 206	1 550
EUR mn	1 321	1 033	912	712	911	1 114
Percentage PSE	10	6	3	3	3	3
Producer NPC	1.08	1.03	1.00	1.00	1.00	1.00
Producer NAC	1.11	1.06	1.03	1.03	1.03	1.03
Canada						
USD mn	6 024	3 566	6 976	6 760	7 155	7 013
EUR mn	5 490	2 874	5 104	4 866	5 402	5 043
Percentage PSE	36	16	16	17	17	14
Producer NPC	1.39	1.10	1.11	1.12	1.12	1.10
Producer NAC	1.56	1.20	1.19	1.21	1.20	1.17
Chile[1]						
USD mn	..	416	361	432	301	349
EUR mn	..	338	263	311	227	251
Percentage PSE	..	8	4	6	3	4
Producer NPC	..	1.07	1.01	1.02	1.00	1.00
Producer NAC	..	1.09	1.04	1.06	1.03	1.04
European Union[2]						
USD mn	97 318	116 083	108 190	118 990	102 400	103 181
EUR mn	88 005	93 763	79 056	85 649	77 317	74 203
Percentage PSE	39	34	20	23	20	18
Producer NPC	1.71	1.33	1.05	1.08	1.04	1.03
Producer NAC	1.65	1.51	1.25	1.30	1.25	1.21
Iceland						
USD mn	193	130	128	125	120	139
EUR mn	174	105	94	90	91	100
Percentage PSE	77	59	47	51	47	44
Producer NPC	4.22	2.32	1.58	1.76	1.62	1.37
Producer NAC	4.34	2.45	1.91	2.06	1.89	1.78
Israel[3]						
USD mn	..	765	913	783	902	1 054
EUR mn	..	622	667	563	681	758
Percentage PSE	..	20	13	12	13	14
Producer NPC	..	1.18	1.12	1.11	1.12	1.13
Producer NAC	..	1.24	1.15	1.13	1.14	1.16
Japan						
USD mn	49 754	58 891	54 261	46 470	55 215	61 098
EUR mn	45 110	47 302	39 693	33 449	41 690	43 939
Percentage PSE	64	58	51	49	53	52
Producer NPC	2.65	2.31	1.89	1.84	1.95	1.87
Producer NAC	2.78	2.40	2.06	1.96	2.14	2.07
Korea						
USD mn	12 040	23 080	18 829	17 197	17 056	22 234
EUR mn	10 803	18 630	13 749	12 378	12 878	15 990
Percentage PSE	70	67	50	51	45	53
Producer NPC	3.35	2.97	1.90	1.96	1.71	2.03
Producer NAC	3.38	3.09	2.00	2.04	1.81	2.14
Mexico[4]						
USD mn	8 437	1 589	6 062	6 004	6 001	6 182
EUR mn	6 867	1 395	4 433	4 321	4 531	4 446
Percentage PSE	28	5	12	14	12	12
Producer NPC	1.34	1.00	1.04	1.05	1.03	1.03
Producer NAC	1.40	1.06	1.14	1.16	1.13	1.13
New Zealand						
USD mn	435	63	88	50	82	134
EUR mn	416	51	65	36	62	96
Percentage PSE	10	1	1	0	1	1
Producer NPC	1.02	1.01	1.00	1.00	1.00	1.01
Producer NAC	1.12	1.01	1.01	1.00	1.01	1.01
Norway						
USD mn	2 801	2 910	3 648	3 408	3 664	3 871
EUR mn	2 530	2 358	2 668	2 453	2 766	2 784
Percentage PSE	70	66	60	61	61	58
Producer NPC	4.11	2.53	1.94	2.04	1.98	1.81
Producer NAC	3.38	2.97	2.50	2.58	2.55	2.36
Switzerland						
USD mn	5 325	5 653	5 721	5 760	5 204	6 199
EUR mn	4 800	4 567	4 178	4 146	3 929	4 458
Percentage PSE	76	67	56	60	54	54
Producer NPC	4.57	2.84	1.57	1.80	1.46	1.46
Producer NAC	4.20	3.07	2.29	2.52	2.15	2.19

Table III.1. **OECD: Producer Support Estimate by country** *(cont.)*

	1986-88	1995-97	2009-11	2009	2010	2011p
Turkey						
USD mn	3 952	7 428	17 791	17 025	20 746	15 602
EUR mn	3 558	6 052	13 046	12 255	15 664	11 220
Percentage PSE	20	26	25	28	26	20
Producer NPC	1.21	1.25	1.19	1.26	1.21	1.10
Producer NAC	1.26	1.35	1.33	1.40	1.34	1.25
United States						
USD mn	36 411	26 614	30 395	33 016	27 591	30 579
EUR mn	33 299	21 765	22 196	23 765	20 832	21 991
Percentage PSE	22	12	9	11	8	8
Producer NPC	1.13	1.07	1.01	1.02	1.01	1.01
Producer NAC	1.28	1.14	1.09	1.12	1.08	1.08
OECD[5]						
USD mn	239 401	253 189	247 736	249 521	241 264	252 424
EUR mn	217 205	204 671	181 101	179 605	182 165	181 533
Percentage PSE	37	30	20	23	20	19
Producer NPC	1.49	1.31	1.11	1.13	1.11	1.09
Producer NAC	1.59	1.42	1.26	1.29	1.25	1.23

.. Not available

Note: p: provisional. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.

1. For Chile, the database starts in 1995.
2. EU12 for 1986-94, including ex-GDR from 1990; EU15 for 1995-2003; EU25 for 2004-06 and EU-27 from 2007.
3. For Israel, the database starts in 1995.The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
4. For Mexico, 1986-88 is replaced by 1991-93.
5. Austria, Finland and Sweden are included in the OECD total for all years and in the EU from 1995. The Czech Republic, Estonia, Hungary, Poland and the Slovak Republic are included in the OECD total for all years and in the EU from 2004. Slovenia is included in the OECD total from 1992 and in the EU from 2004. The OECD total does not include the non-OECD EU member states. Chile and Israel are included in the OECD total from 1995.

Source: OECD, PSE/CSE database, 2012

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Table III.2. **OECD: Consumer Support Estimate by country**

	1986-88	1995-97	2009-11	2009	2010	2011p
Australia						
USD mn	-608	-292	-65	-194	0	0
EUR mn	-553	-236	-47	-140	0	0
Percentage CSE	-12	-3	0	-1	0	0
Consumer NPC	1.13	1.03	1.00	1.00	1.00	1.00
Consumer NAC	1.13	1.03	1.00	1.01	1.00	1.00
Canada						
USD mn	-2 860	-1 758	-4 605	-4 434	-4 809	-4 571
EUR mn	-2 586	-1 429	-3 370	-3 192	-3 631	-3 287
Percentage CSE	-23	-11	-16	-19	-16	-14
Consumer NPC	1.33	1.13	1.20	1.23	1.20	1.16
Consumer NAC	1.30	1.13	1.20	1.23	1.20	1.16
Chile[1]						
USD mn	..	-422	-70	-149	-35	-25
EUR mn	..	-342	-51	-107	-26	-18
Percentage CSE	..	-8	-1	-2	0	0
Consumer NPC	..	1.09	1.01	1.02	1.01	1.00
Consumer NAC	..	1.09	1.01	1.02	1.00	1.00
European Union[2]						
USD mn	-72 556	-57 825	-17 138	-27 850	-13 891	-9 674
EUR mn	-65 589	-46 625	-12 497	-20 046	-10 488	-6 957
Percentage CSE	-36	-21	-4	-7	-3	-2
Consumer NPC	1.70	1.30	1.05	1.08	1.04	1.02
Consumer NAC	1.56	1.26	1.04	1.07	1.03	1.02
Iceland						
USD mn	-112	-59	-33	-43	-36	-21
EUR mn	-102	-48	-25	-31	-27	-15
Percentage CSE	-70	-43	-24	-30	-24	-17
Consumer NPC	4.44	1.82	1.35	1.46	1.35	1.25
Consumer NAC	3.50	1.75	1.32	1.43	1.32	1.21
Israel[3]						
USD mn	..	-637	-821	-734	-816	-912
EUR mn	..	-523	-600	-528	-616	-656
Percentage CSE	..	-22	-16	-16	-15	-16
Consumer NPC	..	1.29	1.19	1.19	1.18	1.20
Consumer NAC	..	1.28	1.19	1.19	1.18	1.19
Japan						
USD mn	-61 282	-76 199	-59 074	-53 365	-60 163	-63 695
EUR mn	-55 381	-61 242	-43 215	-38 412	-45 426	-45 807
Percentage CSE	-62	-54	-43	-43	-44	-43
Consumer NPC	2.66	2.17	1.76	1.75	1.78	1.76
Consumer NAC	2.65	2.16	1.76	1.75	1.78	1.76
Korea						
USD mn	-11 786	-23 777	-20 732	-17 126	-18 198	-26 873
EUR mn	-10 594	-19 120	-15 131	-12 327	-13 740	-19 326
Percentage CSE	-66	-65	-46	-47	-41	-50
Consumer NPC	2.94	2.91	1.86	1.89	1.68	2.00
Consumer NAC	2.93	2.89	1.86	1.88	1.68	2.00
Mexico[4]						
USD mn	-6 298	61	-1 276	-1 474	-1 354	-1 000
EUR mn	-5 126	-48	-934	-1 061	-1 022	-719
Percentage CSE	-24	1	-3	-3	-3	-2
Consumer NPC	1.38	1.02	1.03	1.04	1.03	1.02
Consumer NAC	1.32	0.99	1.03	1.04	1.03	1.02
New Zealand						
USD mn	-63	-34	-65	-30	-57	-106
EUR mn	-58	-28	-47	-22	-43	-76
Percentage CSE	-7	-2	-2	-1	-2	-3
Consumer NPC	1.07	1.02	1.02	1.01	1.02	1.04
Consumer NAC	1.07	1.02	1.02	1.01	1.02	1.04
Norway						
USD mn	-1 333	-1 261	-1 666	-1 632	-1 699	-1 667
EUR mn	-1 207	-1 022	-1 219	-1 175	-1 283	-1 198
Percentage CSE	-56	-47	-41	-44	-43	-37
Consumer NPC	3.24	2.13	1.82	1.93	1.85	1.69
Consumer NAC	2.27	1.91	1.70	1.78	1.74	1.59
Switzerland						
USD mn	-4 868	-3 848	-2 817	-3 389	-2 394	-2 667
EUR mn	-4 382	-3 101	-2 055	-2 439	-1 808	-1 918
Percentage CSE	-72	-57	-34	-43	-31	-30
Consumer NPC	4.52	2.89	1.55	1.77	1.46	1.43
Consumer NAC	3.57	2.35	1.54	1.75	1.44	1.42

Table III.2. **OECD: Consumer Support Estimate by country** *(cont.)*

	1986-88	1995-97	2009-11	2009	2010	2011p
Turkey						
USD mn	-2 931	-5 186	-9 745	-10 043	-13 070	-6 123
EUR mn	-2 640	-4 224	-7 167	-7 229	-9 868	-4 403
Percentage CSE	-19	-21	-16	-20	-19	-10
Consumer NPC	1.26	1.29	1.21	1.26	1.24	1.11
Consumer NAC	1.24	1.27	1.20	1.25	1.24	1.11
United States						
USD mn	-3 794	4 452	32 372	28 590	32 794	35 732
EUR mn	-3 494	3 550	23 679	20 579	24 761	25 697
Percentage CSE	-3	3	13	14	13	13
Consumer NPC	1.12	1.08	1.02	1.02	1.02	1.02
Consumer NAC	1.03	0.97	0.88	0.88	0.88	0.89
OECD[5]						
USD mn	-159 908	-170 431	-84 842	-90 558	-82 899	-81 070
EUR mn	-144 721	-137 388	-62 026	-65 184	-62 592	-58 302
Percentage CSE	-30	-23	-8	-10	-8	-7
Consumer NPC	1.52	1.35	1.14	1.15	1.13	1.12
Consumer NAC	1.42	1.30	1.09	1.11	1.09	1.08

.. Not available

Note: p: provisional. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.

1. Chile, the database starts in 1995
2. EU12 for 1986-94, including ex-GDR from 1990; EU15 for 1995-2003; EU25 for 2004-06 and EU-27 from 2007.
3. For Israel, the database starts in 1995.The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
4. For Mexico, 1986-88 is replaced by 1991-93.
5. Austria, Finland and Sweden are included in the OECD total for all years and in the EU from 1995. The Czech Republic, Estonia, Hungary, Poland and the Slovak Republic are included in the OECD total for all years and in the EU from 2004. Slovenia is included in the OECD total from 1992 and in the EU from 2004. The OECD total does not include the non-OECD EU member states. Chile and Israel are included in the OECD total from 1995.

Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932654638

Table III.3. **OECD: General Services Support Estimate by country**

	1986-88	1995-97	2009-11	2009	2010	2011p
Australia						
USD mn	95	385	767	688	763	851
EUR mn	86	315	561	495	576	612
Percentage of TSE	6	24	40	46	39	35
Canada						
USD mn	1 464	1 454	3 063	2 902	3 150	3 137
EUR mn	1 328	1 175	2 241	2 089	2 378	2 256
Percentage of TSE	20	29	31	30	31	31
Chile[1]						
USD mn	..	79	374	334	376	411
EUR mn	..	66	273	240	284	295
Percentage of TSE	..	16	51	44	56	54
European Union[2]						
USD mn	9 318	10 912	14 419	14 525	13 785	14 946
EUR mn	8 391	8 901	10 537	10 455	10 408	10 749
Percentage of TSE	8	8	12	11	12	12
Iceland						
USD mn	18	14	7	8	8	7
EUR mn	16	11	5	5	6	5
Percentage of TSE	7	9	5	6	6	5
Israel[3]						
USD mn	..	121	177	159	181	191
EUR mn	..	98	129	114	137	137
Percentage of TSE	..	14	16	17	17	15
Japan						
USD mn	8 775	19 447	9 935	10 763	8 413	10 629
EUR mn	7 889	15 611	7 248	7 748	6 352	7 644
Percentage of TSE	15	25	16	19	13	15
Korea						
USD mn	1 475	3 378	2 903	2 607	3 010	3 092
EUR mn	1 368	2 762	2 124	1 876	2 273	2 224
Percentage of TSE	11	13	13	13	15	12
Mexico[4]						
USD mn	1 105	488	786	764	745	849
EUR mn	900	392	574	550	562	610
Percentage of TSE	11	..[c]	11	11	11	12
New Zealand						
USD mn	119	122	278	195	276	363
EUR mn	108	100	203	140	209	261
Percentage of TSE	26	66	77	80	77	73
Norway						
USD mn	124	160	371	340	391	382
EUR mn	112	129	272	245	295	275
Percentage of TSE	4	5	9	9	9	9
Switzerland						
USD mn	438	462	487	443	469	550
EUR mn	396	373	356	319	354	396
Percentage of TSE	7	7	8	7	8	8
Turkey						
USD mn	309	2 303	1 322	1 498	1 039	1 429
EUR mn	277	1 878	963	1 079	784	1 027
Percentage of TSE	7	24	7	8	5	8
United States						
USD mn	13 682	25 678	67 324	56 651	69 846	75 476
EUR mn	12 450	20 786	49 264	40 778	52 737	54 279
Percentage of TSE	23	37	50	46	52	51
OECD[5]						
USD mn	37 045	65 518	101 606	91 489	101 825	111 504
EUR mn	33 556	53 023	74 308	65 854	76 882	80 189
Percentage of TSE	12	19	26	24	27	27

Table III.3. **OECD: General Services Support Estimate by country** *(cont.)*

.. Not available
Note: p: provisional. TSE: Total support estimate.
1. For Chile, the database starts in 1995.
2. EU12 for 1986-94, including ex-GDR from 1990; EU15 for 1995-2003; EU25 for 2004-06 and EU-27 from 2007.
3. For Israel, the database starts in 1995.The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
4. For Mexico, 1986-88 is replaced by 1991-93.
5. Austria, Finland and Sweden are included in the OECD total for all years and in the EU from 1995. The Czech Republic, Estonia, Hungary, Poland and the Slovak Republic are included in the OECD total for all years and in the EU from 2004. Slovenia is included in the OECD total from 1992 and in the EU from 2004. The OECD total does not include the non-OECD EU member states. Chile and Israel are included in the OECD total from 1995.

c) Not calculated
Source: OECD, PSE/CSE database, 2012

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Table III.4. **OECD: Total Support Estimate by country**

	1986-88	1995-97	2009-11	2009	2010	2011p
Australia						
USD mn	1 542	1 669	1 951	1 483	1 969	2 401
EUR mn	1 407	1 347	1 427	1 067	1 487	1 726
Percentage of GDP	0.7	0.4	0.2	0.1	0.2	0.2
Canada						
USD mn	7 518	5 024	10 039	9 662	10 305	10 150
EUR mn	6 848	4 052	7 345	6 955	7 781	7 299
Percentage of GDP	1.8	0.8	0.7	0.7	0.7	0.6
Chile[1]						
USD mn	..	495	734	766	677	760
EUR mn	..	403	536	551	511	547
Percentage of GDP	..	0.6	0.4	0.5	0.3	0.3
European Union[2]						
USD mn	111 547	131 848	124 606	135 495	118 332	119 990
EUR mn	100 838	106 594	91 056	97 529	89 346	86 292
Percentage of GDP	2.6	1.5	0.7	0.8	0.7	0.7
Iceland						
USD mn	257	149	139	136	131	149
EUR mn	230	121	101	98	99	107
Percentage of GDP	5.0	2.1	1.1	1.1	1.0	1.1
Israel[3]						
USD mn	..	886	1 090	941	1 083	1 244
EUR mn	..	721	797	678	818	895
Percentage of GDP	..	0.9	0.5	0.5	0.5	0.5
Japan						
USD mn	58 422	78 578	64 214	57 258	63 642	71 741
EUR mn	52 901	63 106	46 953	41 214	48 052	51 593
Percentage of GDP	2.4	1.6	1.2	1.1	1.2	1.2
Korea						
USD mn	13 588	26 767	21 776	19 854	20 107	25 368
EUR mn	12 236	21 643	15 905	14 291	15 181	18 244
Percentage of GDP	9.1	4.9	2.2	2.4	2.0	2.3
Mexico[4]						
USD mn	10 395	2 686	7 123	7 062	7 011	7 298
EUR mn	8 458	2 287	5 208	5 083	5 294	5 248
Percentage of GDP	2.6	0.7	0.7	0.8	0.7	0.6
New Zealand						
USD mn	554	185	367	245	358	497
EUR mn	524	150	268	176	271	357
Percentage of GDP	1.6	0.3	0.3	0.2	0.3	0.3
Norway						
USD mn	3 145	3 151	4 097	3 823	4 127	4 341
EUR mn	2 844	2 554	2 996	2 752	3 116	3 122
Percentage of GDP	3.5	2.0	1.0	1.0	1.0	0.9
Switzerland						
USD mn	6 458	6 943	6 220	6 226	5 677	6 756
EUR mn	5 823	5 605	4 542	4 481	4 286	4 859
Percentage of GDP	3.8	2.3	1.1	1.3	1.1	1.1
Turkey						
USD mn	4 260	9 731	19 113	18 523	21 784	17 031
EUR mn	3 835	7 929	14 010	13 333	16 448	12 248
Percentage of GDP	3.7	4.0	2.7	3.0	3.0	2.2
United States						
USD mn	60 182	70 108	135 273	123 634	135 486	146 698
EUR mn	54 918	57 025	98 930	88 992	102 298	105 499
Percentage of GDP	1.3	0.9	0.9	0.9	0.9	1.0
OECD[5]						
USD mn	296 316	343 466	389 167	377 140	383 612	406 749
EUR mn	268 786	277 792	284 542	271 466	289 643	292 517
Percentage of GDP	3.0	1.6	0.9	1.0	0.9	1.0

Table III.4. **OECD: Total Support Estimate by country** *(cont.)*

.. Not available

Note: p: provisional. na: not avaliable.

1. For Chile, the database starts in 1995.
2. EU12 for 1986-94, including ex-GDR from 1990; EU15 for 1995-2003; EU25 for 2004-06 and EU-27 from 2007.
3. For Israel, the database starts in 1995.The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
4. For Mexico, 1986-88 is replaced by 1991-93.
5. Austria, Finland and Sweden are included in the OECD total for all years and in the EU from 1995. The Czech Republic, Estonia, Hungary, Poland and the Slovak Republic are included in the OECD total for all years and in the EU from 2004. Slovenia is included in the OECD total from 1992 and in the EU from 2004. The OECD total does not include the non-OECD EU member states. Chile and Israel are included in the OECD total from 1995.

Source: OECD, PSE/CSE database, 2012

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Table III.5. **OECD: Composition of Producer Support Estimate by country**

Percentage share in PSE

	1986-88	1995-97	2009-11	2009	2010	2011p
Australia						
Percentage PSE	10	6	3	3	3	3
Support based on commodity output	71	50	0	0	0	0
Payments based on input use	16	35	48	56	48	41
Payments based on current A/An/R/I, production required[1]	0	1	13	6	18	16
Payments based on non-current A/An/R/I, production required	0	0	0	0	0	0
Payments based on non-current A/An/R/I, production not required	13	14	37	36	33	42
Payments based on non-commodity criteria	0	0	1	2	2	1
Miscellaneous payments	0	0	0	0	0	0
Canada						
Percentage PSE	36	16	16	17	17	14
Support based on commodity output	58	51	59	59	60	59
Payments based on input use	18	14	6	6	6	7
Payments based on current A/An/R/I, production required	22	17	28	28	27	28
Payments based on non-current A/An/R/I, production required	0	0	2	0	5	0
Payments based on non-current A/An/R/I, production not required	0	15	3	3	0	5
Payments based on non-commodity criteria	0	0	2	4	1	0
Miscellaneous payments	2	2	0	0	0	0
Chile[2]						
Percentage PSE	..	8	4	6	3	4
Support based on commodity output	..	82	15	35	8	3
Payments based on input use	..	15	84	65	90	97
Payments based on current A/An/R/I, production required	..	2	1	0	2	0
Payments based on non-current A/An/R/I, production required	..	0	0	0	0	0
Payments based on non-current A/An/R/I, production not required	..	0	0	0	0	0
Payments based on non-commodity criteria	..	0	0	0	0	0
Miscellaneous payments	..	0	0	0	0	0
European Union 27[3]						
Percentage PSE	39	34	20	23	20	18
Support based on commodity output	91	61	19	26	17	13
Payments based on input use	5	7	14	13	15	15
Payments based on current A/An/R/I, production required	4	32	18	18	18	19
Payments based on non-current A/An/R/I, production required	0	0	0	0	0	0
Payments based on non-current A/An/R/I, production not required	0	0	46	40	48	51
Payments based on non-commodity criteria	0	1	2	2	2	2
Miscellaneous payments	0	-1	0	0	0	0
Iceland						
Percentage PSE	77	59	47	51	47	44
Support based on commodity output	93	84	68	69	66	68
Payments based on input use	7	4	7	7	8	7
Payments based on current A/An/R/I, production required	0	0	4	3	4	4
Payments based on non-current A/An/R/I, production required	0	12	22	21	22	21
Payments based on non-current A/An/R/I, production not required	1	0	0	0	0	0
Payments based on non-commodity criteria	0	0	0	0	0	0
Miscellaneous payments	0	0	0	0	0	0
Israel[4]						
Percentage PSE	..	20	13	12	13	14
Support based on commodity output	..	65	81	79	82	83
Payments based on input use	..	28	13	14	12	12
Payments based on current A/An/R/I, production required	..	4	5	6	5	4
Payments based on non-current A/An/R/I, production required	..	0	0	0	0	0
Payments based on non-current A/An/R/I, production not required	..	2	1	1	1	1
Payments based on non-commodity criteria	..	0	0	0	0	0
Miscellaneous payments	..	0	0	0	0	0

Table III.5. **OECD: Composition of Producer Support Estimate by country** *(cont.)*

Percentage share in PSE

	1986-88	1995-97	2009-11	2009	2010	2011p
Japan						
Percentage PSE	64	58	51	49	53	52
Support based on commodity output	93	93	84	88	83	81
Payments based on input use	4	5	3	3	4	3
Payments based on current A/An/R/I, production required	0	0	5	2	6	9
Payments based on non-current A/An/R/I, production required	0	0	0	0	0	0
Payments based on non-current A/An/R/I, production not required	3	2	7	7	7	8
Payments based on non-commodity criteria	0	0	0	0	0	0
Miscellaneous payments	0	0	0	0	0	0
Korea						
Percentage PSE	70	67	50	51	45	53
Support based on commodity output	99	94	90	92	88	90
Payments based on input use	1	5	3	3	4	3
Payments based on current A/An/R/I, production required	0	1	4	2	5	4
Payments based on non-current A/An/R/I, production required	0	0	0	0	0	0
Payments based on non-current A/An/R/I, production not required	0	0	3	3	4	3
Payments based on non-commodity criteria	0	0	0	0	0	0
Miscellaneous payments	0	0	0	0	0	0
Mexico[5]						
Percentage PSE	28	5	12	14	12	12
Support based on commodity output	83	98	25	30	25	21
Payments based on input use	17	3	50	46	50	55
Payments based on current A/An/R/I, production required	0	1	1	1	1	1
Payments based on non-current A/An/R/I, production required	0	0	5	5	5	5
Payments based on non-current A/An/R/I, production not required	0	-1	18	18	20	18
Payments based on non-commodity criteria	0	0	0	0	0	0
Miscellaneous payments	0	0	0	0	0	0
New Zealand						
Percentage PSE	10	1	1	0	1	1
Support based on commodity output	20	61	72	61	74	82
Payments based on input use	48	38	27	38	26	17
Payments based on current A/An/R/I, production required	11	1	1	1	0	0
Payments based on non-current A/An/R/I, production required	21	0	0	0	0	0
Payments based on non-current A/An/R/I, production not required	0	0	0	0	0	0
Payments based on non-commodity criteria	0	0	0	0	0	0
Miscellaneous payments	0	0	0	0	0	0
Norway						
Percentage PSE	70	66	60	61	61	58
Support based on commodity output	72	62	50	51	52	47
Payments based on input use	9	5	5	6	4	6
Payments based on current A/An/R/I, production required	19	33	32	31	32	34
Payments based on non-current A/An/R/I, production required	0	0	12	12	12	13
Payments based on non-current A/An/R/I, production not required	0	0	0	0	0	0
Payments based on non-commodity criteria	0	0	0	0	0	0
Miscellaneous payments	0	0	0	0	0	0
Switzerland						
Percentage PSE	76	67	56	60	54	54
Support based on commodity output	83	66	44	49	41	42
Payments based on input use	7	6	4	3	4	4
Payments based on current A/An/R/I, production required	7	17	23	21	24	24
Payments based on non-current A/An/R/I, production required	0	8	2	2	2	2
Payments based on non-current A/An/R/I, production not required	0	0	21	20	23	22
Payments based on non-commodity criteria	0	1	3	3	3	3
Miscellaneous payments	3	3	3	3	3	4

Table III.5. **OECD: Composition of Producer Support Estimate by country** *(cont.)*

Percentage share in PSE

	1986-88	1995-97	2009-11	2009	2010	2011p
Turkey						
Percentage PSE	20	26	25	28	26	20
Support based on commodity output	78	72	89	90	90	88
Payments based on input use	22	28	3	3	2	3
Payments based on current A/An/R/I, production required	0	1	8	7	8	9
Payments based on non-current A/An/R/I, production required	0	0	0	0	0	0
Payments based on non-current A/An/R/I, production not required	0	0	0	0	0	0
Payments based on non-commodity criteria	0	0	0	0	0	0
Miscellaneous payments	0	0	0	0	0	0
United States						
Percentage PSE	22	12	9	11	8	8
Support based on commodity output	44	47	14	16	14	12
Payments based on input use	20	26	32	29	35	32
Payments based on current A/An/R/I, production required	34	8	26	28	21	28
Payments based on non-current A/An/R/I, production required	0	0	0	0	0	0
Payments based on non-current A/An/R/I, production not required	1	13	20	19	21	19
Payments based on non-commodity criteria	2	7	9	8	9	9
Miscellaneous payments	0	0	0	0	0	0
OECD[6]						
Percentage PSE	37	30	20	23	20	19
Support based on commodity output	82	70	45	47	46	44
Payments based on input use	8	10	13	12	13	13
Payments based on current A/An/R/I, production required	8	16	15	14	14	16
Payments based on non-current A/An/R/I, production required	0	0	0	0	1	0
Payments based on non-current A/An/R/I, production not required	1	3	24	23	25	25
Payments based on non-commodity criteria	0	1	2	2	2	2
Miscellaneous payments	0	0	0	0	0	0

.. Not available

Note: p: provisional. na: not avaliable.

1. A (area planted) / An (animal numbers) / R (receipts) / I (income).
2. For Chile, the database starts in 1995.
3. EU12 for 1986-94, including ex-GDR from 1990; EU15 for 1995-2003; EU25 for 2004-06 and EU-27 from 2007.
4. For Israel, the database starts in 1995.The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
5. For Mexico, 1986-88 is replaced by 1991-93.
6. Austria, Finland and Sweden are included in the OECD total for all years and in the EU from 1995. The Czech Republic, Estonia, Hungary, Poland and the Slovak Republic are included in the OECD total for all years and in the EU from 2004. Slovenia is included in the OECD total from 1992 and in the EU from 2004. The OECD total does not include the non-OECD EU member states. Chile and Israel are included in the OECD total from 1995.

Source: OECD, PSE/CSE database, 2012

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Table III.6. **OECD: Characteristics of policy support by country**

Percentage share in PSE

	1986-88	1995-97	2009-11	2009	2010	2011p
Australia						
Proportion of support with output and payment limits	0.0	2.4	36.4	40.9	36.4	31.8
Proportion of support with input constraints	0.0	2.4	9.3	9.2	10.5	8.2
Proportion of support based on single commodities	71.4	52.7	0.0	0.0	0.0	0.0
Proportion of support not requiring production	12.6	13.9	38.6	38.2	34.7	43.0
Canada						
Proportion of support with output and payment limits	35.9	43.8	70.2	65.5	73.1	71.9
Proportion of support with input constraints	0.1	0.0	1.7	3.9	0.9	0.3
Proportion of support based on single commodities	71.0	58.8	72.9	71.4	74.0	73.2
Proportion of support not requiring production	2.4	17.5	5.0	7.2	1.5	6.2
Chile[1]						
Proportion of support with output and payment limits	..	0.0	0.0	0.0	0.0	0.0
Proportion of support with input constraints	..	6.6	33.9	29.1	34.1	38.3
Proportion of support based on single commodities	..	82.4	15.3	34.8	8.0	3.2
Proportion of support not requiring production	..	0.0	0.0	0.0	0.0	0.0
European Union[2]						
Proportion of support with output and payment limits	31.7	49.9	56.7	52.1	57.4	60.6
Proportion of support with input constraints	1.5	13.8	64.0	57.4	65.5	69.0
Proportion of support based on single commodities	93.2	70.2	22.9	30.7	20.8	17.1
Proportion of support not requiring production	0.5	0.3	48.5	42.3	50.1	53.0
Iceland						
Proportion of support with output and payment limits	0.0	47.1	55.6	53.5	58.0	55.2
Proportion of support with input constraints	0.0	0.0	0.2	0.2	0.3	0.0
Proportion of support based on single commodities	94.1	97.4	95.2	94.9	94.6	96.2
Proportion of support not requiring production	0.6	0.2	0.2	0.2	0.3	0.0
Israel[3]						
Proportion of support with output and payment limits	..	2.6	2.8	3.2	2.8	2.6
Proportion of support with input constraints	..	0.0	0.0	0.0	0.0	0.0
Proportion of support based on single commodities	..	66.9	82.2	80.5	82.4	83.9
Proportion of support not requiring production	..	2.5	1.0	1.1	1.0	0.9
Japan						
Proportion of support with output and payment limits	2.1	2.2	6.5	3.3	6.6	9.5
Proportion of support with input constraints	0.0	0.0	6.0	6.0	5.4	6.7
Proportion of support based on single commodities	92.7	93.3	87.7	87.6	87.3	88.1
Proportion of support not requiring production	3.1	1.9	7.3	7.1	7.4	7.5
Korea						
Proportion of support with output and payment limits	0.0	0.0	3.1	3.0	3.6	2.7
Proportion of support with input constraints	0.0	0.4	3.9	3.7	4.6	3.4
Proportion of support based on single commodities	99.0	94.4	92.3	92.3	91.1	93.5
Proportion of support not requiring production	0.0	0.0	3.1	3.0	3.6	2.7
Mexico[4]						
Proportion of support with output and payment limits	0.5	-2.0	29.3	26.1	30.4	31.3
Proportion of support with input constraints	0.0	0.0	5.1	4.7	5.0	5.5
Proportion of support based on single commodities	84.4	99.6	44.1	45.9	43.4	42.9
Proportion of support not requiring production	0.0	-1.4	18.3	18.0	19.5	17.5
New Zealand						
Proportion of support with output and payment limits	0.2	0.0	0.0	0.0	0.0	0.0
Proportion of support with input constraints	0.0	0.0	0.0	0.0	0.0	0.0
Proportion of support based on single commodities	19.9	60.8	72.5	61.4	73.7	82.3
Proportion of support not requiring production	0.0	0.0	0.0	0.0	0.0	0.0
Norway						
Proportion of support with output and payment limits	32.3	34.9	26.8	27.2	26.1	27.3
Proportion of support with input constraints	0.0	0.7	10.2	10.2	10.0	10.5
Proportion of support based on single commodities	72.4	62.4	54.9	55.3	56.6	52.8
Proportion of support not requiring production	0.0	0.2	0.3	0.3	0.3	0.2

Table III.6. **OECD: Characteristics of policy support by country** *(cont.)*

Percentage share in PSE

	1986-88	1995-97	2009-11	2009	2010	2011p
Switzerland						
Proportion of support with output and payment limits	34.2	28.7	9.6	15.4	5.5	8.1
Proportion of support with input constraints	4.9	26.5	49.6	44.9	52.4	51.6
Proportion of support based on single commodities	85.4	68.4	44.4	49.8	41.3	42.0
Proportion of support not requiring production	2.6	3.6	27.7	25.0	29.2	28.8
Turkey						
Proportion of support with output and payment limits	77.6	72.4	90.1	90.2	90.6	89.6
Proportion of support with input constraints	0.0	0.0	0.0	0.0	0.0	0.1
Proportion of support based on single commodities	77.8	72.7	91.5	91.3	92.3	90.9
Proportion of support not requiring production	0.0	0.0	0.0	0.0	0.0	0.0
United States						
Proportion of support with output and payment limits	72.6	66.6	44.5	46.0	46.2	41.4
Proportion of support with input constraints	24.0	28.1	58.8	58.7	57.6	60.1
Proportion of support based on single commodities	71.3	51.4	34.3	35.9	30.9	36.0
Proportion of support not requiring production	2.6	20.0	28.4	27.2	30.2	27.7
OECD[5]						
Proportion of support with output and payment limits	27.8	34.8	40.4	39.8	41.5	39.9
Proportion of support with input constraints	4.3	10.1	36.6	36.5	36.0	37.3
Proportion of support based on single commodities	87.7	75.0	51.7	52.5	51.4	51.3
Proportion of support not requiring production	1.4	3.7	26.7	25.7	26.9	27.5

.. Not available

Note: p: provisional. The shares may add to more than 100% as different characteristics may apply to the same payment.

1. For Chile, the database starts in 1995.
2. EU12 for 1986-94, including ex-GDR from 1990; EU15 for 1995-2003; EU25 for 2004-06 and EU-27 from 2007.
3. For Israel, the database starts in 1995.The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
4. For Mexico, 1986-88 is replaced by 1991-93.
5. Austria, Finland and Sweden are included in the OECD total for all years and in the EU from 1995. The Czech Republic, Estonia, Hungary, Poland and the Slovak Republic are included in the OECD total for all years and in the EU from 2004. Slovenia is included in the OECD total from 1992 and in the EU from 2004. The OECD total does not include the non-OECD EU member states. Chile and Israel are included in the OECD total from 1995.

Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932654714

Table III.7. **OECD: Composition of General Services Support Estimate**

Percentage share in GSSE

	1986-88	1995-97	2009-11	2009	2010	2011p
Australia						
Research and Development	100	77	71	72	71	71
Agricultural schools	0	0	1	1	1	1
Inspection services	0	5	11	11	12	12
Infrastructure	0	13	16	15	15	16
Marketing and promotion	0	5	1	1	1	1
Public stockholding	0	0	0	0	0	0
Miscellaneous	0	0	0	0	0	0
Canada						
Research and Development	17	21	15	14	15	16
Agricultural schools	14	13	8	7	8	9
Inspection services	17	18	30	28	30	33
Infrastructure	23	16	17	15	17	19
Marketing and promotion	29	32	29	35	30	23
Public stockholding	0	0	0	0	0	0
Miscellaneous	0	0	0	0	0	0
Chile[1]						
Research and Development	..	34	21	16	23	23
Agricultural schools	..	1	1	1	0	0
Inspection services	..	1	25	27	27	22
Infrastructure	..	58	49	51	44	52
Marketing and promotion	..	5	4	5	5	3
Public stockholding	..	0	0	0	0	0
Miscellaneous	..	1	0	0	0	0
European Union 27[2]						
Research and Development	13	18	20	21	20	19
Agricultural schools	3	10	13	11	14	14
Inspection services	2	3	6	7	7	5
Infrastructure	14	21	30	32	29	29
Marketing and promotion	19	25	30	27	31	33
Public stockholding	49	21	0	2	-1	0
Miscellaneous	0	3	0	0	0	0
Iceland						
Research and Development	20	25	13	14	13	11
Agricultural schools	7	10	0	0	0	0
Inspection services	6	9	38	37	37	41
Infrastructure	13	19	4	6	5	1
Marketing and promotion	8	8	5	7	7	3
Public stockholding	47	28	39	36	37	45
Miscellaneous	0	0	0	0	0	0
Israel[3]						
Research and Development	..	39	37	34	34	41
Agricultural schools	..	1	0	0	0	0
Inspection services	..	14	15	15	15	14
Infrastructure	..	3	41	42	43	38
Marketing and promotion	..	15	0	0	0	0
Public stockholding	..	28	7	8	7	7
Miscellaneous	..	0	0	0	0	0
Japan						
Research and Development	4	3	10	9	11	9
Agricultural schools	2	1	4	4	5	4
Inspection services	1	1	1	1	1	1
Infrastructure	86	89	79	82	77	79
Marketing and promotion	2	1	1	1	0	2
Public stockholding	3	3	2	2	3	2
Miscellaneous	2	1	2	2	3	2
Korea						
Research and Development	5	10	20	19	19	22
Agricultural schools	0	2	4	4	4	5
Inspection services	2	3	3	3	3	4
Infrastructure	37	74	53	59	52	49
Marketing and promotion	0	0	2	2	2	2
Public stockholding	35	11	17	13	20	19
Miscellaneous	21	0	0	0	0	0
Mexico[4]						
Research and Development	10	19	14	16	13	14
Agricultural schools	16	25	35	33	35	36
Inspection services	0	5	10	5	11	13
Infrastructure	25	23	29	33	28	27
Marketing and promotion	9	6	12	13	14	10
Public stockholding	35	14	0	0	0	0
Miscellaneous	5	9	0	0	0	0

Table III.7. **OECD: Composition of General Services Support Estimate** *(cont.)*

Percentage share in GSSE

	1986-88	1995-97	2009-11	2009	2010	2011p
New Zeland						
Research and Development	51	60	28	23	31	28
Agricultural schools	0	3	7	9	6	5
Inspection services	26	24	41	39	38	45
Infrastructure	23	12	25	29	25	21
Marketing and promotion	0	0	0	0	0	0
Public stockholding	0	0	0	0	0	0
Miscellaneous	0	1	0	0	0	0
Norway						
Research and Development	56	60	43	47	39	44
Agricultural schools	0	0	0	0	0	0
Inspection services	4	16	10	8	13	9
Infrastructure	16	7	14	14	13	15
Marketing and promotion	25	14	6	3	10	4
Public stockholding	0	2	0	0	0	0
Miscellaneous	0	0	27	28	25	28
Switzerland						
Research and Development	20	21	21	20	21	21
Agricultural schools	6	6	4	4	4	4
Inspection services	2	2	2	2	2	2
Infrastructure	20	14	17	17	17	17
Marketing and promotion	7	8	11	11	11	11
Public stockholding	15	14	8	8	8	8
Miscellaneous	31	34	36	36	36	36
Turkey						
Research and Development	18	2	2	2	2	1
Agricultural schools	1	0	0	0	0	0
Inspection services	16	3	4	3	5	3
Infrastructure	3	1	0	0	0	0
Marketing and promotion	28	90	95	95	93	95
Public stockholding	0	0	0	0	0	0
Miscellaneous	35	4	0	0	0	0
United States						
Research and Development	8	6	3	4	3	3
Agricultural schools	0	0	0	0	0	0
Inspection services	3	2	2	2	2	1
Infrastructure	3	2	6	5	6	6
Marketing and promotion	78	85	86	85	86	87
Public stockholding	0	0	0	0	0	0
Miscellaneous	8	6	3	4	3	3
OECD[5]						
Research and Development	10	9	8	9	8	8
Agricultural schools	3	3	3	3	3	3
Inspection services	3	2	4	4	4	3
Infrastructure	28	35	18	21	17	18
Marketing and promotion	36	42	63	60	65	65
Public stockholding	16	5	1	1	1	1
Miscellaneous	5	4	3	3	3	2

.. Not available

Note: p: provisional. na: not avaliable.

1. For Chile, the database starts in 1995.
2. EU12 for 1986-94, including ex-GDR from 1990; EU15 for 1995-2003; EU25 for 2004-06 and EU-27 from 2007.
3. For Israel, the database starts in 1995.The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
4. For Mexico, 1986-88 is replaced by 1991-93.
5. Austria, Finland and Sweden are included in the OECD total for all years and in the EU from 1995. The Czech Republic, Estonia, Hungary, Poland and the Slovak Republic are included in the OECD total for all years and in the EU from 2004. Slovenia is included in the OECD total from 1992 and in the EU from 2004. The OECD total does not include the non-OECD EU member states. Chile and Israel are included in the OECD total from 1995.

Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932654733

Table III.8. **OECD: Producer Single Commodity Transfers (USD)**

	1986-88	1995-97	2009-11	2009	2010	2011p
Total PSE (USD mn)	**239 401**	**253 189**	**247 736**	**249 521**	**241 264**	**252 424**
Total Producer SCT (USD mn)	**209 952**	**190 084**	**128 148**	**130 879**	**124 093**	**129 471**
Share of Producer SCT in Total PSE (%)	**88**	**75**	**52**	**52**	**51**	**51**
Wheat						
Producer SCT (USD mn)	16 021	3 673	3 004	3 722	2 567	2 724
Percentage SCT	43.2	8.8	5.1	7.5	4.3	3.6
Producer NPC	1.67	1.05	1.03	1.04	1.03	1.01
Maize						
Producer SCT (USD mn)	11 012	2 724	3 124	3 021	2 736	3 615
Percentage SCT	36.2	7.4	3.8	4.7	3.2	3.4
Producer NPC	1.30	1.04	1.01	1.01	1.01	1.00
Other grains						
Producer SCT (USD mn)	9 782	2 204	1 300	1 450	1 483	965
Percentage SCT	48.1	12.1	6.5	8.1	7.6	3.7
Producer NPC	1.95	1.14	1.05	1.07	1.07	1.02
Rice						
Producer SCT (USD mn)	25 346	31 241	19 553	16 353	19 377	22 929
Percentage SCT	79.8	75.4	57.6	52.0	58.3	62.7
Producer NPC	4.90	4.17	2.18	2.06	2.18	2.30
Rapeseed						
Producer SCT (USD mn)	1 833	52	182	107	132	307
Percentage SCT	47.5	1.2	1.1	0.8	0.8	1.5
Producer NPC	1.88	1.01	1.00	1.00	1.00	1.00
Sunflower						
Producer SCT (USD mn)	1 161	75	197	185	156	251
Percentage SCT	47.3	4.5	6.3	8.0	5.1	5.7
Producer NPC	1.92	1.05	1.07	1.09	1.05	1.06
Soyabean						
Producer SCT (USD mn)	1 101	354	1 923	1 544	1 559	2 667
Percentage SCT	8.7	2.0	4.8	4.3	3.7	6.4
Producer NPC	1.09	1.02	1.02	1.01	1.01	1.03
Sugar						
Producer SCT (USD mn)	4 988	5 727	1 995	2 167	2 116	1 702
Percentage SCT	50.8	41.2	15.0	17.8	15.8	11.4
Producer NPC	2.31	1.81	1.17	1.20	1.18	1.12
Milk						
Producer SCT (USD mn)	45 276	42 243	14 465	16 117	13 398	13 881
Percentage SCT	59.3	44.7	11.4	14.4	10.3	9.4
Producer NPC	2.83	1.84	1.13	1.17	1.11	1.10
Beef and Veal						
Producer SCT (USD mn)	18 066	19 786	12 344	15 627	10 278	11 127
Percentage SCT	27.9	25.0	11.7	16.3	9.7	9.0
Producer NPC	1.41	1.25	1.10	1.16	1.08	1.07
Sheepmeat						
Producer SCT (USD mn)	4 284	4 085	1 221	1 826	1 303	533
Percentage SCT	51.7	39.8	11.4	18.0	12.0	4.2
Producer NPC	1.81	1.37	1.10	1.17	1.11	1.01
Wool						
Producer SCT (USD mn)	112	97	29	30	30	26
Percentage SCT	2.9	3.7	1.1	1.6	1.0	0.7
Producer NPC	1.01	1.02	1.01	1.02	1.01	1.01
Pigmeat						
Producer SCT (USD mn)	4 203	5 905	7 867	7 975	7 795	7 831
Percentage SCT	9.0	9.8	10.3	11.4	10.5	9.0
Producer NPC	1.20	1.13	1.11	1.13	1.12	1.10
Poultry						
Producer SCT (USD mn)	3 232	5 012	7 249	9 244	6 431	6 074
Percentage SCT	13.3	13.7	11.8	15.8	10.4	9.3
Producer NPC	1.26	1.17	1.13	1.18	1.12	1.10
Eggs						
Producer SCT (USD mn)	3 352	2 373	1 642	1 537	1 916	1 474
Percentage SCT	21.4	12.3	5.7	5.5	6.8	4.7
Producer NPC	1.34	1.16	1.07	1.07	1.08	1.05
Other Commodities						
Producer SCT (USD mn)[1]	60 182	64 533	52 052	49 974	52 817	53 364
Percentage SCT	26.2	20.7	12.9	13.3	12.8	12.7
Producer NPC	1.51	1.33	1.13	1.14	1.13	1.12

Note: p: provisional; PSE: Producer Support Estimate; SCT: Single Commodity Transfers; NPC: Nominal Protection Coefficient.

1. The producer SCT for Other Commodities is the Total Producer SCT minus the sum of Producer SCTs for the commodities listed above.

Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932654752

Table III.9. **OECD: Producer Single Commodity Transfers (EUR)**

	1986-88	1995-97	2009-11	2009	2010	2011p
Total PSE (EUR mn)	**217 205**	**204 671**	**181 101**	**179 605**	**182 165**	**181 533**
Total Producer SCT (EUR mn)	**190 521**	**153 492**	**93 671**	**94 207**	**93 695**	**93 110**
Share of Producer SCT in Total PSE (%)	**88**	**75**	**52**	**52**	**51**	**51**
Wheat						
Producer SCT (EUR mn)	14 649	2 955	2 192	2 679	1 938	1 959
Percentage SCT	43.2	8.8	5.1	7.5	4.3	3.6
Producer NPC	1.67	1.05	1.03	1.04	1.03	1.01
Maize						
Producer SCT (EUR mn)	10 121	2 193	2 280	2 175	2 066	2 600
Percentage SCT	36.2	7.4	3.8	4.7	3.2	3.4
Producer NPC	1.30	1.04	1.01	1.01	1.01	1.00
Other grains						
Producer SCT (EUR mn)	8 959	1 764	953	1 044	1 120	694
Percentage SCT	48.1	12.1	6.5	8.1	7.6	3.7
Producer NPC	1.95	1.14	1.05	1.07	1.07	1.02
Rice						
Producer SCT (EUR mn)	23 037	25 136	14 297	11 771	14 630	16 490
Percentage SCT	79.8	75.4	57.6	52.0	58.3	62.7
Producer NPC	4.90	4.17	2.18	2.06	2.18	2.30
Rapeseed						
Producer SCT (EUR mn)	1 662	41	133	77	100	221
Percentage SCT	47.5	1.2	1.1	0.8	0.8	1.5
Producer NPC	1.88	1.01	1.00	1.00	1.00	1.00
Sunflower						
Producer SCT (EUR mn)	1 054	63	144	133	118	181
Percentage SCT	47.3	4.5	6.3	8.0	5.1	5.7
Producer NPC	1.92	1.05	1.07	1.09	1.05	1.06
Soyabean						
Producer SCT (EUR mn)	1 001	285	1 402	1 111	1 177	1 918
Percentage SCT	8.7	2.0	4.8	4.3	3.7	6.4
Producer NPC	1.09	1.02	1.02	1.01	1.01	1.03
Sugar						
Producer SCT (EUR mn)	4 544	4 662	1 460	1 560	1 598	1 224
Percentage SCT	50.8	41.2	15.0	17.8	15.8	11.4
Producer NPC	2.31	1.81	1.17	1.20	1.18	1.12
Milk						
Producer SCT (EUR mn)	41 114	34 214	10 567	11 601	10 116	9 983
Percentage SCT	59.3	44.7	11.4	14.4	10.3	9.4
Producer NPC	2.83	1.84	1.13	1.17	1.11	1.10
Beef and Veal						
Producer SCT (EUR mn)	16 428	16 079	9 003	11 248	7 760	8 002
Percentage SCT	27.9	25.0	11.7	16.3	9.7	9.0
Producer NPC	1.41	1.25	1.10	1.16	1.08	1.07
Sheepmeat						
Producer SCT (EUR mn)	3 843	3 282	894	1 314	984	384
Percentage SCT	51.7	39.8	11.4	18.0	12.0	4.2
Producer NPC	1.81	1.37	1.10	1.17	1.11	1.01
Wool						
Producer SCT (EUR mn)	105	77	21	22	23	19
Percentage SCT	2.9	3.7	1.1	1.6	1.0	0.7
Producer NPC	1.01	1.02	1.01	1.02	1.01	1.01
Pigmeat						
Producer SCT (EUR mn)	3 626	4 737	5 753	5 740	5 886	5 632
Percentage SCT	9.0	9.8	10.3	11.4	10.5	9.0
Producer NPC	1.20	1.13	1.11	1.13	1.12	1.10
Poultry						
Producer SCT (EUR mn)	2 851	4 029	5 292	6 654	4 855	4 368
Percentage SCT	13.3	13.7	11.8	15.8	10.4	9.3
Producer NPC	1.26	1.17	1.13	1.18	1.12	1.10
Eggs						
Producer SCT (EUR mn)	3 032	1 897	1 204	1 106	1 447	1 060
Percentage SCT	21.4	12.3	5.7	5.5	6.8	4.7
Producer NPC	1.34	1.16	1.07	1.07	1.08	1.05
Other Commodities						
Producer SCT (EUR mn)[1]	54 496	52 077	38 076	35 971	39 879	38 377
Percentage SCT	26.2	20.7	12.9	13.3	12.8	12.7
Producer NPC	1.51	1.33	1.13	1.14	1.13	1.12

Note: p: provisional; PSE: Producer Support Estimate; SCT: Single Commodity Transfers; NPC: Nominal Protection Coefficient.

1. The producer SCT for Other Commodities is the Total Producer SCT minus the sum of Producer SCTs for the commodities listed above.

Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932654771

Table III.10. **Australia: Producer Single Commodity Transfers**

AUD million

	1986-88	1995-97	2009-11	2009	2010	2011p
Total PSE (AUD mn)	**2 026**	**1 697**	**1 361**	**1 268**	**1 315**	**1 502**
Total Producer SCT (AUD mn)	**1 452**	**876**	**0**	**0**	**0**	**0**
Share of Producer SCT in Total PSE (%)	**71**	**53**	**0**	**0**	**0**	**0**
Wheat						
Producer SCT (AUD mn)	109	43	0	0	0	0
Percentage SCT	4.5	1.0	0.0	0.0	0.0	0.0
Producer NPC	1.05	1.01	1.00	1.00	1.00	1.00
Maize						
Producer SCT (AUD mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Other grains						
Producer SCT (AUD mn)	0	0	0	0	0	0
Percentage SCT	0.0	0.0	0.0	0.0	0.0	0.0
Producer NPC	1.00	1.00	1.00	1.00	1.00	1.00
Rice						
Producer SCT (AUD mn)	13	6	0	0	0	0
Percentage SCT	11.1	2.3	0.0	0.0	0.0	0.0
Producer NPC	1.13	1.02	1.00	1.00	1.00	1.00
Rapeseed						
Producer SCT (AUD mn)	0	0	0	0	0	0
Percentage SCT	0.0	0.0	0.0	0.0	0.0	0.0
Producer NPC	1.00	1.00	1.00	1.00	1.00	1.00
Sunflower						
Producer SCT (AUD mn)	0	0	0	0	0	0
Percentage SCT	0.0	0.0	0.0	0.0	0.0	0.0
Producer NPC	1.00	1.00	1.00	1.00	1.00	1.00
Soyabean						
Producer SCT (AUD mn)	0	0	0	0	0	0
Percentage SCT	0.0	0.0	0.0	0.0	0.0	0.0
Producer NPC	1.00	1.00	1.00	1.00	1.00	1.00
Sugar						
Producer SCT (AUD mn)	66	30	0	0	0	0
Percentage SCT	10.4	2.6	0.0	0.0	0.0	0.0
Producer NPC	1.12	1.03	1.00	1.00	1.00	1.00
Milk						
Producer SCT (AUD mn)	972	515	0	0	0	0
Percentage SCT	62.3	18.4	0.0	0.0	0.0	0.0
Producer NPC	2.71	1.22	1.00	1.00	1.00	1.00
Beef and Veal						
Producer SCT (AUD mn)	0	0	0	0	0	0
Percentage SCT	0	0	0	0	0	0
Producer NPC	1.00	1.00	1.00	1.00	1.00	1.00
Sheepmeat						
Producer SCT (AUD mn)	10	0	0	0	0	0
Percentage SCT	1.3	0.0	0.0	0.0	0.0	0.0
Producer NPC	1.01	1.00	1.00	1.00	1.00	1.00
Wool						
Producer SCT (AUD mn)	26	74	0	0	0	0
Percentage SCT	0.6	2.8	0.0	0.0	0.0	0.0
Producer NPC	1.01	1.01	1.00	1.00	1.00	1.00
Pigmeat						
Producer SCT (AUD mn)	1	0	0	0	0	0
Percentage SCT	0	0	0	0	0	0
Producer NPC	1.00	1.00	1.00	1.00	1.00	1.00
Poultry						
Producer SCT (AUD mn)	0	0	0	0	0	0
Percentage SCT	0.1	0.0	0.0	0.0	0.0	0.0
Producer NPC	1.00	1.00	1.00	1.00	1.00	1.00
Eggs						
Producer SCT (AUD mn)	43	2	0	0	0	0
Percentage SCT	14.5	0.7	0.0	0.0	0.0	0.0
Producer NPC	1.18	1.01	1.00	1.00	1.00	1.00
Other Commodities						
Producer SCT (AUD mn)[1]	211	207	0	0	0	0
Percentage SCT	5.9	2.5	0.0	0.0	0.0	0.0
Producer NPC	1.20	1.06	1.00	1.00	1.00	1.00

.. Not available

Note: p: provisional; PSE: Producer Support Estimate; SCT: Single Commodity Transfers; NPC: Nominal Protection Coefficient.

1. The producer SCT for Other Commodities is the Total Producer SCT minus the sum of Producer SCTs for the commodities listed above.

Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932654790

Table III.11. **Canada: Producer Single Commodity Transfers**

CAD million

	1986-88	1995-97	2009-11	2009	2010	2011p
Total PSE (CAD mn)	**7 940**	**4 896**	**7 341**	**7 716**	**7 371**	**6 937**
Total Producer SCT (CAD mn)	**5 655**	**2 830**	**5 347**	**5 510**	**5 451**	**5 081**
Share of Producer SCT in Total PSE (%)	**71**	**59**	**73**	**71**	**74**	**73**
Wheat						
Producer SCT (CAD mn)	1 274	54	132	102	87	207
Percentage SCT	33.2	1.2	2.7	2.4	1.7	3.9
Producer NPC	1.32	1.00	1.00	1.00	1.00	1.00
Maize						
Producer SCT (CAD mn)	169	32	59	116	33	27
Percentage SCT	20.6	2.7	3.1	7.0	1.3	0.9
Producer NPC	1.13	1.00	1.00	1.00	1.00	1.00
Other grains						
Producer SCT (CAD mn)	536	26	41	40	38	44
Percentage SCT	47.4	1.9	3.7	4.7	3.0	3.5
Producer NPC	1.76	1.00	1.00	1.00	1.00	1.00
Rice						
Producer SCT (CAD mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Rapeseed						
Producer SCT (CAD mn)	170	36	152	71	112	273
Percentage SCT	17.0	1.6	2.3	1.5	1.7	3.6
Producer NPC	1.11	1.00	1.00	1.00	1.00	1.00
Sunflower						
Producer SCT (CAD mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Soyabean						
Producer SCT (CAD mn)	8	9	17	15	5	30
Percentage SCT	3.1	1.0	1.0	1.1	0.3	1.6
Producer NPC	1.02	1.00	1.00	1.00	1.00	1.00
Sugar						
Producer SCT (CAD mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Milk						
Producer SCT (CAD mn)	2 591	1 909	2 982	3 213	3 165	2 567
Percentage SCT	73.6	48.2	52.1	57.4	55.8	43.1
Producer NPC	6.33	2.03	2.12	2.35	2.26	1.76
Beef and Veal						
Producer SCT (CAD mn)	-17	73	122	171	131	64
Percentage SCT	-1	2	2	3	3	1
Producer NPC	1.03	1.00	1.00	1.00	1.00	1.00
Sheepmeat						
Producer SCT (CAD mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Wool						
Producer SCT (CAD mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Pigmeat						
Producer SCT (CAD mn)	-39	84	163	166	200	122
Percentage SCT	-2	3	5	5	6	3
Producer NPC	1.02	1.00	1.00	1.00	1.00	1.00
Poultry						
Producer SCT (CAD mn)	123	50	528	450	353	781
Percentage SCT	12.2	3.4	21.7	19.1	15.6	30.5
Producer NPC	1.19	1.04	1.29	1.24	1.19	1.44
Eggs						
Producer SCT (CAD mn)	78	135	126	116	160	103
Percentage SCT	16.5	23.6	16.9	16.2	21.9	12.6
Producer NPC	1.28	1.31	1.21	1.19	1.28	1.14
Other Commodities						
Producer SCT (CAD mn)[1]	760	422	1 026	1 048	1 167	863
Percentage SCT	30.4	11.1	10.9	8.4	15.1	9.3
Producer NPC	2.30	1.12	1.09	1.07	1.12	1.08

.. Not available

Note: p: provisional; PSE: Producer Support Estimate; SCT: Single Commodity Transfers; NPC: Nominal Protection Coefficient.

1. The producer SCT for Other Commodities is the Total Producer SCT minus the sum of Producer SCTs for the commodities listed above.

Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932654809

Table III.12. **Chile: Producer Single Commodity Transfers**

CLP million

	1995-97	2009-11	2009	2010	2011p
Total PSE (CLP mn)	**170 102**	**187 933**	**241 580**	**153 370**	**168 848**
Total Producer SCT (CLP mn)	**140 034**	**33 915**	**84 068**	**12 314**	**5 362**
Share of Producer SCT in Total PSE (%)	**82**	**15**	**35**	**8**	**3**
Wheat					
Producer SCT (CLP mn)	7 631	0	0	0	0
Percentage SCT	6.1	0.0	0.0	0.0	0.0
Producer NPC	1.07	1.00	1.00	1.00	1.00
Maize					
Producer SCT (CLP mn)	3 166	4 235	6 060	6 644	0
Percentage SCT	4.6	2.2	3.2	3.4	0.0
Producer NPC	1.05	1.02	1.03	1.04	1.00
Other grains					
Producer SCT (CLP mn)	..	..	..	..	..
Percentage SCT	..	..	..	..	..
Producer NPC	..	..	..	..	..
Rice					
Producer SCT (CLP mn)	..	..	..	..	..
Percentage SCT	..	..	..	..	..
Producer NPC	..	..	..	..	..
Rapeseed					
Producer SCT (CLP mn)	..	..	..	..	..
Percentage SCT	..	..	..	..	..
Producer NPC	..	..	..	..	..
Sunflower					
Producer SCT (CLP mn)	..	..	..	..	..
Percentage SCT	..	..	..	..	..
Producer NPC	..	..	..	..	..
Soyabean					
Producer SCT (CLP mn)	..	..	..	..	..
Percentage SCT	..	..	..	..	..
Producer NPC	..	..	..	..	..
Sugar					
Producer SCT (CLP mn)	27 124	2 920	1 554	2 845	4 362
Percentage SCT	27.7	2.7	2.6	2.6	2.8
Producer NPC	1.39	1.03	1.03	1.03	1.03
Milk					
Producer SCT (CLP mn)	35 564	17 733	53 199	0	0
Percentage SCT	19.1	4.9	14.8	0.0	0.0
Producer NPC	1.24	1.06	1.17	1.00	1.00
Beef and Veal					
Producer SCT (CLP mn)	18 693	0	0	0	0
Percentage SCT	8.7	0.0	0.0	0.0	0.0
Producer NPC	1.10	1.00	1.00	1.00	1.00
Sheepmeat					
Producer SCT (CLP mn)	..	..	..	..	..
Percentage SCT	..	..	..	..	..
Producer NPC	..	..	..	..	..
Wool					
Producer SCT (CLP mn)	..	..	..	..	..
Percentage SCT	..	..	..	..	..
Producer NPC	..	..	..	..	..
Pigmeat					
Producer SCT (CLP mn)	-589	0	0	0	0
Percentage SCT	-0.5	0.0	0.0	0.0	0.0
Producer NPC	1.00	1.00	1.00	1.00	1.00
Poultry					
Producer SCT (CLP mn)	-1 178	0	0	0	0
Percentage SCT	-0.7	0.0	0.0	0.0	0.0
Producer NPC	1.00	1.00	1.00	1.00	1.00
Eggs					
Producer SCT (CLP mn)	..	..	..	..	..
Percentage SCT	..	..	..	..	..
Producer NPC	..	..	..	..	..
Other Commodities					
Producer SCT (CLP mn)[1]	49 623	9 027	23 254	2 826	999
Percentage SCT	4.6	0.4	1.1	0.1	0.1
Producer NPC	1.05	1.00	1.01	1.00	1.00

.. Not available

Note: p: provisional; PSE: Producer Support Estimate; SCT: Single Commodity Transfers; NPC: Nominal Protection Coefficient.
For Chile, the database starts in 1995.

1. The producer SCT for Other Commodities is the Total Producer SCT minus the sum of Producer SCTs for the commodities listed above.

Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932654828

Table III.13. **European Union: Producer Single Commodity Transfers (EU27)**

EUR million

	1986-88	1995-97	2009-11	2009	2010	2011p
Total PSE (EUR mn)	**88 005**	**93 763**	**79 056**	**85 649**	**77 317**	**74 203**
Total Producer SCT (EUR mn)	**82 020**	**65 820**	**18 363**	**26 267**	**16 105**	**12 717**
Share of Producer SCT in Total PSE (%)	**93**	**70**	**23**	**31**	**21**	**17**
Wheat						
Producer SCT (EUR mn)	7 228	1 558	67	130	36	36
Percentage SCT	49.3	11.2	0.4	0.8	0.2	0.1
Producer NPC	2.14	1.05	1.00	1.00	1.00	1.00
Maize						
Producer SCT (EUR mn)	2 697	2 204	1	1	1	1
Percentage SCT	51.0	34.9	0.0	0.0	0.0	0.0
Producer NPC	2.20	1.28	1.00	1.00	1.00	1.00
Other grains						
Producer SCT (EUR mn)	4 859	934	27	0	82	0
Percentage SCT	55.1	14.0	0.4	0.0	1.1	0.0
Producer NPC	2.42	1.18	1.00	1.00	1.01	1.00
Rice						
Producer SCT (EUR mn)	412	290	171	181	165	166
Percentage SCT	58.9	33.5	15.9	15.9	16.7	15.0
Producer NPC	2.62	1.52	1.01	1.01	1.01	1.01
Rapeseed						
Producer SCT (EUR mn)	1 267	4	2	3	2	2
Percentage SCT	58.2	0.2	0.0	0.0	0.0	0.0
Producer NPC	2.40	1.00	1.00	1.00	1.00	1.00
Sunflower						
Producer SCT (EUR mn)	972	2	1	1	1	1
Percentage SCT	56.0	0.2	0.0	0.0	0.0	0.0
Producer NPC	2.30	1.00	1.00	1.00	1.00	1.00
Soyabean						
Producer SCT (EUR mn)	479	1	2	6	0	0
Percentage SCT	60.9	0.2	0.8	2.2	0.0	0.0
Producer NPC	2.63	1.00	1.01	1.02	1.00	1.00
Sugar						
Producer SCT (EUR mn)	2 582	2 800	241	592	80	52
Percentage SCT	58.8	49.7	7.0	17.2	2.5	1.4
Producer NPC	3.35	2.33	1.06	1.19	1.00	1.00
Milk						
Producer SCT (EUR mn)	21 363	18 689	668	592	712	701
Percentage SCT	69.6	50.1	1.5	1.5	1.6	1.4
Producer NPC	4.60	2.08	1.01	1.01	1.01	1.01
Beef and Veal						
Producer SCT (EUR mn)	10 505	12 171	4 856	8 353	3 079	3 135
Percentage SCT	51	48	19	34	12	11
Producer NPC	2.07	1.66	1.17	1.40	1.07	1.06
Sheepmeat						
Producer SCT (EUR mn)	3 568	3 093	845	1 332	835	367
Percentage SCT	69.1	56.1	19.6	31.2	19.6	8.0
Producer NPC	2.70	1.71	1.14	1.29	1.14	1.00
Wool						
Producer SCT (EUR mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Pigmeat						
Producer SCT (EUR mn)	-270	1 381	670	1 103	883	24
Percentage SCT	-1	5	2	4	3	0
Producer NPC	1.13	1.08	1.02	1.03	1.03	1.00
Poultry						
Producer SCT (EUR mn)	963	2 399	3 933	4 896	3 802	3 101
Percentage SCT	13.3	30.6	29.2	37.7	28.7	21.3
Producer NPC	1.46	1.51	1.42	1.59	1.40	1.27
Eggs						
Producer SCT (EUR mn)	1 682	456	96	141	70	78
Percentage SCT	32.7	9.4	1.2	1.7	0.9	1.0
Producer NPC	1.64	1.14	1.01	1.01	1.01	1.01
Other Commodities						
Producer SCT (EUR mn)[1]	23 713	19 840	6 782	8 937	6 356	5 053
Percentage SCT	25.2	18.4	4.6	6.3	4.2	3.3
Producer NPC	1.49	1.26	1.05	1.06	1.04	1.03

.. Not available

Note: p: provisional; PSE: Producer Support Estimate; SCT: Single Commodity Transfers; NPC: Nominal Protection Coefficient.
EU12 for 1986-94 including ex-GDR from 1990; EU15 for 1995-2003; EU25 for 2004-06 and EU27 from 2007.

1. The producer SCT for Other Commodities is the Total Producer SCT minus the sum of Producer SCTs for the commodities listed above.

Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932654847

Table III.14. **Iceland: Producer Single Commodity Transfers**

ISK million

	1986-88	1995-97	2009-11	2009	2010	2011p
Total PSE (ISK mn)	**7 896**	**8 759**	**15 433**	**15 514**	**14 678**	**16 106**
Total Producer SCT (ISK mn)	**7 434**	**8 534**	**14 701**	**14 722**	**13 892**	**15 489**
Share of Producer SCT in Total PSE (%)	**94**	**97**	**95**	**95**	**95**	**96**
Wheat						
Producer SCT (ISK mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Maize						
Producer SCT (ISK mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Other grains						
Producer SCT (ISK mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Rice						
Producer SCT (ISK mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Rapeseed						
Producer SCT (ISK mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Sunflower						
Producer SCT (ISK mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Soyabean						
Producer SCT (ISK mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Sugar						
Producer SCT (ISK mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Milk						
Producer SCT (ISK mn)	2 623	3 909	7 792	8 378	7 360	7 639
Percentage SCT	87.8	72.3	53.3	58.6	51.1	50.1
Producer NPC	9.45	3.89	2.10	2.38	1.99	1.94
Beef and Veal						
Producer SCT (ISK mn)	323	292	163	110	265	115
Percentage SCT	57	33	8	6	11	5
Producer NPC	2.40	1.58	1.03	1.00	1.08	1.00
Sheepmeat						
Producer SCT (ISK mn)	2 157	1 724	3 378	3 255	3 356	3 522
Percentage SCT	71.3	53.5	46.7	48.9	47.6	43.4
Producer NPC	3.57	1.51	1.00	1.00	1.00	1.00
Wool						
Producer SCT (ISK mn)	26	129	95	160	94	31
Percentage SCT	15.0	45.0	25.0	44.7	23.5	6.9
Producer NPC	1.20	2.05	1.44	1.88	1.34	1.09
Pigmeat						
Producer SCT (ISK mn)	346	446	432	265	365	665
Percentage SCT	74	49	22	15	21	30
Producer NPC	4.08	2.05	1.31	1.19	1.29	1.46
Poultry						
Producer SCT (ISK mn)	225	489	1 618	1 538	1 529	1 788
Percentage SCT	83.5	83.2	68.0	68.5	67.9	67.5
Producer NPC	6.38	6.39	3.20	3.26	3.19	3.14
Eggs						
Producer SCT (ISK mn)	304	410	479	432	454	552
Percentage SCT	81.4	73.4	53.4	47.9	54.4	57.8
Producer NPC	5.63	4.00	2.22	1.96	2.26	2.43
Other Commodities						
Producer SCT (ISK mn)[1]	1 429	1 135	743	585	469	1 177
Percentage SCT	73.1	41.5	33.9	40.7	35.0	26.1
Producer NPC	-4.21	1.90	2.21	3.40	2.47	0.77

.. Not available

Note: p: provisional; PSE: Producer Support Estimate; SCT: Single Commodity Transfers; NPC: Nominal Protection Coefficient.

1. The producer SCT for Other Commodities is the Total Producer SCT minus the sum of Producer SCTs for the commodities listed above.

Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932654866

Table III.15. **Israel: Producer Single Commodity Transfers**

ILS million

	1995-97	2009-11	2009	2010	2011p
Total PSE (ILS mn)	**2 466**	**3 404**	**3 078**	**3 367**	**3 766**
Total Producer SCT (ILS mn)	**1 664**	**2 803**	**2 477**	**2 773**	**3 158**
Share of Producer SCT in Total PSE (%)	**67**	**82**	**80**	**82**	**84**
Wheat					
Producer SCT (ILS mn)	20	30	49	14	28
Percentage SCT	16.2	21.7	31.7	13.2	20.3
Producer NPC	1.22	1.29	1.46	1.15	1.25
Maize					
Producer SCT (ILS mn)	..	..	..	..	..
Percentage SCT	..	..	..	..	..
Producer NPC	..	..	..	..	..
Other grains					
Producer SCT (ILS mn)	..	..	..	..	..
Percentage SCT	..	..	..	..	..
Producer NPC	..	..	..	..	..
Rice					
Producer SCT (ILS mn)	..	..	..	..	..
Percentage SCT	..	..	..	..	..
Producer NPC	..	..	..	..	..
Rapeseed					
Producer SCT (ILS mn)	..	..	..	..	..
Percentage SCT	..	..	..	..	..
Producer NPC	..	..	..	..	..
Sunflower					
Producer SCT (ILS mn)	..	..	..	..	..
Percentage SCT	..	..	..	..	..
Producer NPC	..	..	..	..	..
Soyabean					
Producer SCT (ILS mn)	..	..	..	..	..
Percentage SCT	..	..	..	..	..
Producer NPC	..	..	..	..	..
Sugar					
Producer SCT (ILS mn)	..	..	..	..	..
Percentage SCT	..	..	..	..	..
Producer NPC	..	..	..	..	..
Milk					
Producer SCT (ILS mn)	800	674	863	495	664
Percentage SCT	58.1	26.8	35.0	20.9	24.7
Producer NPC	2.48	1.38	1.55	1.27	1.34
Beef and Veal					
Producer SCT (ILS mn)	135	573	482	582	656
Percentage SCT	29.1	39.2	39.0	40.3	38.4
Producer NPC	1.42	1.66	1.66	1.68	1.63
Sheepmeat					
Producer SCT (ILS mn)	51	262	250	271	266
Percentage SCT	32.3	32.6	32.3	33.0	32.6
Producer NPC	1.50	1.50	1.50	1.50	1.50
Wool					
Producer SCT (ILS mn)	..	..	..	..	..
Percentage SCT	..	..	..	..	..
Producer NPC	..	..	..	..	..
Pigmeat					
Producer SCT (ILS mn)	..	..	..	..	..
Percentage SCT	..	..	..	..	..
Producer NPC	..	..	..	..	..
Poultry					
Producer SCT (ILS mn)	248	520	254	722	585
Percentage SCT	16.7	15.9	7.8	22.5	17.5
Producer NPC	1.26	1.22	1.13	1.31	1.24
Eggs					
Producer SCT (ILS mn)	35	33	-54	58	94
Percentage SCT	7.7	4.0	-7.0	7.6	11.3
Producer NPC	1.11	1.07	0.96	1.10	1.16
Other Commodities					
Producer SCT (ILS mn)[1]	375	710	634	632	865
Percentage SCT	4.8	4.2	3.7	3.6	5.2
Producer NPC	1.06	1.04	1.03	1.04	1.04

.. Not available

Note: p: provisional; PSE: Producer Support Estimate; SCT: Single Commodity Transfers; NPC: Nominal Protection Coefficient.

For Israel, the database starts in 1995.The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

1. The producer SCT for Other Commodities is the Total Producer SCT minus the sum of Producer SCTs for the commodities listed above.

Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932654885

Table III.16. **Japan: Producer Single Commodity Transfers**

JPY billion

	1986-88	1995-97	2009-11	2009	2010	2011p
Total PSE (JPY bn)	**7 267**	**6 239**	**4 688**	**4 348**	**4 846**	**4 870**
Total Producer SCT (JPY bn)	**6 740**	**5 822**	**4 111**	**3 810**	**4 232**	**4 289**
Share of Producer SCT in Total PSE (%)	**93**	**93**	**88**	**88**	**87**	**88**
Wheat						
Producer SCT (JPY bn)	135	61	31	28	28	37
Percentage SCT	84.7	81.2	47.3	42.0	48.1	51.7
Producer NPC	6.56	5.34	1.91	1.73	1.93	2.07
Maize						
Producer SCT (JPY bn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Other grains						
Producer SCT (JPY bn)	52	24	13	12	11	16
Percentage SCT	84.1	77.3	69.2	66.5	67.9	73.1
Producer NPC	6.30	4.49	3.27	2.98	3.11	3.72
Rice						
Producer SCT (JPY bn)	2 720	2 385	1 332	1 138	1 395	1 462
Percentage SCT	82.6	79.9	70.5	63.3	72.9	75.4
Producer NPC	5.81	5.12	3.13	2.71	3.30	3.37
Rapeseed						
Producer SCT (JPY bn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Sunflower						
Producer SCT (JPY bn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Soyabean						
Producer SCT (JPY bn)	29	5	13	7	7	24
Percentage SCT	64.7	19.8	25.2	15.7	18.7	41.1
Producer NPC	2.96	1.26	1.37	1.19	1.23	1.70
Sugar						
Producer SCT (JPY bn)	81	54	44	42	41	48
Percentage SCT	65.1	58.6	54.3	54.6	53.8	54.5
Producer NPC	2.88	2.42	2.19	2.20	2.16	2.20
Milk						
Producer SCT (JPY bn)	621	501	367	400	328	373
Percentage SCT	86.0	69.8	53.7	56.6	49.0	55.6
Producer NPC	7.43	3.40	2.17	2.30	1.96	2.25
Beef and Veal						
Producer SCT (JPY bn)	357	155	165	135	153	206
Percentage SCT	72	34	33	29	32	39
Producer NPC	3.65	1.53	1.50	1.41	1.47	1.64
Sheepmeat						
Producer SCT (JPY bn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Wool						
Producer SCT (JPY bn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Pigmeat						
Producer SCT (JPY bn)	285	255	353	353	350	355
Percentage SCT	41	51	69	72	68	67
Producer NPC	1.73	2.07	3.28	3.65	3.12	3.08
Poultry						
Producer SCT (JPY bn)	45	29	26	23	28	28
Percentage SCT	11.3	10.5	10.2	10.1	10.3	10.2
Producer NPC	1.13	1.12	1.12	1.12	1.12	1.12
Eggs						
Producer SCT (JPY bn)	70	71	64	60	62	69
Percentage SCT	17.0	16.1	14.9	14.9	14.4	15.3
Producer NPC	1.21	1.19	1.18	1.18	1.17	1.18
Other Commodities						
Producer SCT (JPY bn)[1]	2 345	2 282	1 705	1 613	1 830	1 672
Percentage SCT	52.9	48.4	41.7	39.8	45.7	39.6
Producer NPC	2.17	1.96	1.72	1.66	1.84	1.66

.. Not available

Note: p: provisional; PSE: Producer Support Estimate; SCT: Single Commodity Transfers; NPC: Nominal Protection Coefficient.

1. The producer SCT for Other Commodities is the Total Producer SCT minus the sum of Producer SCTs for the commodities listed above.

Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932654904

Table III.17. **Korea: Producer Single Commodity Transfers**

KRW billion

	1986-88	1995-97	2009-11	2009	2010	2011p
Total PSE (KRW bn)	**9 605**	**19 277**	**22 084**	**21 925**	**19 707**	**24 620**
Total Producer SCT (KRW bn)	**9 511**	**18 199**	**20 405**	**20 236**	**17 958**	**23 020**
Share of Producer SCT in Total PSE (%)	**99**	**94**	**92**	**92**	**91**	**94**
Wheat						
Producer SCT (KRW bn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Maize						
Producer SCT (KRW bn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Other grains						
Producer SCT (KRW bn)	220	208	59	91	49	36
Percentage SCT	72.8	79.4	54.7	55.9	59.0	49.0
Producer NPC	3.69	4.89	2.22	2.27	2.44	1.96
Rice						
Producer SCT (KRW bn)	4 509	6 886	4 473	4 962	3 690	4 766
Percentage SCT	82.0	82.1	52.0	52.9	46.9	56.2
Producer NPC	5.59	5.89	1.98	2.12	1.74	2.07
Rapeseed						
Producer SCT (KRW bn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Sunflower						
Producer SCT (KRW bn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Soyabean						
Producer SCT (KRW bn)	156	235	525	324	457	794
Percentage SCT	78.7	85.2	85.7	77.1	88.9	91.1
Producer NPC	4.75	6.97	8.22	4.36	9.02	11.28
Sugar						
Producer SCT (KRW bn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Milk						
Producer SCT (KRW bn)	306	512	891	984	794	894
Percentage SCT	67.8	59.9	50.9	56.6	46.9	49.2
Producer NPC	3.11	2.50	2.05	2.30	1.88	1.97
Beef and Veal						
Producer SCT (KRW bn)	496	1 294	1 228	1 241	1 243	1 199
Percentage SCT	54	65	31	31	31	31
Producer NPC	2.23	2.89	1.45	1.44	1.45	1.46
Sheepmeat						
Producer SCT (KRW bn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Wool						
Producer SCT (KRW bn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Pigmeat						
Producer SCT (KRW bn)	307	775	2 371	2 421	2 052	2 639
Percentage SCT	32	40	64	68	58	68
Producer NPC	1.50	1.69	2.85	3.08	2.38	3.10
Poultry						
Producer SCT (KRW bn)	132	385	649	628	636	682
Percentage SCT	49.4	56.5	46.2	46.4	45.2	47.1
Producer NPC	2.09	2.33	1.86	1.86	1.82	1.89
Eggs						
Producer SCT (KRW bn)	-28	63	137	156	76	180
Percentage SCT	-10.8	10.7	10.8	13.3	6.4	12.7
Producer NPC	0.92	1.12	1.12	1.15	1.07	1.15
Other Commodities						
Producer SCT (KRW bn)[1]	3 414	7 841	10 072	9 428	8 959	11 831
Percentage SCT	70.8	61.9	47.0	48.4	40.8	51.9
Producer NPC	4.60	2.73	1.90	1.94	1.69	2.08

.. Not available

Note: p: provisional; PSE: Producer Support Estimate; SCT: Single Commodity Transfers; NPC: Nominal Protection Coefficient.

1. The producer SCT for Other Commodities is the Total Producer SCT minus the sum of Producer SCTs for the commodities listed above.

Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932654923

Table III.18. **Mexico: Producer Single Commodity Transfers**

MXN million

	1991-93	1995-97	2009-11	2009	2010	2011p
Total PSE (MXN mn)	**25 995**	**12 953**	**77 915**	**81 074**	**75 802**	**76 871**
Total Producer SCT (MXN mn)	**21 975**	**630**	**34 395**	**37 236**	**32 934**	**33 015**
Share of Producer SCT in Total PSE (%)	**84**	**100**	**44**	**46**	**43**	**43**
Wheat						
Producer SCT (MXN mn)	492	-176	2 567	1 972	1 932	3 798
Percentage SCT	22.0	-7.6	18.0	17.1	16.2	20.6
Producer NPC	1.29	0.95	1.01	1.00	1.03	1.00
Maize						
Producer SCT (MXN mn)	5 225	-732	5 136	4 302	5 263	5 842
Percentage SCT	42.9	-2.7	7.7	8.0	8.3	6.8
Producer NPC	1.75	0.99	1.00	1.00	1.00	1.00
Other grains						
Producer SCT (MXN mn)	601	134	1 821	1 497	1 818	2 149
Percentage SCT	28.0	3.8	8.5	8.9	9.5	7.1
Producer NPC	1.39	1.04	1.00	1.00	1.00	1.00
Rice						
Producer SCT (MXN mn)	17	2	24	0	55	18
Percentage SCT	6.9	1.2	3.2	0.0	7.6	2.0
Producer NPC	1.08	1.02	1.03	1.00	1.08	1.02
Rapeseed						
Producer SCT (MXN mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Sunflower						
Producer SCT (MXN mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Soyabean						
Producer SCT (MXN mn)	75	-15	86	102	83	74
Percentage SCT	14.4	-7.1	9.4	14.7	8.9	4.6
Producer NPC	1.17	0.94	1.02	1.05	1.00	1.02
Sugar						
Producer SCT (MXN mn)	2 114	1 745	1 475	33	3 431	962
Percentage SCT	56.1	19.5	5.0	0.2	11.7	3.2
Producer NPC	2.07	1.28	1.05	1.00	1.13	1.03
Milk						
Producer SCT (MXN mn)	2 236	1 075	3 201	7 754	1 102	748
Percentage SCT	35.6	4.5	6.5	15.8	2.2	1.5
Producer NPC	1.62	1.07	1.08	1.19	1.02	1.02
Beef and Veal						
Producer SCT (MXN mn)	1 795	397	4 320	4 185	4 442	4 333
Percentage SCT	25	-1	9	9	9	9
Producer NPC	1.33	1.04	1.00	1.00	1.00	1.00
Sheepmeat						
Producer SCT (MXN mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Wool						
Producer SCT (MXN mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Pigmeat						
Producer SCT (MXN mn)	25	-1 305	1 562	2 002	662	2 022
Percentage SCT	1	-18	6	9	3	8
Producer NPC	1.06	0.86	1.05	1.07	1.00	1.08
Poultry						
Producer SCT (MXN mn)	1 685	1 992	6 083	6 581	5 091	6 578
Percentage SCT	33.1	11.2	10.2	11.3	8.6	10.6
Producer NPC	1.62	1.14	1.11	1.13	1.09	1.12
Eggs						
Producer SCT (MXN mn)	88	26	-43	-82	0	-46
Percentage SCT	2.5	0.2	-0.1	-0.2	0.0	-0.1
Producer NPC	1.05	1.00	1.00	1.00	1.00	1.00
Other Commodities						
Producer SCT (MXN mn)[1]	7 622	-2 514	8 161	8 891	9 055	6 538
Percentage SCT	18.7	-5.1	3.4	3.8	3.5	2.8
Producer NPC	1.22	0.98	1.03	1.04	1.04	1.03

.. Not available

Note: p: provisional; PSE: Producer Support Estimate; SCT: Single Commodity Transfers; NPC: Nominal Protection Coefficient.

1. The producer SCT for Other Commodities is the Total Producer SCT minus the sum of Producer SCTs for the commodities listed above.

Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932654942

Table III.19. **New Zealand: Producer Single Commodity Transfers**

NZD million

	1986-88	1995-97	2009-11	2009	2010	2011p
Total PSE (NZD mn)	**786**	**94**	**121**	**80**	**114**	**169**
Total Producer SCT (NZD mn)	**114**	**58**	**91**	**49**	**84**	**139**
Share of Producer SCT in Total PSE (%)	**20**	**61**	**72**	**61**	**74**	**82**
Wheat						
Producer SCT (NZD mn)	3	0	0	0	0	0
Percentage SCT	2.8	0.0	0.0	0.0	0.0	0.0
Producer NPC	1.03	1.00	1.00	1.00	1.00	1.00
Maize						
Producer SCT (NZD mn)	0	0	0	0	0	0
Percentage SCT	0.0	0.0	0.0	0.0	0.0	0.0
Producer NPC	1.00	1.00	1.00	1.00	1.00	1.00
Other grains						
Producer SCT (NZD mn)	0	0	0	0	0	0
Percentage SCT	0.0	0.0	0.0	0.0	0.0	0.0
Producer NPC	1.00	1.00	1.00	1.00	1.00	1.00
Rice						
Producer SCT (NZD mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Rapeseed						
Producer SCT (NZD mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Sunflower						
Producer SCT (NZD mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Soyabean						
Producer SCT (NZD mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Sugar						
Producer SCT (NZD mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Milk						
Producer SCT (NZD mn)	21	0	0	0	0	0
Percentage SCT	1.7	0.0	0.0	0.0	0.0	0.0
Producer NPC	1.02	1.00	1.00	1.00	1.00	1.00
Beef and Veal						
Producer SCT (NZD mn)	0	0	0	0	0	0
Percentage SCT	0	0	0	0	0	0
Producer NPC	1.00	1.00	1.00	1.00	1.00	1.00
Sheepmeat						
Producer SCT (NZD mn)	0	0	0	0	0	0
Percentage SCT	0.0	0.0	0.0	0.0	0.0	0.0
Producer NPC	1.00	1.00	1.00	1.00	1.00	1.00
Wool						
Producer SCT (NZD mn)	0	0	0	0	0	0
Percentage SCT	0.0	0.0	0.0	0.0	0.0	0.0
Producer NPC	1.00	1.00	1.00	1.00	1.00	1.00
Pigmeat						
Producer SCT (NZD mn)	2	0	0	0	0	0
Percentage SCT	2	0	0	0	0	0
Producer NPC	1.02	1.00	1.00	1.00	1.00	1.00
Poultry						
Producer SCT (NZD mn)	18	16	62	36	58	93
Percentage SCT	17.4	9.0	16.6	10.3	15.4	24.2
Producer NPC	1.25	1.10	1.21	1.11	1.18	1.32
Eggs						
Producer SCT (NZD mn)	40	26	7	0	7	14
Percentage SCT	48.5	29.6	5.1	0.0	5.0	10.2
Producer NPC	1.97	1.43	1.06	1.00	1.05	1.11
Other Commodities						
Producer SCT (NZD mn)[1]	32	16	22	13	19	33
Percentage SCT	1.7	0.6	0.4	0.3	0.4	0.7
Producer NPC	1.02	1.01	1.00	1.00	1.00	1.01

.. Not available

Note: p: provisional; PSE: Producer Support Estimate; SCT: Single Commodity Transfers; NPC: Nominal Protection Coefficient.

1. The producer SCT for Other Commodities is the Total Producer SCT minus the sum of Producer SCTs for the commodities listed above.

Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932654961

Table III.20. **Norway: Producer Single Commodity Transfers**

NOK million

	1986-88	1995-97	2009-11	2009	2010	2011p
Total PSE (NOK mn)	**19 175**	**19 246**	**21 759**	**21 437**	**22 145**	**21 696**
Total Producer SCT (NOK mn)	**13 877**	**12 013**	**11 949**	**11 853**	**12 535**	**11 457**
Share of Producer SCT in Total PSE (%)	**72**	**62**	**55**	**55**	**57**	**53**
Wheat						
Producer SCT (NOK mn)	330	320	315	340	337	269
Percentage SCT	73.1	51.6	43.4	51.8	44.1	34.2
Producer NPC	3.81	2.09	1.82	2.10	1.81	1.54
Maize						
Producer SCT (NOK mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Other grains						
Producer SCT (NOK mn)	1 838	943	792	880	920	576
Percentage SCT	76.8	53.1	46.0	55.9	51.4	30.6
Producer NPC	4.46	2.16	1.95	2.30	2.09	1.46
Rice						
Producer SCT (NOK mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Rapeseed						
Producer SCT (NOK mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Sunflower						
Producer SCT (NOK mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Soyabean						
Producer SCT (NOK mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Sugar						
Producer SCT (NOK mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Milk						
Producer SCT (NOK mn)	4 575	5 002	3 654	3 692	3 588	3 683
Percentage SCT	71.2	65.8	46.8	49.2	45.6	45.7
Producer NPC	6.20	3.36	1.78	1.95	1.71	1.68
Beef and Veal						
Producer SCT (NOK mn)	2 174	1 941	1 968	1 920	2 042	1 941
Percentage SCT	69	61	52	50	54	51
Producer NPC	4.44	2.96	2.26	2.21	2.32	2.25
Sheepmeat						
Producer SCT (NOK mn)	531	399	316	406	379	163
Percentage SCT	54.1	45.4	26.7	35.4	31.6	13.3
Producer NPC	3.64	2.05	1.50	1.71	1.58	1.22
Wool						
Producer SCT (NOK mn)	104	175	138	137	139	138
Percentage SCT	48.7	66.4	61.7	70.0	60.6	54.5
Producer NPC	2.01	2.98	2.69	3.33	2.54	2.20
Pigmeat						
Producer SCT (NOK mn)	1 138	732	1 424	1 228	1 595	1 448
Percentage SCT	46	34	44	41	49	43
Producer NPC	3.11	1.84	2.17	2.02	2.32	2.16
Poultry						
Producer SCT (NOK mn)	136	283	789	763	839	764
Percentage SCT	43.2	57.8	54.4	55.0	57.6	50.5
Producer NPC	3.96	3.14	2.63	2.83	2.75	2.30
Eggs						
Producer SCT (NOK mn)	447	225	406	290	424	503
Percentage SCT	52.6	38.4	43.9	34.3	47.0	50.4
Producer NPC	4.79	2.54	2.34	1.88	2.45	2.68
Other Commodities						
Producer SCT (NOK mn)[1]	2 604	1 993	2 147	2 196	2 273	1 972
Percentage SCT	54.7	47.7	39.4	41.2	41.3	35.8
Producer NPC	4.17	2.68	1.86	1.95	1.92	1.71

.. Not available

Note: p: provisional; PSE: Producer Support Estimate; SCT: Single Commodity Transfers; NPC: Nominal Protection Coefficient.

1. The producer SCT for Other Commodities is the Total Producer SCT minus the sum of Producer SCTs for the commodities listed above.

Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932654980

Table III.21. **Switzerland: Producer Single Commodity Transfers**

CHF million

	1986-88	1995-97	2009-11	2009	2010	2011p
Total PSE (CHF mn)	**8 335**	**7 240**	**5 728**	**6 256**	**5 427**	**5 500**
Total Producer SCT (CHF mn)	**7 120**	**4 951**	**2 557**	**3 116**	**2 243**	**2 312**
Share of Producer SCT in Total PSE (%)	**85**	**68**	**44**	**50**	**41**	**42**
Wheat						
Producer SCT (CHF mn)	417	333	56	36	91	41
Percentage SCT	76.0	54.1	21.8	13.8	36.0	15.6
Producer NPC	4.02	3.10	1.30	1.16	1.56	1.19
Maize						
Producer SCT (CHF mn)	102	63	14	15	17	10
Percentage SCT	70.9	52.8	24.2	24.4	31.6	16.6
Producer NPC	3.46	2.13	1.33	1.32	1.46	1.20
Other grains						
Producer SCT (CHF mn)	173	114	20	25	26	10
Percentage SCT	77.7	57.2	30.5	34.5	41.7	15.2
Producer NPC	4.53	2.45	1.47	1.53	1.72	1.18
Rice						
Producer SCT (CHF mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Rapeseed						
Producer SCT (CHF mn)	80	57	30	45	21	24
Percentage SCT	83.9	76.8	45.8	61.4	39.3	36.6
Producer NPC	6.45	4.32	1.94	2.59	1.65	1.58
Sunflower						
Producer SCT (CHF mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Soyabean						
Producer SCT (CHF mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Sugar						
Producer SCT (CHF mn)	95	111	24	54	17	0
Percentage SCT	72.9	71.4	16.2	33.6	15.1	0.0
Producer NPC	4.51	3.51	1.23	1.51	1.18	1.00
Milk						
Producer SCT (CHF mn)	2 771	2 129	568	963	299	443
Percentage SCT	85.5	64.9	25.8	42.9	14.0	20.7
Producer NPC	9.99	3.36	1.42	1.82	1.18	1.27
Beef and Veal						
Producer SCT (CHF mn)	1 311	645	505	486	480	547
Percentage SCT	75	55	44	42	42	47
Producer NPC	4.21	2.40	1.79	1.72	1.75	1.89
Sheepmeat						
Producer SCT (CHF mn)	36	41	12	17	12	8
Percentage SCT	67.7	63.0	28.1	38.5	28.1	17.8
Producer NPC	5.08	3.70	1.43	1.64	1.41	1.22
Wool						
Producer SCT (CHF mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Pigmeat						
Producer SCT (CHF mn)	704	450	450	509	448	393
Percentage SCT	44	39	47	50	47	44
Producer NPC	2.45	2.17	1.97	2.05	2.01	1.84
Poultry						
Producer SCT (CHF mn)	112	133	113	111	113	115
Percentage SCT	73.0	74.6	76.7	78.0	75.4	76.8
Producer NPC	6.08	6.10	4.75	4.91	4.77	4.57
Eggs						
Producer SCT (CHF mn)	184	134	129	114	134	137
Percentage SCT	78.6	72.2	70.2	66.0	70.6	74.0
Producer NPC	6.87	5.28	3.80	3.24	3.97	4.18
Other Commodities						
Producer SCT (CHF mn)[1]	1 135	740	637	743	584	583
Percentage SCT	72.5	57.5	35.4	40.8	32.1	33.4
Producer NPC	11.02	4.80	1.47	1.76	1.32	1.32

.. Not available

Note: p: provisional; PSE: Producer Support Estimate; SCT: Single Commodity Transfers; NPC: Nominal Protection Coefficient.

1. The producer SCT for Other Commodities is the Total Producer SCT minus the sum of Producer SCTs for the commodities listed above.

Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932654999

Table III.22. **Turkey: Producer Single Commodity Transfers**

TRY million

	1986-88	1995-97	2009-11	2009	2010	2011p
Total PSE (TRY mn)	**4**	**707**	**27 838**	**26 335**	**31 097**	**26 081**
Total Producer SCT (TRY mn)	**3**	**520**	**25 482**	**24 039**	**28 691**	**23 717**
Share of Producer SCT in Total PSE (%)	**78**	**73**	**91**	**91**	**92**	**91**
Wheat						
Producer SCT (TRY mn)	1	54	1 445	2 009	1 522	805
Percentage SCT	23.9	11.0	13.4	20.3	14.0	6.0
Producer NPC	1.36	1.14	1.16	1.25	1.16	1.06
Maize						
Producer SCT (TRY mn)	0	8	556	630	727	313
Percentage SCT	13.6	17.6	25.0	31.7	32.3	11.1
Producer NPC	1.16	1.23	1.36	1.46	1.48	1.12
Other grains						
Producer SCT (TRY mn)	0	21	912	1 235	1 124	376
Percentage SCT	23.1	13.0	30.4	45.2	36.1	10.0
Producer NPC	1.36	1.16	1.50	1.82	1.56	1.11
Rice						
Producer SCT (TRY mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Rapeseed						
Producer SCT (TRY mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Sunflower						
Producer SCT (TRY mn)	0	11	311	284	232	418
Percentage SCT	12.9	29.3	24.2	31.4	18.5	22.6
Producer NPC	1.16	1.43	1.33	1.46	1.23	1.29
Soyabean						
Producer SCT (TRY mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Sugar						
Producer SCT (TRY mn)	0	49	205	466	135	15
Percentage SCT	12.6	38.9	10.0	23.0	6.3	0.7
Producer NPC	1.11	1.67	1.12	1.29	1.06	1.00
Milk						
Producer SCT (TRY mn)	0	97	3 470	3 331	3 803	3 277
Percentage SCT	52.9	50.3	34.3	38.9	33.1	31.0
Producer NPC	2.49	2.16	1.60	1.76	1.56	1.47
Beef and Veal						
Producer SCT (TRY mn)	0	44	2 387	1 162	3 146	2 852
Percentage SCT	8	29	44	34	54	44
Producer NPC	1.19	1.54	1.79	1.57	2.13	1.67
Sheepmeat						
Producer SCT (TRY mn)	0	1	104	106	235	-28
Percentage SCT	11.2	4.8	10.4	10.5	23.9	-3.0
Producer NPC	1.17	1.09	1.28	1.30	1.53	1.00
Wool						
Producer SCT (TRY mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Pigmeat						
Producer SCT (TRY mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Poultry						
Producer SCT (TRY mn)	0	14	-61	1 134	-320	-996
Percentage SCT	-15.9	23.1	-4.6	29.6	-11.3	-32.0
Producer NPC	0.93	1.40	1.08	1.53	0.96	0.77
Eggs						
Producer SCT (TRY mn)	0	18	519	597	1 023	-63
Percentage SCT	10.6	30.5	17.1	22.6	31.4	-2.6
Producer NPC	1.21	1.59	1.33	1.42	1.59	0.99
Other Commodities						
Producer SCT (TRY mn)[1]	2	203	15 633	13 087	17 063	16 748
Percentage SCT	14.6	15.6	22.7	24.6	22.6	21.1
Producer NPC	1.17	1.16	1.11	1.15	1.13	1.06

.. Not available

Note: p: provisional; PSE: Producer Support Estimate; SCT: Single Commodity Transfers; NPC: Nominal Protection Coefficient.

1. The producer SCT for Other Commodities is the Total Producer SCT minus the sum of Producer SCTs for the commodities listed above.

Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932655018

Table III.23. **United States: Producer Single Commodity Transfers**

USD million

	1986-88	1995-97	2009-11	2009	2010	2011p
Total PSE (USD mn)	**36 411**	**26 614**	**30 395**	**33 016**	**27 591**	**30 579**
Total Producer SCT (USD mn)	**26 190**	**13 550**	**10 461**	**11 861**	**8 521**	**11 002**
Share of Producer SCT in Total PSE (%)	**71**	**51**	**34**	**36**	**31**	**36**
Wheat						
Producer SCT (USD mn)	4 337	545	1 175	1 610	801	1 114
Percentage SCT	46.5	5.2	8.7	13.0	6.0	7.1
Producer NPC	1.33	1.01	1.01	1.01	1.01	1.00
Maize						
Producer SCT (USD mn)	7 217	120	2 285	2 167	1 772	2 918
Percentage SCT	34.8	0.5	3.6	4.5	2.7	3.7
Producer NPC	1.13	1.00	1.00	1.00	1.00	1.00
Other grains						
Producer SCT (USD mn)	1 177	49	140	139	104	177
Percentage SCT	37.7	1.8	5.3	5.7	4.1	6.0
Producer NPC	1.35	1.00	1.00	1.00	1.00	1.00
Rice						
Producer SCT (USD mn)	816	168	55	49	62	54
Percentage SCT	50.2	8.2	1.8	1.5	2.0	2.0
Producer NPC	1.45	1.01	1.00	1.00	1.00	1.00
Rapeseed						
Producer SCT (USD mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Sunflower						
Producer SCT (USD mn)	..	..	..	..	..	..
Percentage SCT	..	..	..	..	..	..
Producer NPC	..	..	..	..	..	..
Soyabean						
Producer SCT (USD mn)	172	25	1 293	1 198	1 076	1 606
Percentage SCT	1.7	0.2	3.6	3.6	2.8	4.3
Producer NPC	1.01	1.00	1.00	1.00	1.00	1.00
Sugar						
Producer SCT (USD mn)	1 036	744	883	557	1 157	936
Percentage SCT	55.9	36.6	27.9	21.3	35.0	27.3
Producer NPC	2.31	1.60	1.38	1.26	1.52	1.36
Milk						
Producer SCT (USD mn)	6 340	7 500	2 209	3 282	1 593	1 752
Percentage SCT	34.9	35.2	7.6	13.2	5.1	4.5
Producer NPC	1.56	1.57	1.08	1.15	1.05	1.05
Beef and Veal						
Producer SCT (USD mn)	258	-3	0	0	0	0
Percentage SCT	1	0	0	0	0	0
Producer NPC	1.02	1.00	1.00	1.00	1.00	1.00
Sheepmeat						
Producer SCT (USD mn)	5	3	38	31	37	46
Percentage SCT	1.1	0.8	9.0	9.0	9.0	9.0
Producer NPC	1.01	1.01	1.10	1.10	1.10	1.10
Wool						
Producer SCT (USD mn)	79	13	5	7	6	1
Percentage SCT	47.8	12.9	13.1	22.0	15.0	2.4
Producer NPC	1.01	1.01	1.16	1.28	1.18	1.02
Pigmeat						
Producer SCT (USD mn)	-66	-2	0	0	0	0
Percentage SCT	-1	0	0	0	0	0
Producer NPC	1.00	1.00	1.00	1.00	1.00	1.00
Poultry						
Producer SCT (USD mn)	725	65	188	550	14	0
Percentage SCT	8.8	0.4	0.7	2.1	0.0	0.0
Producer NPC	1.11	1.00	1.00	1.00	1.00	1.00
Eggs						
Producer SCT (USD mn)	136	133	0	0	0	0
Percentage SCT	4.4	3.3	0.0	0.0	0.0	0.0
Producer NPC	1.06	1.04	1.00	1.00	1.00	1.00
Other Commodities						
Producer SCT (USD mn)[1]	3 957	4 190	2 190	2 273	1 898	2 398
Percentage SCT	8.8	6.5	2.5	2.7	2.1	2.6
Producer NPC	1.11	1.06	1.01	1.02	1.01	1.01

.. Not available

Note: p: provisional; PSE: Producer Support Estimate; SCT: Single Commodity Transfers; NPC: Nominal Protection Coefficient.

1. The producer SCT for Other Commodities is the Total Producer SCT minus the sum of Producer SCTs for the commodities listed above.

Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932655037

Table III.24. **OECD: Consumer Single Commodity Transfers (USD)**

	1986-88	1995-97	2009-11	2009	2010	2011p
Total CSE (USD mn)	**-159 908**	**-170 431**	**-84 842**	**-90 558**	**-82 899**	**-81 070**
Total Consumer SCT (USD mn)[1]	**-173 163**	**-189 570**	**-124 162**	**-126 251**	**-122 904**	**-123 330**
Wheat						
Consumer SCT (USD mn)	-12 472	-8 446	-574	-984	-566	-171
Consumer NPC	2.06	1.31	1.02	1.03	1.01	1.00
Maize						
Consumer SCT (USD mn)	-1 979	-304	-91	-103	-137	-35
Consumer NPC	1.24	1.04	1.00	1.01	1.01	1.00
Other grains						
Consumer SCT (USD mn)	-4 329	-3 195	-1 034	-1 235	-1 165	-703
Consumer NPC	2.08	1.30	1.08	1.12	1.10	1.04
Rice						
Consumer SCT (USD mn)	-23 427	-29 660	-17 490	-16 200	-17 273	-18 997
Consumer NPC	4.96	4.32	2.25	2.11	2.27	2.36
Rapeseed						
Consumer SCT (USD mn)	-515	-189	-164	-233	-115	-143
Consumer NPC	1.35	1.06	1.01	1.02	1.01	1.01
Sunflower						
Consumer SCT (USD mn)	-61	-160	-79	-90	-25	-122
Consumer NPC	1.07	1.07	1.02	1.03	1.01	1.02
Soybeans						
Consumer SCT (USD mn)	-216	-432	-471	-243	-432	-740
Consumer NPC	1.02	1.02	1.01	1.01	1.01	1.02
Sugar						
Consumer SCT (USD mn)	-7 285	-7 515	-3 991	-3 463	-4 688	-3 823
Consumer NPC	2.46	1.92	1.34	1.34	1.39	1.29
Milk						
Consumer SCT (USD mn)	-38 523	-38 969	-15 371	-17 229	-13 859	-15 026
Consumer NPC	2.79	1.88	1.15	1.19	1.13	1.12
Beef and Veal						
Consumer SCT (USD mn)	-18 231	-16 496	-12 262	-14 832	-11 080	-10 875
Consumer NPC	1.41	1.27	1.13	1.18	1.11	1.10
Sheepmeat						
Consumer SCT (USD mn)	-3 561	-2 597	-1 100	-1 729	-1 396	-176
Consumer NPC	2.06	1.47	1.14	1.24	1.16	1.02
Wool						
Consumer SCT (USD mn)	-8	0	2	1	2	3
Consumer NPC	1.04	1.02	1.01	1.01	1.00	1.00
Pigmeat						
Consumer SCT (USD mn)	-7 121	-7 981	-11 585	-10 784	-11 194	-12 776
Consumer NPC	1.20	1.16	1.18	1.19	1.18	1.18
Poultry						
Consumer SCT (USD mn)	-4 509	-5 303	-7 497	-9 154	-6 859	-6 479
Consumer NPC	1.25	1.18	1.15	1.20	1.13	1.12
Eggs						
Consumer SCT (USD mn)	-3 849	-2 631	-1 735	-1 665	-1 893	-1 647
Consumer NPC	1.35	1.17	1.07	1.07	1.08	1.06
Other Commodities						
Consumer SCT (USD mn)[2]	-47 077	-65 692	-50 718	-48 309	-52 224	-51 621
Consumer NPC	1.31	1.30	1.14	1.14	1.14	1.13

Note: p: provisional. CSE: Consumer Support Estimate. SCT: Single Commodity Transfers. NPC: Nominal Protection Coefficient.

1. May differ from the Total CSE by the amount of subsidies to consumers which are not specific to a single commodity.
2. The Consumer SCT for Other Commodities is the Total Consumer SCT minus the sum of Consumer SCTs for the commodities listed above.

Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932655056

Table III.25. **OECD: Consumer Single Commodity Transfers (EUR)**

	1986-88	1995-97	2009-11	2009	2010	2011p
Total CSE (EUR mn)	**-144 721**	**-137 388**	**-62 026**	**-65 184**	**-62 592**	**-58 302**
Total Consumer SCT (EUR mn)[1]	**-156 744**	**-152 929**	**-90 789**	**-90 875**	**-92 798**	**-88 694**
Wheat						
Consumer SCT (EUR mn)	-11 289	-6 820	-420	-708	-427	-123
Consumer NPC	2.06	1.31	1.02	1.03	1.01	1.00
Maize						
Consumer SCT (EUR mn)	-1 796	-239	-67	-74	-103	-25
Consumer NPC	1.24	1.04	1.00	1.01	1.01	1.00
Other grains						
Consumer SCT (EUR mn)	-3 924	-2 564	-758	-889	-879	-505
Consumer NPC	2.08	1.30	1.08	1.12	1.10	1.04
Rice						
Consumer SCT (EUR mn)	-21 229	-23 846	-12 788	-11 661	-13 042	-13 662
Consumer NPC	4.96	4.32	2.25	2.11	2.27	2.36
Rapeseed						
Consumer SCT (EUR mn)	-465	-151	-119	-168	-87	-103
Consumer NPC	1.35	1.06	1.01	1.02	1.01	1.01
Sunflower						
Consumer SCT (EUR mn)	-58	-132	-57	-65	-19	-88
Consumer NPC	1.07	1.07	1.02	1.03	1.01	1.02
Soybeans						
Consumer SCT (EUR mn)	-193	-349	-344	-175	-326	-532
Consumer NPC	1.02	1.02	1.01	1.01	1.01	1.02
Sugar						
Consumer SCT (EUR mn)	-6 632	-6 099	-2 927	-2 492	-3 539	-2 749
Consumer NPC	2.46	1.92	1.34	1.34	1.39	1.29
Milk						
Consumer SCT (EUR mn)	-34 971	-31 581	-11 224	-12 401	-10 464	-10 806
Consumer NPC	2.79	1.88	1.15	1.19	1.13	1.12
Beef and Veal						
Consumer SCT (EUR mn)	-16 575	-13 390	-8 954	-10 676	-8 366	-7 821
Consumer NPC	1.41	1.27	1.13	1.18	1.11	1.10
Sheepmeat						
Consumer SCT (EUR mn)	-3 205	-2 079	-808	-1 245	-1 054	-126
Consumer NPC	2.06	1.47	1.14	1.24	1.16	1.02
Wool						
Consumer SCT (EUR mn)	-7	0	2	1	2	2
Consumer NPC	1.04	1.02	1.01	1.01	1.00	1.00
Pigmeat						
Consumer SCT (EUR mn)	-6 302	-6 380	-8 468	-7 763	-8 452	-9 188
Consumer NPC	1.20	1.16	1.18	1.19	1.18	1.18
Poultry						
Consumer SCT (EUR mn)	-4 017	-4 263	-5 476	-6 589	-5 179	-4 659
Consumer NPC	1.25	1.18	1.15	1.20	1.13	1.12
Eggs						
Consumer SCT (EUR mn)	-3 487	-2 106	-1 271	-1 198	-1 430	-1 184
Consumer NPC	1.35	1.17	1.07	1.07	1.08	1.06
Other Commodities						
Consumer SCT (EUR mn)[2]	-42 593	-52 930	-37 109	-34 773	-39 431	-37 124
Consumer NPC	1.31	1.30	1.14	1.14	1.14	1.13

Note: p: provisional. CSE: Consumer Support Estimate. SCT: Single Commodity Transfers. NPC: Nominal Protection Coefficient.

1. May differ from the Total CSE by the amount of subsidies to consumers which are not specific to a single commodity.
2. The Consumer SCT for Other Commodities is the Total Consumer SCT minus the sum of Consumer SCTs for the commodities listed above.

Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932655075

Table III.26. **Australia: Consumer Single Commodity Transfers**

	1986-88	1995-97	2009-11	2009	2010	2011p
Total CSE (AUD mn)	**-848**	**-386**	**-83**	**-248**	**0**	**0**
Total Consumer SCT (AUD mn)[1]	**-848**	**-386**	**-83**	**-248**	**0**	**0**
Wheat						
Consumer SCT (AUD mn)	-16	-6	0	0	0	0
Consumer NPC	1.05	1.01	1.00	1.00	1.00	1.00
Maize						
Consumer SCT (AUD mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Other grains						
Consumer SCT (AUD mn)	0	0	0	0	0	0
Consumer NPC	1.00	1.00	1.00	1.00	1.00	1.00
Rice						
Consumer SCT (AUD mn)	-4	-2	0	0	0	0
Consumer NPC	1.13	1.02	1.00	1.00	1.00	1.00
Rapeseed						
Consumer SCT (AUD mn)	0	0	0	0	0	0
Consumer NPC	1.00	1.00	1.00	1.00	1.00	1.00
Sunflower						
Consumer SCT (AUD mn)	0	0	0	0	0	0
Consumer NPC	1.00	1.00	1.00	1.00	1.00	1.00
Soybeans						
Consumer SCT (AUD mn)	0	0	0	0	0	0
Consumer NPC	1.00	1.00	1.00	1.00	1.00	1.00
Sugar						
Consumer SCT (AUD mn)	-66	-30	0	0	0	0
Consumer NPC	1.12	1.03	1.00	1.00	1.00	1.00
Milk						
Consumer SCT (AUD mn)	-590	-246	-83	-248	0	0
Consumer NPC	2.71	1.22	1.00	1.00	1.00	1.00
Beef and Veal						
Consumer SCT (AUD mn)	0	0	0	0	0	0
Consumer NPC	1.00	1.00	1.00	1.00	1.00	1.00
Sheepmeat						
Consumer SCT (AUD mn)	-5	0	0	0	0	0
Consumer NPC	1.01	1.00	1.00	1.00	1.00	1.00
Wool						
Consumer SCT (AUD mn)	-1	-1	0	0	0	0
Consumer NPC	1.01	1.01	1.00	1.00	1.00	1.00
Pigmeat						
Consumer SCT (AUD mn)	-1	0	0	0	0	0
Consumer NPC	1.00	1.00	1.00	1.00	1.00	1.00
Poultry						
Consumer SCT (AUD mn)	0	0	0	0	0	0
Consumer NPC	1.00	1.00	1.00	1.00	1.00	1.00
Eggs						
Consumer SCT (AUD mn)	-43	-2	0	0	0	0
Consumer NPC	1.18	1.01	1.00	1.00	1.00	1.00
Other Commodities						
Consumer SCT (AUD mn)[2]	-121	-98	0	0	0	0
Consumer NPC	1.13	1.03	1.00	1.00	1.00	1.00

.. Not available

Note: p: provisional. CSE: Consumer Support Estimate. SCT: Single Commodity Transfers. NPC: Nominal Protection Coefficient.

1. May differ from the Total CSE by the amount of subsidies to consumers which are not specific to a single commodity.
2. Total Consumer SCT minus the sum of Consumer SCTs for the commodities listed above.

Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932655094

Table III.27. **Canada: Consumer Single Commodity Transfers**

	1986-88	1995-97	2009-11	2009	2010	2011p
Total CSE (CAD mn)	**-3 758**	**-2 415**	**-4 845**	**-5 061**	**-4 954**	**-4 521**
Total Consumer SCT (CAD mn)[1]	**-3 758**	**-2 415**	**-4 845**	**-5 061**	**-4 954**	**-4 521**
Wheat						
Consumer SCT (CAD mn)	-259	6	0	0	0	0
Consumer NPC	1.54	1.00	1.00	1.00	1.00	1.00
Maize						
Consumer SCT (CAD mn)	-2	-1	0	0	0	0
Consumer NPC	1.02	1.00	1.00	1.00	1.00	1.00
Other grains						
Consumer SCT (CAD mn)	11	0	0	0	0	0
Consumer NPC	1.83	1.00	1.00	1.00	1.00	1.00
Rice						
Consumer SCT (CAD mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Rapeseed						
Consumer SCT (CAD mn)	-46	0	0	0	0	0
Consumer NPC	1.11	1.00	1.00	1.00	1.00	1.00
Sunflower						
Consumer SCT (CAD mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Soybeans						
Consumer SCT (CAD mn)	0	0	0	0	0	0
Consumer NPC	1.00	1.00	1.00	1.00	1.00	1.00
Sugar						
Consumer SCT (CAD mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Milk						
Consumer SCT (CAD mn)	-2 566	-1 850	-3 378	-3 650	-3 594	-2 891
Consumer NPC	5.81	1.94	2.12	2.35	2.26	1.76
Beef and Veal						
Consumer SCT (CAD mn)	-62	0	0	0	0	0
Consumer NPC	1.02	1.00	1.00	1.00	1.00	1.00
Sheepmeat						
Consumer SCT (CAD mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Wool						
Consumer SCT (CAD mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Pigmeat						
Consumer SCT (CAD mn)	0	0	0	0	0	0
Consumer NPC	1.00	1.00	1.00	1.00	1.00	1.00
Poultry						
Consumer SCT (CAD mn)	-157	-47	-543	-457	-361	-810
Consumer NPC	1.19	1.03	1.29	1.23	1.18	1.44
Eggs						
Consumer SCT (CAD mn)	-90	-139	-124	-115	-157	-98
Consumer NPC	1.28	1.31	1.21	1.19	1.28	1.14
Other Commodities						
Consumer SCT (CAD mn)[2]	-588	-384	-801	-839	-843	-722
Consumer NPC	1.18	1.08	1.12	1.14	1.13	1.10

.. Not available

Note: p: provisional. CSE: Consumer Support Estimate. SCT: Single Commodity Transfers. NPC: Nominal Protection Coefficient.

1. May differ from the Total CSE by the amount of subsidies to consumers which are not specific to a single commodity.
2. Total Consumer SCT minus the sum of Consumer SCTs for the commodities listed above.

Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932655113

Table III.28. **Chile: Consumer Single Commodity Transfers**

	1995-97	2009-11	2009	2010	2011p
Total CSE (CLP mn)	**-172 494**	**-37 813**	**-83 443**	**-17 735**	**-12 260**
Total Consumer SCT (CLP mn)[1]	**-172 494**	**-37 813**	**-83 443**	**-17 735**	**-12 260**
Wheat					
Consumer SCT (CLP mn)	-9 500	0	0	0	0
Consumer NPC	1.07	1.00	1.00	1.00	1.00
Maize					
Consumer SCT (CLP mn)	-3 946	-2 619	-3 833	-4 025	0
Consumer NPC	1.05	1.02	1.03	1.04	1.00
Other grains					
Consumer SCT (CLP mn)	..	..	..	..	..
Consumer NPC	..	..	..	..	..
Rice					
Consumer SCT (CLP mn)	..	..	..	..	..
Consumer NPC	..	..	..	..	..
Rapeseed					
Consumer SCT (CLP mn)	..	..	..	..	..
Consumer NPC	..	..	..	..	..
Sunflower					
Consumer SCT (CLP mn)	..	..	..	..	..
Consumer NPC	..	..	..	..	..
Soybeans					
Consumer SCT (CLP mn)	..	..	..	..	..
Consumer NPC	..	..	..	..	..
Sugar					
Consumer SCT (CLP mn)	-39 910	-8 281	-6 644	-8 224	-9 975
Consumer NPC	1.39	1.03	1.03	1.03	1.03
Milk					
Consumer SCT (CLP mn)	-34 353	-16 109	-48 326	0	0
Consumer NPC	1.24	1.06	1.17	1.00	1.00
Beef and Veal					
Consumer SCT (CLP mn)	-23 036	0	0	0	0
Consumer NPC	1.10	1.00	1.00	1.00	1.00
Sheepmeat					
Consumer SCT (CLP mn)	..	..	..	..	..
Consumer NPC	..	..	..	..	..
Wool					
Consumer SCT (CLP mn)	..	..	..	..	..
Consumer NPC	..	..	..	..	..
Pigmeat					
Consumer SCT (CLP mn)	0	0	0	0	0
Consumer NPC	1.00	1.00	1.00	1.00	1.00
Poultry					
Consumer SCT (CLP mn)	0	0	0	0	0
Consumer NPC	1.00	1.00	1.00	1.00	1.00
Eggs					
Consumer SCT (CLP mn)	..	..	..	..	..
Consumer NPC	..	..	..	..	..
Other Commodities					
Consumer SCT (CLP mn)[2]	-61 749	-10 804	-24 640	-5 486	-2 285
Consumer NPC	1.07	1.01	1.02	1.00	1.00

.. Not available

Note: p: provisional. CSE: Consumer Support Estimate. SCT: Single Commodity Transfers. NPC: Nominal Protection Coefficient. For Chile, the database starts in 1995.

1. May differ from the Total CSE by the amount of subsidies to consumers which are not specific to a single commodity.
2. Total Consumer SCT minus the sum of Consumer SCTs for the commodities listed above.

Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932655132

Table III.29. **European Union: Consumer Single Commodity Transfers (EU27)**

	1986-88	1995-97	2009-11	2009	2010	2011p
Total CSE (EUR mn)	**-65 589**	**-46 625**	**-12 497**	**-20 046**	**-10 488**	**-6 957**
Total Consumer SCT (EUR mn)[1]	**-66 496**	**-47 426**	**-13 812**	**-21 307**	**-12 011**	**-8 119**
Wheat						
Consumer SCT (EUR mn)	-4 244	-263	0	0	0	0
Consumer NPC	2.14	1.05	1.00	1.00	1.00	1.00
Maize						
Consumer SCT (EUR mn)	-1 371	-421	0	0	0	0
Consumer NPC	2.20	1.28	1.00	1.00	1.00	1.00
Other grains						
Consumer SCT (EUR mn)	-1 271	-243	-20	0	-61	0
Consumer NPC	2.34	1.19	1.01	1.00	1.02	1.00
Rice						
Consumer SCT (EUR mn)	-398	-252	-1	0	0	-2
Consumer NPC	2.50	1.50	1.00	1.00	1.00	1.00
Rapeseed						
Consumer SCT (EUR mn)	15	0	0	0	0	0
Consumer NPC	1.00	1.00	1.00	1.00	1.00	1.00
Sunflower						
Consumer SCT (EUR mn)	12	0	0	0	0	0
Consumer NPC	1.00	1.00	1.00	1.00	1.00	1.00
Soybeans						
Consumer SCT (EUR mn)	4	0	0	0	0	0
Consumer NPC	1.00	1.00	1.00	1.00	1.00	1.00
Sugar						
Consumer SCT (EUR mn)	-2 779	-2 547	-152	-456	1	1
Consumer NPC	3.35	2.33	1.06	1.18	1.00	1.00
Milk						
Consumer SCT (EUR mn)	-17 622	-16 027	104	114	64	135
Consumer NPC	4.56	2.07	1.00	1.00	1.00	1.00
Beef and Veal						
Consumer SCT (EUR mn)	-9 696	-7 185	-3 145	-6 544	-1 443	-1 450
Consumer NPC	2.07	1.66	1.17	1.40	1.07	1.06
Sheepmeat						
Consumer SCT (EUR mn)	-2 993	-1 914	-570	-1 089	-620	0
Consumer NPC	2.70	1.71	1.14	1.29	1.14	1.00
Wool						
Consumer SCT (EUR mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Pigmeat						
Consumer SCT (EUR mn)	-1 675	-1 727	-585	-929	-827	0
Consumer NPC	1.13	1.08	1.02	1.03	1.03	1.00
Poultry						
Consumer SCT (EUR mn)	-2 078	-2 382	-3 738	-4 705	-3 616	-2 893
Consumer NPC	1.46	1.51	1.42	1.59	1.40	1.27
Eggs						
Consumer SCT (EUR mn)	-1 958	-552	-77	-109	-57	-66
Consumer NPC	1.64	1.14	1.01	1.01	1.01	1.01
Other Commodities						
Consumer SCT (EUR mn)[2]	-20 442	-13 914	-5 628	-7 589	-5 452	-3 843
Consumer NPC	1.42	1.19	1.04	1.06	1.04	1.03

.. Not available

Note: p: provisional. CSE: Consumer Support Estimate. SCT: Single Commodity Transfers. NPC: Nominal Protection Coefficient. EU12 for 1986-94 including ex-GDR from 1990; EU15 for 1995-2003; EU25 for 2004-06 and EU27 from 2007.

1. May differ from the Total CSE by the amount of subsidies to consumers which are not specific to a single commodity.
2. Total Consumer SCT minus the sum of Consumer SCTs for the commodities listed above.

Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932655151

Table III.30. **Iceland: Consumer Single Commodity Transfers**

	1986-88	1995-97	2009-11	2009	2010	2011p
Total CSE (ISK mn)	**-4 566**	**-4 012**	**-4 069**	**-5 324**	**-4 394**	**-2 490**
Total Consumer SCT (ISK mn)[1]	**-4 566**	**-4 012**	**-4 069**	**-5 324**	**-4 394**	**-2 490**
Wheat						
Consumer SCT (ISK mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Maize						
Consumer SCT (ISK mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Other grains						
Consumer SCT (ISK mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Rice						
Consumer SCT (ISK mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Rapeseed						
Consumer SCT (ISK mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Sunflower						
Consumer SCT (ISK mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Soybeans						
Consumer SCT (ISK mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Sugar						
Consumer SCT (ISK mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Milk						
Consumer SCT (ISK mn)	-1 664	-1 369	-2 184	-2 924	-1 809	-1 818
Consumer NPC	9.45	2.01	1.39	1.58	1.31	1.29
Beef and Veal						
Consumer SCT (ISK mn)	-208	-281	-51	0	-154	0
Consumer NPC	2.40	1.58	1.03	1.00	1.08	1.00
Sheepmeat						
Consumer SCT (ISK mn)	-747	-3	0	0	0	0
Consumer NPC	3.57	1.11	1.00	1.00	1.00	1.00
Wool						
Consumer SCT (ISK mn)	98	106	272	196	269	351
Consumer NPC	1.20	2.05	1.44	1.88	1.34	1.09
Pigmeat						
Consumer SCT (ISK mn)	-316	-456	-446	-288	-382	-668
Consumer NPC	3.81	2.05	1.31	1.19	1.29	1.46
Poultry						
Consumer SCT (ISK mn)	-192	-466	-1 640	-1 554	-1 610	-1 757
Consumer NPC	5.80	6.39	3.20	3.26	3.19	3.14
Eggs						
Consumer SCT (ISK mn)	-261	-383	-483	-424	-464	-562
Consumer NPC	5.37	4.00	2.22	1.96	2.26	2.43
Other Commodities						
Consumer SCT (ISK mn)[2]	-1 277	-1 160	464	-330	-244	1 964
Consumer NPC	4.44	1.82	1.56	1.46	1.35	1.86

.. Not available

Note: p: provisional. CSE: Consumer Support Estimate. SCT: Single Commodity Transfers. NPC: Nominal Protection Coefficient.

1. May differ from the Total CSE by the amount of subsidies to consumers which are not specific to a single commodity.
2. Total Consumer SCT minus the sum of Consumer SCTs for the commodities listed above.

Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932655170

Table III.31. **Israel: Consumer Single Commodity Transfers**

	1995-97	2009-11	2009	2010	2011p
Total CSE (ILS mn)	**-2 072**	**-3 064**	**-2 886**	**-3 045**	**-3 260**
Total Consumer SCT (ILS mn)[1]	**-2 072**	**-3 064**	**-2 886**	**-3 045**	**-3 260**
Wheat					
Consumer SCT (ILS mn)	-57	-193	-271	-98	-211
Consumer NPC	1.22	1.29	1.46	1.15	1.25
Maize					
Consumer SCT (ILS mn)	..	..	..	..	..
Consumer NPC	..	..	..	..	..
Other grains					
Consumer SCT (ILS mn)	..	..	..	..	..
Consumer NPC	..	..	..	..	..
Rice					
Consumer SCT (ILS mn)	..	..	..	..	..
Consumer NPC	..	..	..	..	..
Rapeseed					
Consumer SCT (ILS mn)	..	..	..	..	..
Consumer NPC	..	..	..	..	..
Sunflower					
Consumer SCT (ILS mn)	..	..	..	..	..
Consumer NPC	..	..	..	..	..
Soybeans					
Consumer SCT (ILS mn)	..	..	..	..	..
Consumer NPC	..	..	..	..	..
Sugar					
Consumer SCT (ILS mn)	..	..	..	..	..
Consumer NPC	..	..	..	..	..
Milk					
Consumer SCT (ILS mn)	-783	-664	-853	-475	-665
Consumer NPC	2.48	1.38	1.55	1.27	1.34
Beef and Veal					
Consumer SCT (ILS mn)	-309	-840	-700	-919	-901
Consumer NPC	1.42	1.66	1.66	1.68	1.63
Sheepmeat					
Consumer SCT (ILS mn)	-63	-246	-222	-276	-240
Consumer NPC	1.50	1.50	1.50	1.50	1.50
Wool					
Consumer SCT (ILS mn)	..	..	..	..	..
Consumer NPC	..	..	..	..	..
Pigmeat					
Consumer SCT (ILS mn)	..	..	..	..	..
Consumer NPC	..	..	..	..	..
Poultry					
Consumer SCT (ILS mn)	-304	-489	-340	-597	-529
Consumer NPC	1.24	1.22	1.12	1.30	1.23
Eggs					
Consumer SCT (ILS mn)	-8	5	85	-13	-58
Consumer NPC	1.02	1.00	0.90	1.02	1.08
Other Commodities					
Consumer SCT (ILS mn)[2]	-548	-637	-585	-667	-657
Consumer NPC	1.14	1.07	1.07	1.07	1.07

.. Not available

Note: p: provisional. CSE: Consumer Support Estimate. SCT: Single Commodity Transfers. NPC: Nominal Protection Coefficient.
For Israel, the database starts in 1995.The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

1. May differ from the Total CSE by the amount of subsidies to consumers which are not specific to a single commodity.
2. Total Consumer SCT minus the sum of Consumer SCTs for the commodities listed above.

Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932655189

Table III.32. **Japan: Consumer Single Commodity Transfers**

	1986-88	1995-97	2009-11	2009	2010	2011p
Total CSE (JPY bn)	**-8 910**	**-8 080**	**-5 117**	**-4 993**	**-5 280**	**-5 077**
Total Consumer SCT (JPY bn)[1]	**-8 910**	**-8 080**	**-5 117**	**-4 993**	**-5 280**	**-5 077**
Wheat						
Consumer SCT (JPY bn)	-897	-780	0	0	0	0
Consumer NPC	6.56	5.34	1.00	1.00	1.00	1.00
Maize						
Consumer SCT (JPY bn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Other grains						
Consumer SCT (JPY bn)	-304	-269	-74	-90	-78	-54
Consumer NPC	6.18	4.36	2.15	2.26	2.26	1.92
Rice						
Consumer SCT (JPY bn)	-2 559	-2 230	-1 192	-1 150	-1 258	-1 168
Consumer NPC	5.61	4.93	3.12	2.68	3.30	3.37
Rapeseed						
Consumer SCT (JPY bn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Sunflower						
Consumer SCT (JPY bn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Soybeans						
Consumer SCT (JPY bn)	0	0	0	0	0	0
Consumer NPC	1.00	1.00	1.00	1.00	1.00	1.00
Sugar						
Consumer SCT (JPY bn)	-267	-171	-138	-131	-144	-140
Consumer NPC	2.50	2.34	15.16	31.91	6.23	7.33
Milk						
Consumer SCT (JPY bn)	-776	-679	-509	-552	-454	-519
Consumer NPC	7.06	3.27	2.08	2.21	1.88	2.15
Beef and Veal						
Consumer SCT (JPY bn)	-558	-355	-301	-296	-295	-313
Consumer NPC	3.65	1.46	1.38	1.38	1.38	1.38
Sheepmeat						
Consumer SCT (JPY bn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Wool						
Consumer SCT (JPY bn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Pigmeat						
Consumer SCT (JPY bn)	-356	-414	-644	-638	-636	-659
Consumer NPC	1.73	2.07	3.26	3.65	3.11	3.02
Poultry						
Consumer SCT (JPY bn)	-51	-42	-35	-30	-38	-36
Consumer NPC	1.13	1.12	1.12	1.12	1.12	1.12
Eggs						
Consumer SCT (JPY bn)	-71	-73	-64	-60	-65	-68
Consumer NPC	1.20	1.19	1.17	1.17	1.17	1.17
Other Commodities						
Consumer SCT (JPY bn)[2]	-3 072	-3 068	-2 159	-2 047	-2 312	-2 120
Consumer NPC	2.21	2.00	1.73	1.70	1.76	1.72

.. Not available

Note: p: provisional. CSE: Consumer Support Estimate. SCT: Single Commodity Transfers. NPC: Nominal Protection Coefficient.

1. May differ from the Total CSE by the amount of subsidies to consumers which are not specific to a single commodity.
2. Total Consumer SCT minus the sum of Consumer SCTs for the commodities listed above.

Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932655208

Table III.33. **Korea: Consumer Single Commodity Transfers**

	1986-88	1995-97	2009-11	2009	2010	2011p
Total CSE (KRW bn)	**-9 425**	**-19 748**	**-24 206**	**-21 835**	**-21 026**	**-29 757**
Total Consumer SCT (KRW bn)[1]	**-9 481**	**-20 002**	**-24 232**	**-21 877**	**-21 044**	**-29 774**
Wheat						
Consumer SCT (KRW bn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Maize						
Consumer SCT (KRW bn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Other grains						
Consumer SCT (KRW bn)	-210	-209	-60	-92	-50	-38
Consumer NPC	3.42	3.50	1.41	1.54	1.44	1.26
Rice						
Consumer SCT (KRW bn)	-4 452	-6 933	-4 397	-4 990	-3 391	-4 808
Consumer NPC	5.59	5.89	1.98	2.12	1.74	2.07
Rapeseed						
Consumer SCT (KRW bn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Sunflower						
Consumer SCT (KRW bn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Soybeans						
Consumer SCT (KRW bn)	-175	-264	-543	-309	-499	-820
Consumer NPC	1.72	1.65	1.67	1.28	1.67	2.05
Sugar						
Consumer SCT (KRW bn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Milk						
Consumer SCT (KRW bn)	-302	-604	-1 426	-1 428	-1 215	-1 635
Consumer NPC	3.11	2.50	2.05	2.30	1.88	1.97
Beef and Veal						
Consumer SCT (KRW bn)	-495	-2 046	-1 735	-1 581	-1 835	-1 789
Consumer NPC	2.23	2.89	1.45	1.44	1.45	1.46
Sheepmeat						
Consumer SCT (KRW bn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Wool						
Consumer SCT (KRW bn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Pigmeat						
Consumer SCT (KRW bn)	-303	-781	-2 949	-2 423	-2 470	-3 954
Consumer NPC	1.50	1.69	2.85	3.08	2.38	3.10
Poultry						
Consumer SCT (KRW bn)	-132	-398	-783	-720	-762	-867
Consumer NPC	2.09	2.33	1.86	1.86	1.82	1.89
Eggs						
Consumer SCT (KRW bn)	28	-63	-138	-157	-76	-180
Consumer NPC	0.92	1.12	1.12	1.15	1.07	1.15
Other Commodities						
Consumer SCT (KRW bn)[2]	-3 439	-8 704	-12 202	-10 176	-10 746	-15 683
Consumer NPC	2.74	2.71	1.88	1.90	1.67	2.07

.. Not available

Note: p: provisional. CSE: Consumer Support Estimate. SCT: Single Commodity Transfers. NPC: Nominal Protection Coefficient.

1. May differ from the Total CSE by the amount of subsidies to consumers which are not specific to a single commodity.
2. Total Consumer SCT minus the sum of Consumer SCTs for the commodities listed above.

Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932655227

Table III.34. **Mexico: Consumer Single Commodity Transfers**

	1991-93	1995-97	2009-11	2009	2010	2011p
Total CSE (MXN mn)	**-19 400**	**-760**	**-16 478**	**-19 903**	**-17 102**	**-12 431**
Total Consumer SCT (MXN mn)[1]	**-19 403**	**-765**	**-18 300**	**-21 384**	**-19 088**	**-14 427**
Wheat						
Consumer SCT (MXN mn)	189	375	0	0	0	0
Consumer NPC	1.24	0.99	1.00	1.00	1.00	1.00
Maize						
Consumer SCT (MXN mn)	-4 659	2 016	0	0	0	0
Consumer NPC	1.70	0.99	1.00	1.00	1.00	1.00
Other grains						
Consumer SCT (MXN mn)	-68	227	0	0	0	0
Consumer NPC	1.21	1.03	1.00	1.00	1.00	1.00
Rice						
Consumer SCT (MXN mn)	-30	-66	-18	0	-55	0
Consumer NPC	1.06	1.06	1.01	1.00	1.02	1.00
Rapeseed						
Consumer SCT (MXN mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Sunflower						
Consumer SCT (MXN mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Soybeans						
Consumer SCT (MXN mn)	-229	-857	0	0	0	0
Consumer NPC	1.19	1.13	1.00	1.00	1.00	1.00
Sugar						
Consumer SCT (MXN mn)	-1 699	-2 724	-2 312	0	-5 602	-1 333
Consumer NPC	1.98	1.51	1.10	1.00	1.24	1.06
Milk						
Consumer SCT (MXN mn)	-1 013	1 516	-1 990	-6 435	73	391
Consumer NPC	1.51	1.06	1.07	1.16	1.02	1.01
Beef and Veal						
Consumer SCT (MXN mn)	-1 816	-389	0	0	0	0
Consumer NPC	1.32	1.03	1.00	1.00	1.00	1.00
Sheepmeat						
Consumer SCT (MXN mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Wool						
Consumer SCT (MXN mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Pigmeat						
Consumer SCT (MXN mn)	-275	1 302	-1 135	-1 489	0	-1 917
Consumer NPC	1.07	0.86	1.04	1.05	1.00	1.06
Poultry						
Consumer SCT (MXN mn)	-1 955	-1 966	-6 133	-6 677	-5 091	-6 630
Consumer NPC	1.58	1.13	1.10	1.11	1.08	1.10
Eggs						
Consumer SCT (MXN mn)	-152	0	0	0	0	0
Consumer NPC	1.05	1.00	1.00	1.00	1.00	1.00
Other Commodities						
Consumer SCT (MXN mn)[2]	-7 696	-200	-6 711	-6 783	-8 413	-4 939
Consumer NPC	1.34	0.99	1.03	1.04	1.04	1.02

.. Not available

Note: p: provisional. CSE: Consumer Support Estimate. SCT: Single Commodity Transfers. NPC: Nominal Protection Coefficient.

1. May differ from the Total CSE by the amount of subsidies to consumers which are not specific to a single commodity.
2. Total Consumer SCT minus the sum of Consumer SCTs for the commodities listed above.

Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932655246

Table III.35. **New Zealand: Consumer Single Commodity Transfers**

	1986-88	1995-97	2009-11	2009	2010	2011p
Total CSE (NZD mn)	**-110**	**-51**	**-88**	**-49**	**-80**	**-135**
Total Consumer SCT (NZD mn)[1]	**-110**	**-51**	**-88**	**-49**	**-80**	**-135**
Wheat						
Consumer SCT (NZD mn)	0	0	0	0	0	0
Consumer NPC	1.00	1.00	1.00	1.00	1.00	1.00
Maize						
Consumer SCT (NZD mn)	0	0	0	0	0	0
Consumer NPC	1.00	1.00	1.00	1.00	1.00	1.00
Other grains						
Consumer SCT (NZD mn)	0	0	0	0	0	0
Consumer NPC	1.00	1.00	1.00	1.00	1.00	1.00
Rice						
Consumer SCT (NZD mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Rapeseed						
Consumer SCT (NZD mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Sunflower						
Consumer SCT (NZD mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Soybeans						
Consumer SCT (NZD mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Sugar						
Consumer SCT (NZD mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Milk						
Consumer SCT (NZD mn)	-21	0	0	0	0	0
Consumer NPC	1.09	1.00	1.00	1.00	1.00	1.00
Beef and Veal						
Consumer SCT (NZD mn)	0	0	0	0	0	0
Consumer NPC	1.00	1.00	1.00	1.00	1.00	1.00
Sheepmeat						
Consumer SCT (NZD mn)	0	0	0	0	0	0
Consumer NPC	1.00	1.00	1.00	1.00	1.00	1.00
Wool						
Consumer SCT (NZD mn)	0	0	0	0	0	0
Consumer NPC	1.00	1.00	1.00	1.00	1.00	1.00
Pigmeat						
Consumer SCT (NZD mn)	-2	0	0	0	0	0
Consumer NPC	1.02	1.00	1.00	1.00	1.00	1.00
Poultry						
Consumer SCT (NZD mn)	-16	-16	-61	-36	-56	-92
Consumer NPC	1.25	1.10	1.21	1.11	1.18	1.32
Eggs						
Consumer SCT (NZD mn)	-40	-22	-5	0	-5	-11
Consumer NPC	1.97	1.43	1.06	1.00	1.05	1.11
Other Commodities						
Consumer SCT (NZD mn)[2]	-31	-14	-21	-13	-18	-32
Consumer NPC	1.07	1.02	1.02	1.01	1.02	1.04

.. Not available

Note: p: provisional. CSE: Consumer Support Estimate. SCT: Single Commodity Transfers. NPC: Nominal Protection Coefficient.

1. May differ from the Total CSE by the amount of subsidies to consumers which are not specific to a single commodity.
2. Total Consumer SCT minus the sum of Consumer SCTs for the commodities listed above.

Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932655265

Table III.36. **Norway: Consumer Single Commodity Transfers**

	1986-88	1995-97	2009-11	2009	2010	2011p
Total CSE (NOK mn)	**-9 141**	**-8 343**	**-9 958**	**-10 265**	**-10 269**	**-9 340**
Total Consumer SCT (NOK mn)[1]	**-9 141**	**-8 343**	**-9 958**	**-10 265**	**-10 269**	**-9 340**
Wheat						
Consumer SCT (NOK mn)	-121	-332	-249	-307	-261	-180
Consumer NPC	2.05	2.21	1.80	2.18	1.75	1.47
Maize						
Consumer SCT (NOK mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Other grains						
Consumer SCT (NOK mn)	-609	-252	2	-101	-152	259
Consumer NPC	4.07	2.14	1.83	2.14	1.97	1.36
Rice						
Consumer SCT (NOK mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Rapeseed						
Consumer SCT (NOK mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Sunflower						
Consumer SCT (NOK mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Soybeans						
Consumer SCT (NOK mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Sugar						
Consumer SCT (NOK mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Milk						
Consumer SCT (NOK mn)	-700	-2 654	-2 367	-2 629	-2 235	-2 237
Consumer NPC	3.37	2.36	1.63	1.79	1.57	1.54
Beef and Veal						
Consumer SCT (NOK mn)	-1 665	-1 436	-1 868	-1 796	-1 911	-1 897
Consumer NPC	3.40	2.35	2.01	1.97	2.06	2.00
Sheepmeat						
Consumer SCT (NOK mn)	-356	-171	-145	-248	-209	21
Consumer NPC	2.53	1.44	1.20	1.36	1.26	0.98
Wool						
Consumer SCT (NOK mn)	-55	0	0	0	0	0
Consumer NPC	2.01	1.00	1.00	1.00	1.00	1.00
Pigmeat						
Consumer SCT (NOK mn)	-1 487	-969	-1 628	-1 445	-1 723	-1 716
Consumer NPC	2.99	1.80	2.11	1.98	2.27	2.09
Poultry						
Consumer SCT (NOK mn)	-256	-321	-901	-931	-904	-867
Consumer NPC	3.96	3.14	2.60	2.81	2.73	2.28
Eggs						
Consumer SCT (NOK mn)	-590	-299	-493	-373	-505	-600
Consumer NPC	4.48	2.45	2.30	1.84	2.42	2.64
Other Commodities						
Consumer SCT (NOK mn)[2]	-3 302	-1 909	-2 309	-2 434	-2 369	-2 125
Consumer NPC	3.24	2.13	1.82	1.93	1.85	1.69

.. Not available

Note: p: provisional. CSE: Consumer Support Estimate. SCT: Single Commodity Transfers. NPC: Nominal Protection Coefficient.

1. May differ from the Total CSE by the amount of subsidies to consumers which are not specific to a single commodity.
2. Total Consumer SCT minus the sum of Consumer SCTs for the commodities listed above.

Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932655284

Table III.37. **Switzerland: Consumer Single Commodity Transfers**

	1986-88	1995-97	2009-11	2009	2010	2011p
Total CSE (CHF mn)	**-7 609**	**-4 910**	**-2 848**	**-3 680**	**-2 496**	**-2 366**
Total Consumer SCT (CHF mn)[1]	**-7 889**	**-5 039**	**-2 853**	**-3 690**	**-2 497**	**-2 370**
Wheat						
Consumer SCT (CHF mn)	-538	-399	-96	-59	-157	-71
Consumer NPC	4.02	3.10	1.30	1.16	1.56	1.19
Maize						
Consumer SCT (CHF mn)	-139	-32	-18	-17	-25	-11
Consumer NPC	3.46	2.13	1.33	1.32	1.46	1.20
Other grains						
Consumer SCT (CHF mn)	-265	-62	-22	-23	-32	-11
Consumer NPC	4.53	2.45	1.47	1.53	1.72	1.18
Rice						
Consumer SCT (CHF mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Rapeseed						
Consumer SCT (CHF mn)	-313	-252	-167	-253	-120	-127
Consumer NPC	6.45	4.32	1.94	2.59	1.65	1.58
Sunflower						
Consumer SCT (CHF mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Soybeans						
Consumer SCT (CHF mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Sugar						
Consumer SCT (CHF mn)	-143	-146	-37	-84	-27	0
Consumer NPC	4.51	3.51	1.23	1.51	1.18	1.00
Milk						
Consumer SCT (CHF mn)	-1 900	-1 102	-297	-696	-41	-155
Consumer NPC	9.85	3.27	1.24	1.59	1.02	1.10
Beef and Veal						
Consumer SCT (CHF mn)	-1 382	-712	-555	-533	-532	-598
Consumer NPC	4.21	2.40	1.79	1.72	1.75	1.89
Sheepmeat						
Consumer SCT (CHF mn)	-106	-102	-25	-34	-24	-16
Consumer NPC	5.08	3.70	1.43	1.64	1.41	1.22
Wool						
Consumer SCT (CHF mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Pigmeat						
Consumer SCT (CHF mn)	-908	-651	-491	-548	-505	-421
Consumer NPC	2.45	2.17	1.97	2.05	2.01	1.84
Poultry						
Consumer SCT (CHF mn)	-301	-298	-232	-231	-236	-230
Consumer NPC	6.08	6.10	4.75	4.91	4.77	4.57
Eggs						
Consumer SCT (CHF mn)	-399	-299	-264	-238	-278	-276
Consumer NPC	6.87	5.28	3.80	3.24	3.97	4.18
Other Commodities						
Consumer SCT (CHF mn)[2]	-1 495	-985	-649	-973	-521	-453
Consumer NPC	4.52	2.89	1.46	1.77	1.33	1.30

.. Not available

Note: p: provisional. CSE: Consumer Support Estimate. SCT: Single Commodity Transfers. NPC: Nominal Protection Coefficient.

1. May differ from the Total CSE by the amount of subsidies to consumers which are not specific to a single commodity.
2. Total Consumer SCT minus the sum of Consumer SCTs for the commodities listed above.

Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932655303

Table III.38. **Turkey: Consumer Single Commodity Transfers**

	1986-88	1995-97	2009-11	2009	2010	2011p
Total CSE (CHF mn)	**-7 609**	**-4 910**	**-2 848**	**-3 680**	**-2 496**	**-2 366**
Total Consumer SCT (CHF mn)[1]	**-7 889**	**-5 039**	**-2 853**	**-3 690**	**-2 497**	**-2 370**
Wheat						
Consumer SCT (CHF mn)	-538	-399	-96	-59	-157	-71
Consumer NPC	4.02	3.10	1.30	1.16	1.56	1.19
Maize						
Consumer SCT (CHF mn)	-139	-32	-18	-17	-25	-11
Consumer NPC	3.46	2.13	1.33	1.32	1.46	1.20
Other grains						
Consumer SCT (CHF mn)	-265	-62	-22	-23	-32	-11
Consumer NPC	4.53	2.45	1.47	1.53	1.72	1.18
Rice						
Consumer SCT (CHF mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Rapeseed						
Consumer SCT (CHF mn)	-313	-252	-167	-253	-120	-127
Consumer NPC	6.45	4.32	1.94	2.59	1.65	1.58
Sunflower						
Consumer SCT (CHF mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Soybeans						
Consumer SCT (CHF mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Sugar						
Consumer SCT (CHF mn)	-143	-146	-37	-84	-27	0
Consumer NPC	4.51	3.51	1.23	1.51	1.18	1.00
Milk						
Consumer SCT (CHF mn)	-1 900	-1 102	-297	-696	-41	-155
Consumer NPC	9.85	3.27	1.24	1.59	1.02	1.10
Beef and Veal						
Consumer SCT (CHF mn)	-1 382	-712	-555	-533	-532	-598
Consumer NPC	4.21	2.40	1.79	1.72	1.75	1.89
Sheepmeat						
Consumer SCT (CHF mn)	-106	-102	-25	-34	-24	-16
Consumer NPC	5.08	3.70	1.43	1.64	1.41	1.22
Wool						
Consumer SCT (CHF mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Pigmeat						
Consumer SCT (CHF mn)	-908	-651	-491	-548	-505	-421
Consumer NPC	2.45	2.17	1.97	2.05	2.01	1.84
Poultry						
Consumer SCT (CHF mn)	-301	-298	-232	-231	-236	-230
Consumer NPC	6.08	6.10	4.75	4.91	4.77	4.57
Eggs						
Consumer SCT (CHF mn)	-399	-299	-264	-238	-278	-276
Consumer NPC	6.87	5.28	3.80	3.24	3.97	4.18
Other Commodities						
Consumer SCT (CHF mn)[2]	-1 495	-985	-649	-973	-521	-453
Consumer NPC	4.52	2.89	1.46	1.77	1.33	1.30

.. Not available

Note: p: provisional. CSE: Consumer Support Estimate. SCT: Single Commodity Transfers. NPC: Nominal Protection Coefficient.

1. May differ from the Total CSE by the amount of subsidies to consumers which are not specific to a single commodity.
2. Total Consumer SCT minus the sum of Consumer SCTs for the commodities listed above.

Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932655322

Table III.39. **United States: Consumer Single Commodity Transfers**

	1986-88	1995-97	2009-11	2009	2010	2011p
Total CSE (USD mn)	**-3 794**	**4 452**	**32 372**	**28 590**	**32 794**	**35 732**
Total Consumer SCT (USD mn)[1]	**-13 872**	**-13 284**	**-5 082**	**-5 282**	**-5 141**	**-4 823**
Wheat						
Consumer SCT (USD mn)	-353	-26	0	0	0	0
Consumer NPC	1.20	1.01	1.00	1.00	1.00	1.00
Maize						
Consumer SCT (USD mn)	0	0	0	0	0	0
Consumer NPC	1.00	1.00	1.00	1.00	1.00	1.00
Other grains						
Consumer SCT (USD mn)	-100	-4	0	0	0	0
Consumer NPC	1.22	1.00	1.00	1.00	1.00	1.00
Rice						
Consumer SCT (USD mn)	-5	-1	0	0	0	0
Consumer NPC	1.01	1.00	1.00	1.00	1.00	1.00
Rapeseed						
Consumer SCT (USD mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Sunflower						
Consumer SCT (USD mn)	..	..	..	..	..	..
Consumer NPC	..	..	..	..	..	..
Soybeans						
Consumer SCT (USD mn)	0	0	0	0	0	0
Consumer NPC	1.00	1.00	1.00	1.00	1.00	1.00
Sugar						
Consumer SCT (USD mn)	-1 997	-1 624	-1 843	-1 097	-2 488	-1 944
Consumer NPC	3.18	2.00	1.63	1.43	1.87	1.60
Milk						
Consumer SCT (USD mn)	-6 181	-7 576	-1 917	-2 672	-1 382	-1 698
Consumer NPC	1.56	1.57	1.07	1.13	1.05	1.05
Beef and Veal						
Consumer SCT (USD mn)	-378	0	0	0	0	0
Consumer NPC	1.02	1.00	1.00	1.00	1.00	1.00
Sheepmeat						
Consumer SCT (USD mn)	-6	-4	-74	-57	-71	-94
Consumer NPC	1.01	1.01	1.10	1.10	1.10	1.10
Wool						
Consumer SCT (USD mn)	-2	-1	0	0	0	0
Consumer NPC	1.01	1.01	1.01	1.01	1.01	1.00
Pigmeat						
Consumer SCT (USD mn)	0	0	0	0	0	0
Consumer NPC	1.00	1.00	1.00	1.00	1.00	1.00
Poultry						
Consumer SCT (USD mn)	-727	-56	0	0	0	0
Consumer NPC	1.11	1.00	1.00	1.00	1.00	1.00
Eggs						
Consumer SCT (USD mn)	-140	-111	0	0	0	0
Consumer NPC	1.06	1.04	1.00	1.00	1.00	1.00
Other Commodities						
Consumer SCT (USD mn)[2]	-3 983	-3 881	-1 247	-1 455	-1 200	-1 087
Consumer NPC	1.11	1.08	1.02	1.02	1.02	1.02

.. Not available

Note: p: provisional. CSE: Consumer Support Estimate. SCT: Single Commodity Transfers. NPC: Nominal Protection Coefficient.

1. May differ from the Total CSE by the amount of subsidies to consumers which are not specific to a single commodity.
2. Total Consumer SCT minus the sum of Consumer SCTs for the commodities listed above.

Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932655341

Table III.40. **Australia: Payments made on the basis of area, animal numbers, receipts or income**

AUD million

	1986-88	1995-97	2009-11	2009	2010	2011p
Payments based on current A/An/R/I, production required	**0**	**19**	**181**	**76**	**234**	**234**
Share in total PSE (%)	0	1	13	6	18	16
Payments based on area	0	0	0	0	0	0
Payments based on animal numbers	0	0	0	0	0	0
Payments based on farm receipts	0	0	0	0	0	0
Payments based on farm income	0	19	181	76	234	234
Payments based on non-current A/An/R/I, production required	**0**	**0**	**0**	**0**	**0**	**0**
Share in total PSE (%)	0	0	0	0	0	0
Payments based on area	0	0	0	0	0	0
Payments based on animal numbers	0	0	0	0	0	0
Payments based on farm receipts	0	0	0	0	0	0
Payments based on farm income	0	0	0	0	0	0
Payments based on non-current A/An/R/I, production not required	**250**	**227**	**509**	**460**	**433**	**636**
Share in total PSE (%)	13	14	37	36	33	42
Payments based on area	0	34	107	93	114	114
Payments based on animal numbers	0	0	0	0	0	0
Payments based on farm receipts	0	0	0	0	0	0
Payments based on farm income	250	193	402	367	319	522

Note: A (area planted) / An (animal numbers) / R (receipts) / I (income).
Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932655360

Table III.41. **Canada: Payments made on the basis of area, animal numbers, receipts or income**

CAD million

	1986-88	1995-97	2009-11	2009	2010	2011p
Payments based on current A/An/R/I, production required	**1 787**	**840**	**2 042**	**2 165**	**2 004**	**1 957**
Share in total PSE (%)	22	17	28	28	27	28
Payments based on area	1 075	223	759	675	731	872
Payments based on animal numbers	81	159	261	324	332	128
Payments based on farm receipts	632	396	319	301	250	408
Payments based on farm income	0	63	702	866	692	548
Payments based on non-current A/An/R/I, production required	**0**	**0**	**138**	**17**	**396**	**2**
Share in total PSE (%)	0	0	2	0	5	0
Payments based on area	0	0	106	6	312	2
Payments based on animal numbers	0	0	32	11	84	0
Payments based on farm receipts	0	0	0	0	0	0
Payments based on farm income	0	0	0	0	0	0
Payments based on non-current A/An/R/I, production not required	**0**	**790**	**197**	**217**	**5**	**369**
Share in total PSE (%)	0	15	3	3	0	5
Payments based on area	0	755	123	3	3	362
Payments based on animal numbers	0	0	28	77	0	7
Payments based on farm receipts	0	35	3	8	0	0
Payments based on farm income	0	0	44	130	2	0

Note: A (area planted) / An (animal numbers) / R (receipts) / I (income).
Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932655379

Table III.42. **Chile: Payments made on the basis of area, animal numbers, receipts or income**

CLP million

	1995-97	2009-11	2009	2010	2011p
Payments based on current A/An/R/I, production required	**4 158**	**1 323**	**809**	**2 858**	**301**
Share in total PSE (%)	2	1	0	2	0
Payments based on area	4 158	1 323	809	2 858	301
Payments based on animal numbers	0	0	0	0	0
Payments based on farm receipts	0	0	0	0	0
Payments based on farm income	0	0	0	0	0
Payments based on non-current A/An/R/I, production required	**0**	**0**	**0**	**0**	**0**
Share in total PSE (%)	0	0	0	0	0
Payments based on area	0	0	0	0	0
Payments based on animal numbers	0	0	0	0	0
Payments based on farm receipts	0	0	0	0	0
Payments based on farm income	0	0	0	0	0
Payments based on non-current A/An/R/I, production not required	**0**	**0**	**0**	**0**	**0**
Share in total PSE (%)	0	0	0	0	0
Payments based on area	0	0	0	0	0
Payments based on animal numbers	0	0	0	0	0
Payments based on farm receipts	0	0	0	0	0
Payments based on farm income	0	0	0	0	0

Note: A (area planted) / An (animal numbers) / R (receipts) / I (income).
For Chile, the database starts in 1995.
Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932655398

Table III.43. **European Union: Payments made on the basis of area, animal numbers, receipts or income (EU27)**

EUR million

	1986-88	1995-97	2009-11	2009	2010	2011p
Payments based on current A/An/R/I, production required	**3 195**	**29 775**	**14 516**	**15 779**	**13 876**	**13 893**
Share in total PSE (%)	4	32	18	18	18	19
Payments based on area	515	20 609	10 636	11 662	10 114	10 132
Payments based on animal numbers	2 548	9 101	3 190	3 543	2 979	3 049
Payments based on farm receipts	91	47	287	225	339	296
Payments based on farm income	41	18	403	349	445	417
Payments based on non-current A/An/R/I, production required	**0**	**0**	**151**	**169**	**176**	**108**
Share in total PSE (%)	0	0	0	0	0	0
Payments based on area	0	0	151	169	176	108
Payments based on animal numbers	0	0	0	0	0	0
Payments based on farm receipts	0	0	0	0	0	0
Payments based on farm income	0	0	0	0	0	0
Payments based on non-current A/An/R/I, production not required	**0**	**24**	**36 300**	**34 276**	**36 885**	**37 737**
Share in total PSE (%)	0	0	46	40	48	51
Payments based on area	0	24	13 481	12 847	13 413	14 182
Payments based on animal numbers	0	0	0	0	0	0
Payments based on farm receipts	0	0	22 819	21 429	23 472	23 555
Payments based on farm income	0	0	0	0	0	0

Note: A (area planted) / An (animal numbers) / R (receipts) / I (income).
EU12 for 1986-94 including ex-GDR from 1990; EU15 for 1995-2003; EU25 for 2004-06 and EU27 from 2007.
Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932655417

Table III.44. **Iceland: Payments made on the basis of area, animal numbers, receipts or income**

income

ISK million

	1986-88	1995-97	2009-11	2009	2010	2011p
Payments based on current A/An/R/I, production required	**0**	**0**	**561**	**542**	**556**	**586**
Share in total PSE (%)	0	0	4	3	4	4
Payments based on area	0	0	2	0	2	4
Payments based on animal numbers	0	0	559	542	553	581
Payments based on farm receipts	0	0	0	0	0	0
Payments based on farm income	0	0	0	0	0	0
Payments based on non-current A/An/R/I, production required	**0**	**1 011**	**3 318**	**3 220**	**3 285**	**3 449**
Share in total PSE (%)	0	12	22	21	22	21
Payments based on area	0	0	0	0	0	0
Payments based on animal numbers	0	1 011	3 318	3 220	3 285	3 449
Payments based on farm receipts	0	0	0	0	0	0
Payments based on farm income	0	0	0	0	0	0
Payments based on non-current A/An/R/I, production not required	**48**	**14**	**0**	**0**	**0**	**0**
Share in total PSE (%)	1	0	0	0	0	0
Payments based on area	0	0	0	0	0	0
Payments based on animal numbers	48	14	0	0	0	0
Payments based on farm receipts	0	0	0	0	0	0
Payments based on farm income	0	0	0	0	0	0

Note: A (area planted) / An (animal numbers) / R (receipts) / I (income).
Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932655436

Table III.45. **Israel: Payments made on the basis of area, animal numbers, receipts or income**

ILS million

	1995-97	2009-11	2009	2010	2011p
Payments based on current A/An/R/I, production required	**102**	**169**	**174**	**169**	**163**
Share in total PSE (%)	4	5	6	5	4
Payments based on area	5	23	19	23	27
Payments based on animal numbers	0	0	0	0	0
Payments based on farm receipts	0	0	0	0	0
Payments based on farm income	97	146	155	146	136
Payments based on non-current A/An/R/I, production required	**0**	**0**	**0**	**0**	**0**
Share in total PSE (%)	0	0	0	0	0
Payments based on area	0	0	0	0	0
Payments based on animal numbers	0	0	0	0	0
Payments based on farm receipts	0	0	0	0	0
Payments based on farm income	0	0	0	0	0
Payments based on non-current A/An/R/I, production not required	**56**	**34**	**35**	**32**	**35**
Share in total PSE (%)	2	1	1	1	1
Payments based on area	0	0	0	0	0
Payments based on animal numbers	0	0	0	0	0
Payments based on farm receipts	0	0	0	0	0
Payments based on farm income	56	34	35	32	35

Note: A (area planted) / An (animal numbers) / R (receipts) / I (income).
For Israel, the database starts in 1995.The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932655455

Table III.46. **Japan: Payments made on the basis of area, animal numbers, receipts or income**

JPY billion

	1986-88	1995-97	2009-11	2009	2010	2011p
Payments based on current A/An/R/I, production required	**0**	**0**	**260**	**84**	**279**	**418**
Share in total PSE (%)	0	0	5	2	6	9
Payments based on area	0	0	182	8	202	335
Payments based on animal numbers	0	0	0	0	0	0
Payments based on farm receipts	0	0	0	0	0	0
Payments based on farm income	0	0	79	76	76	84
Payments based on non-current A/An/R/I, production required	**0**	**0**	**0**	**0**	**0**	**0**
Share in total PSE (%)	0	0	0	0	0	0
Payments based on area	0	0	0	0	0	0
Payments based on animal numbers	0	0	0	0	0	0
Payments based on farm receipts	0	0	0	0	0	0
Payments based on farm income	0	0	0	0	0	0
Payments based on non-current A/An/R/I, production not required	**228**	**119**	**345**	**308**	**360**	**366**
Share in total PSE (%)	3	2	7	7	7	8
Payments based on area	228	119	345	308	360	366
Payments based on animal numbers	0	0	0	0	0	0
Payments based on farm receipts	0	0	0	0	0	0
Payments based on farm income	0	0	0	0	0	0

Note: A (area planted) / An (animal numbers) / R (receipts) / I (income).
Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932655474

Table III.47. **Korea: Payments made on the basis of area, animal numbers, receipts or income**

KRW billion

	1986-88	1995-97	2009-11	2009	2010	2011p
Payments based on current A/An/R/I, production required	**24**	**206**	**783**	**347**	**903**	**1 099**
Share in total PSE (%)	0	1	4	2	5	4
Payments based on area	0	0	514	52	649	840
Payments based on animal numbers	0	11	0	0	0	0
Payments based on farm receipts	11	14	0	0	0	0
Payments based on farm income	13	182	269	295	253	259
Payments based on non-current A/An/R/I, production required	**0**	**0**	**0**	**0**	**0**	**0**
Share in total PSE (%)	0	0	0	0	0	0
Payments based on area	0	0	0	0	0	0
Payments based on animal numbers	0	0	0	0	0	0
Payments based on farm receipts	0	0	0	0	0	0
Payments based on farm income	0	0	0	0	0	0
Payments based on non-current A/An/R/I, production not required	**0**	**0**	**673**	**653**	**707**	**658**
Share in total PSE (%)	0	0	3	3	4	3
Payments based on area	0	0	673	653	707	658
Payments based on animal numbers	0	0	0	0	0	0
Payments based on farm receipts	0	0	0	0	0	0
Payments based on farm income	0	0	0	0	0	0

Note: A (area planted) / An (animal numbers) / R (receipts) / I (income).
Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932655493

Table III.48. **Mexico: Payments made on the basis of area, animal numbers, receipts or income**

income

MXN million

	1991-93	1995-97	2009-11	2009	2010	2011p
Payments based on current A/An/R/I, production required	**10**	**234**	**788**	**879**	**489**	**996**
Share in total PSE (%)	0	1	1	1	1	1
Payments based on area	10	134	788	879	489	996
Payments based on animal numbers	0	0	0	0	0	0
Payments based on farm receipts	0	0	0	0	0	0
Payments based on farm income	0	100	0	0	0	0
Payments based on non-current A/An/R/I, production required	**0**	**0**	**3 946**	**3 835**	**3 806**	**4 197**
Share in total PSE (%)	0	0	5	5	5	5
Payments based on area	0	0	0	0	0	0
Payments based on animal numbers	0	0	3 946	3 835	3 806	4 197
Payments based on farm receipts	0	0	0	0	0	0
Payments based on farm income	0	0	0	0	0	0
Payments based on non-current A/An/R/I, production not required	**0**	**6 701**	**14 281**	**14 572**	**14 797**	**13 473**
Share in total PSE (%)	0	-1	18	18	20	18
Payments based on area	0	6 701	14 281	14 572	14 797	13 473
Payments based on animal numbers	0	0	0	0	0	0
Payments based on farm receipts	0	0	0	0	0	0
Payments based on farm income	0	0	0	0	0	0

Note: A (area planted) / An (animal numbers) / R (receipts) / I (income).
Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932655512

Table III.49. **New Zealand: Payments made on the basis of area, animal numbers, receipts or income**

income

NZD million

	1986-88	1995-97	2009-11	2009	2010	2011p
Payments based on current A/An/R/I, production required	**42**	**1**	**1**	**1**	**0**	**1**
Share in total PSE (%)	11	1	1	1	0	0
Payments based on area	0	0	0	0	0	0
Payments based on animal numbers	0	0	0	0	0	0
Payments based on farm receipts	0	0	0	0	0	0
Payments based on farm income	42	1	1	1	0	1
Payments based on non-current A/An/R/I, production required	**315**	**0**	**0**	**0**	**0**	**0**
Share in total PSE (%)	21	0	0	0	0	0
Payments based on area	0	0	0	0	0	0
Payments based on animal numbers	315	0	0	0	0	0
Payments based on farm receipts	0	0	0	0	0	0
Payments based on farm income	0	0	0	0	0	0
Payments based on non-current A/An/R/I, production not required	**0**	**0**	**0**	**0**	**0**	**0**
Share in total PSE (%)	0	0	0	0	0	0
Payments based on area	0	0	0	0	0	0
Payments based on animal numbers	0	0	0	0	0	0
Payments based on farm receipts	0	0	0	0	0	0
Payments based on farm income	0	0	0	0	0	0

Note: A (area planted) / An (animal numbers) / R (receipts) / I (income).
Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932655531

Table III.50. **Norway: Payments made on the basis of area, animal numbers, receipts or income**

NOK million

	1986-88	1995-97	2009-11	2009	2010	2011p
Payments based on current A/An/R/I, production required	**3 577**	**6 254**	**7 031**	**6 717**	**7 068**	**7 308**
Share in total PSE (%)	19	33	32	31	32	34
Payments based on area	974	3 335	2 301	2 251	2 306	2 347
Payments based on animal numbers	2 603	2 920	3 892	3 671	3 905	4 101
Payments based on farm receipts	0	0	0	0	0	0
Payments based on farm income	0	0	837	795	857	860
Payments based on non-current A/An/R/I, production required	**0**	**0**	**2 684**	**2 568**	**2 685**	**2 798**
Share in total PSE (%)	0	0	12	12	12	13
Payments based on area	0	0	1 600	1 596	1 594	1 610
Payments based on animal numbers	0	0	0	0	0	0
Payments based on farm receipts	0	0	1 084	972	1 090	1 188
Payments based on farm income	0	0	0	0	0	0
Payments based on non-current A/An/R/I, production not required	**0**	**0**	**0**	**0**	**0**	**0**
Share in total PSE (%)	0	0	0	0	0	0
Payments based on area	0	0	0	0	0	0
Payments based on animal numbers	0	0	0	0	0	0
Payments based on farm receipts	0	0	0	0	0	0
Payments based on farm income	0	0	0	0	0	0

Note: A (area planted) / An (animal numbers) / R (receipts) / I (income).
Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932655550

Table III.51. **Switzerland: Payments made on the basis of area, animal numbers, receipts or income**

income

CHF million

	1986-88	1995-97	2009-11	2009	2010	2011p
Payments based on current A/An/R/I, production required	**612**	**1 203**	**1 306**	**1 289**	**1 311**	**1 317**
Share in total PSE (%)	7	17	23	21	24	24
Payments based on area	259	804	217	204	221	225
Payments based on animal numbers	338	399	1 089	1 085	1 090	1 092
Payments based on farm receipts	0	0	0	0	0	0
Payments based on farm income	15	0	0	0	0	0
Payments based on non-current A/An/R/I, production required	**28**	**569**	**100**	**98**	**101**	**101**
Share in total PSE (%)	0	8	2	2	2	2
Payments based on area	0	0	0	0	0	0
Payments based on animal numbers	28	60	100	98	101	101
Payments based on farm receipts	0	0	0	0	0	0
Payments based on farm income	0	509	0	0	0	0
Payments based on non-current A/An/R/I, production not required	**0**	**0**	**1 218**	**1 226**	**1 221**	**1 208**
Share in total PSE (%)	0	0	21	20	23	22
Payments based on area	0	0	1 218	1 226	1 221	1 208
Payments based on animal numbers	0	0	0	0	0	0
Payments based on farm receipts	0	0	0	0	0	0
Payments based on farm income	0	0	0	0	0	0

Note: A (area planted) / An (animal numbers) / R (receipts) / I (income).
Source: OECD, PSE/CSE database, 2012

Source: StatLink http://dx.doi.org/10.1787/888932655569

Table III.52. **Turkey: Payments made on the basis of area, animal numbers, receipts or income**

TRY million

	1986-88	1995-97	2009-11	2009	2010	2011p
Payments based on current A/An/R/I, production required	**0**	**4**	**2 143**	**1 751**	**2 414**	**2 263**
Share in total PSE (%)	0	1	8	7	8	9
Payments based on area	0	4	1 519	1 361	1 720	1 477
Payments based on animal numbers	0	0	491	326	596	552
Payments based on farm receipts	0	0	132	65	99	233
Payments based on farm income	0	0	0	0	0	0
Payments based on non-current A/An/R/I, production required	**0**	**0**	**0**	**0**	**0**	**0**
Share in total PSE (%)	0	0	0	0	0	0
Payments based on area	0	0	0	0	0	0
Payments based on animal numbers	0	0	0	0	0	0
Payments based on farm receipts	0	0	0	0	0	0
Payments based on farm income	0	0	0	0	0	0
Payments based on non-current A/An/R/I, production not required	**0**	**0**	**1**	**1**	**1**	**1**
Share in total PSE (%)	0	0	0	0	0	0
Payments based on area	0	0	1	1	1	1
Payments based on animal numbers	0	0	0	0	0	0
Payments based on farm receipts	0	0	0	0	0	0
Payments based on farm income	0	0	0	0	0	0

Note: A (area planted) / An (animal numbers) / R (receipts) / I (income).
Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932655588

Table III.53. **United States: Payments made on the basis of area, animal numbers, receipts or income**

USD million

	1986-88	1995-97	2009-11	2009	2010	2011p
Payments based on current A/An/R/I, production required	**12 231**	**1 825**	**7 851**	**9 126**	**5 775**	**8 653**
Share in total PSE (%)	34	8	26	28	21	28
Payments based on area	11 053	1 104	6 645	7 224	4 970	7 740
Payments based on animal numbers	267	0	188	550	14	0
Payments based on farm receipts	0	0	10	8	11	10
Payments based on farm income	912	721	1 009	1 344	780	902
Payments based on non-current A/An/R/I, production required	**0**	**0**	**0**	**0**	**0**	**0**
Share in total PSE (%)	0	0	0	0	0	0
Payments based on area	0	0	0	0	0	0
Payments based on animal numbers	0	0	0	0	0	0
Payments based on farm receipts	0	0	0	0	0	0
Payments based on farm income	0	0	0	0	0	0
Payments based on non-current A/An/R/I, production not required	**338**	**3 824**	**5 971**	**6 381**	**5 735**	**5 798**
Share in total PSE (%)	1	13	20	19	21	19
Payments based on area	338	3 824	5 018	5 428	4 781	4 844
Payments based on animal numbers	0	0	0	0	0	0
Payments based on farm receipts	0	0	954	953	954	954
Payments based on farm income	0	0	0	0	0	0

Note: A (area planted) / An (animal numbers) / R (receipts) / I (income).
Source: OECD, PSE/CSE database, 2012

StatLink http://dx.doi.org/10.1787/888932655607

Table III.54. **Contribution to change in Producer Support Estimate by country, 2010 to 2011**

	Producer Support Estimate (PSE)		Contribution of		Contribution of budgetary payments (BP) based on:						
			MPS	BP	Output	Input use	Current A/An/R/I, production required	Non-current A/An/R/I, production required	Non-current A/An/R/I, production not required	Non-commodity criteria	Miscella-neous
	USD mn, 2011	% change[1]	% change in PSE if all other variables are held constant								
Australia	1 550	14.2	0.0	14.2	0.0	–0.1	0.0	0.0	15.4	–1.1	0.0
Canada	7 013	–5.9	–4.4	–1.5	0.0	0.1	–0.6	–5.3	4.9	–0.6	0.0
Chile	349	10.1	–4.5	14.6	0.0	16.3	–1.7	0.0	0.0	0.0	0.0
European Union[2]	103 181	–4.0	–4.4	0.3	0.0	–0.5	0.0	–0.1	1.1	–0.3	0.1
Iceland	139	9.7	7.8	1.9	1.3	–0.4	0.2	1.1	0.0	–0.3	0.0
Israel[3]	1 054	11.9	10.5	1.4	0.0	1.5	–0.2	0.0	0.1	0.0	0.0
Japan	61 098	0.5	–3.8	4.3	2.3	–1.0	2.9	0.0	0.1	0.0	0.0
Korea	22 234	24.9	24.7	0.3	0.0	–0.5	1.0	0.0	–0.2	0.0	0.0
Mexico	6 182	1.4	–2.4	3.8	–1.0	5.4	0.7	0.5	–1.7	0.0	0.0
New Zealand	134	48.9	48.8	0.1	0.0	–0.3	0.4	0.0	0.0	0.0	0.0
Norway	3 871	–2.0	–5.5	3.5	0.2	1.7	1.1	0.5	0.0	0.0	0.0
Switzerland	6 199	1.4	1.2	0.1	0.1	0.0	0.1	0.0	–0.2	0.0	0.2
Turkey	15 602	–16.1	–17.1	0.9	1.0	0.4	–0.5	0.0	0.0	0.0	0.0
United States	30 579	10.8	0.4	10.4	–1.1	0.7	10.4	0.0	0.2	0.2	0.0
OECD[4]	252 424	0.1	–2.5	2.6	0.5	–0.1	1.9	–0.2	0.7	–0.1	0.0

1. Per cent changes in national currency.
2. European Union 27.
3. The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities.
The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
4. An average of per cent changes in individual country PSEs in national currencies, weighted by the shares of the country PSEs in the OECD PSE in the previous year; not equivalent to the variation in OECD PSE in any common currency.

Source: OECD, *PSE/CSE database*, 2012.

StatLink http://dx.doi.org/10.1787/888932655626

Table III.55. **Contribution of Market Price Support to change in Producer Support Estimate by country, 2010 to 2011**

	Producer Support Estimate (PSE)	Contribution of		Contribution of MPS elements	
		BP	MPS	Quantity	Price Gap
	% change[1]	% change in nominal PSE if all other variables are held constant			
Australia[2]	14.2	14.2	0.0	0.0	0.0
Canada	–5.9	–1.5	–4.4	0.6	–5.0
Chile	10.1	14.6	–4.5	0.9	–5.5
European Union[3]	–4.0	0.3	–4.4	0.2	–4.6
Iceland	9.7	1.9	7.8	1.9	5.9
Israel[4]	11.9	1.4	10.5	4.1	6.4
Japan	0.5	4.3	–3.8	0.2	–4.0
Korea	24.9	0.3	24.7	–5.0	29.7
Mexico	1.4	3.8	–2.4	0.6	–3.0
New Zealand	48.9	0.1	48.8	1.2	47.6
Norway	–2.0	3.5	–5.5	–0.1	–5.5
Switzerland	1.4	0.1	1.2	0.5	0.7
Turkey	–16.1	0.9	–17.1	3.0	–20.0
United States	10.8	10.4	0.4	0.2	0.3
OECD[5]	0.1	2.6	–2.5	0.1	–2.6

1. Percent changes of nominal values expressed in national currency.
2. The percentage change is equal to zero because the MPS for Australia is equal to zero for all commodities in both years.
3. European Union 27
4. The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities.
The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
5. An average of per cent changes in individual countries' MPS, weighted by the shares of the countries' MPS in the OECD total MPS in the previous year; not equivalent to the variation in OECD MPS in any common currency.

Source: OECD, *PSE/CSE database*, 2012.

StatLink http://dx.doi.org/10.1787/888932655645

Table III.56. **Contribution to change in Border Price by country, 2010 to 2011**

			Contribution to % change in Border Price[1] of:	
	Producer Price	Border Price	Exchange Rate	Border Price (USD)
	%change[2]	%change[2]	if all other variables are held constant	
Australia[3]	0.0	0.0	0.0	0.0
Canada	5.3	29.7	–4.7	34.3
Chile	4.1	6.5	–5.5	12.0
European Union[4]	7.2	13.6	–5.0	18.6
Iceland	9.5	9.4	–5.4	14.9
Israel[5]	4.7	5.4	–4.4	9.8
Japan	–3.0	–3.6	–9.5	5.9
Korea	17.4	–0.6	–4.2	3.6
Mexico	–4.8	0.0	–1.6	1.6
New Zealand	1.0	–9.0	–8.7	–0.2
Norway	1.8	13.1	–8.1	21.2
Switzerland	–2.3	1.5	–16.3	17.8
Turkey	5.9	13.7	11.6	2.1
United States	14.2	19.5	0.0	19.5
OECD[6]	4.0	4.9	–4.1	9.0

1. Border Price at farm gate, *i.e.* price net of marketing margins between border and farm gate.
2. An average of per cent changes in Producer Price/Border Prices for individual commodities in national currencies, weighted by the shares of individual commodity MPS in total MPS in the previous year.
3. The percentage change is equal to zero because the MPS for Australia is equal to zero for all commodities in both years (see footnote 2)
4. European Union 27.
5. The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under under the terms of international law.
6. An average of per cent changes in Producer Price/Border Price for individual countries, weighted by the value of countries' MPS in OECD total MPS in the previous year.

Source: OECD, *PSE/CSE database*, 2012

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