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AGRICULTURAL POLICIES IN OECD COUNTRIES: AT A GLANCE  
CHAPTER 1. EVALUATION OF SUPPORT AND POLICY DEVELOPMENTS

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**NOTE BY THE SECRETARIAT**

This document contains *Chapter 1 – Evaluation of Support Policy Developments* of the report entitled *Agricultural Policies in OECD Countries: At a Glance 2010*. This Chapter highlights the main recent changes and new initiatives in agricultural policies in 2009 and evaluates developments in the estimated support in terms of its level, composition and changes over time.

It is circulated on OLIS as part of the following set of documents forming the 2010 report:

**Executive Summary**

[TAD/CA/APM/WP(2010)3/FINAL]

**Chapter 1 – Evaluation of Support Policy Developments**

[TAD/CA/APM/WP(2010)4/FINAL]

**Chapter 2 – Country Focus**

[TAD/CA/APM/WP(2010)5/FINAL]

**Chapter 3 – Summary Tables of Estimates of Support for OECD countries**

[TAD/CA/APM/WP(2010)6/FINAL]

Document [TAD/CA/APM/WP(2010)3/FINAL] contains the *Executive Summary* which will appear at the beginning of the report.

Document [TAD/CA/APM/WP(2010)5/FINAL] contains *Chapter 2 – Country Focus*, which contains a brief summary of policy changes and evaluation of support developments for each OECD country. The Chapter contains also an Annex with information on countries who are likely to become members in 2010.

Document [TAD/CA/APM/WP(2008)6/FINAL] contains *Chapter 3 - Summary Tables of Estimates of Support for OECD Countries* with the additional tables on support estimates.

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## CHAPTER 1.

## EVALUATION OF SUPPORT AND POLICY DEVELOPMENTS

**Key economic and market developments**

1. The year 2009 saw world commodity prices retreat from their 2008 highs. At the same time, concerns over food supplies prompted by the 2008 price spike and lower food stocks have brought food security to the fore in the agricultural policy debate. The role and response of the agricultural sector to climate change continues to gain in prominence, prompted in part by the United Nations climate change conference held in Copenhagen (Box 1.1). Many countries continued to implement reforms started in earlier years. This includes the new *Average Crop Revenue Election* (ACRE) programme in the *United States* 2008 Farm Bill, reforms made under the *Health Check* in the *European Union* and the last step in the phasing out of the milk quota system in *Switzerland*.

**Box 1.1 Agriculture and Climate Change negotiations**

Agriculture is a significant contributor to man-made global emissions of greenhouse gas. According to the Intergovernmental Panel on Climate Change (IPCC), in 2004 direct emissions from agriculture comprised 13.5% of the global total while forestry (which includes deforestation, mainly for conversion to agriculture) accounted for a further 17.4%.

The United Nations Framework Convention on Climate Change (UNFCCC), adopted at the Earth Summit in Rio de Janeiro in 1992, sets the framework for international efforts to combat climate change. It was ratified by 192 countries. The negotiating process at the UNFCCC is carried out through Conferences of the Parties (COP). The goal of the 15th COP in Copenhagen in December 2009 was to adopt a new international agreement to replace the Kyoto Protocol which expires in 2012.

The Kyoto Protocol, which entered into force on 16 February 2005, set legally binding targets for reducing greenhouse gas emissions in all sectors including agriculture in 37 industrialized countries and the European Union. The targets amount to an average reduction of 5% against 1990 levels over the five year period 2008-12. Developing countries were exempted from reduction targets; however, they can participate through the market-based Clean Development Mechanism in which a developed country commitment is implemented in a developing country. A main example is avoided deforestation.

While the Kyoto Protocol counts emissions from agriculture, it does not include a key feature of the sector, which is the ability to sequester carbon, mainly through improving soil organic matter. Including this would allow farmers to offset to some extent the costs of any additional actions that remove greenhouse gases from the atmosphere.

The Copenhagen Negotiations did not result in a legally binding successor to the Kyoto Protocol. However, the Copenhagen Accord recognized “the scientific view that the increase in global temperature should be below 2 degrees Celsius” in a context of sustainable development. Given the significant potential of agriculture to contribute to climate change goals, it will be important to maintain and manage existing carbon reservoirs and include the possibilities for carbon sequestration in any future international agreement(s). There are synergies and trade-offs with other environmental goals. For example, more sustainable land-use practices not only reduce emissions, but also improve soil productivity and water retention capacity and reduce water pollution, although increased pesticide use may be required. Overall, this translates into increased productivity, this contributing to sustainable food production, green growth and increased resiliency in the face of climate change.

***Slow economic growth drags down commodity prices...***

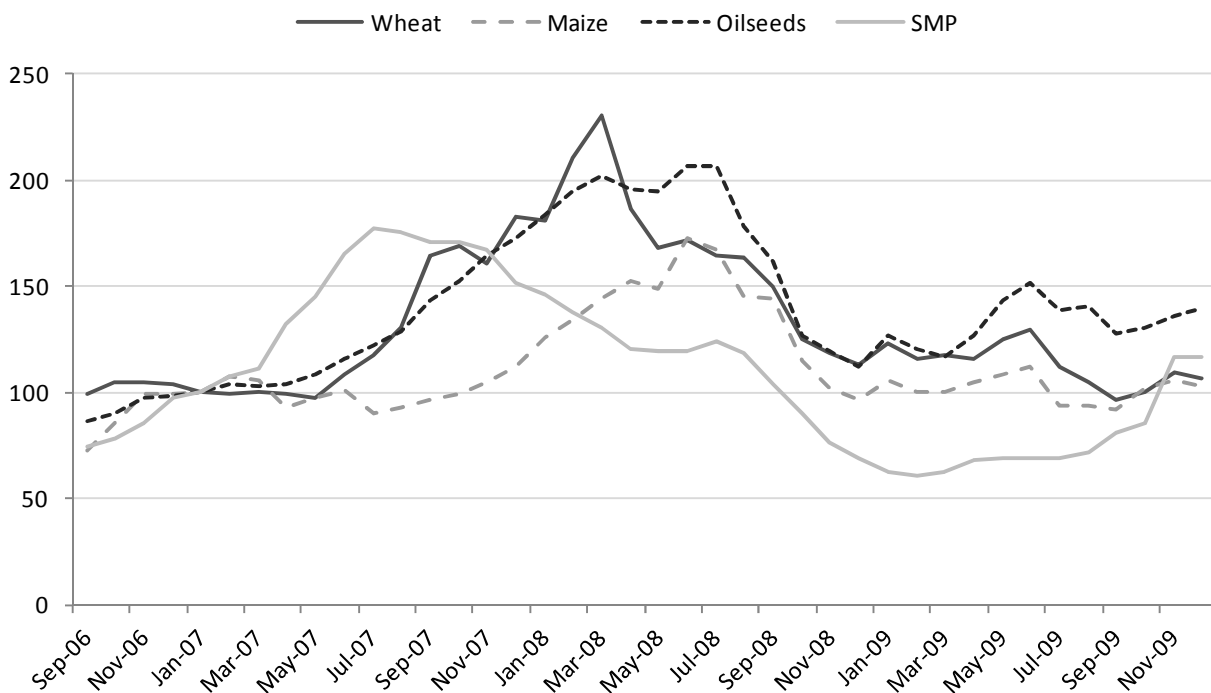
2. Economic growth continued to be slow or slightly negative in OECD countries as the effects of the global recession continue to be felt. Lower demand, coupled with strong growth in agricultural production has kept agricultural prices well below 2008 peak levels (Figure 1.1). A mix of factors was behind the sharp rise in commodity prices between end 2007 and early 2008 — including increased

demand, low stocks, poor harvest in some areas, and a closer integration of energy markets as biofuel production grows in importance [see *Biofuel Support Policies: An Economic Assessment* (OECD, 2008)]. The financial crisis moderated demand pressures, in particular for higher value-added products such as dairy and meats. A positive supply response to higher prices came at the same time as demand was declining, leading to an accumulation of stocks up from historically low levels in 2008 and putting further pressure on prices. Some recovery in demand for dairy products is evident late in 2009, assisted by intervention purchases in the *European Union* and purchasing by dairy marketing boards in *Switzerland* that was partially supported by the Swiss government, leading to some recovery in prices for dairy products. Market developments in 2009 are described more fully in the *OECD-FAO Agricultural Outlook 2010-2019* (OECD 2010).

3. The large contraction in trade relative to the fall in GDP during the financial crisis also affected agricultural markets, but to a lesser extent than for durable goods, which saw double-digit declines. Cereal trade declined by 5%, double the global decrease in GDP. A combination of factors is behind this phenomenon, including export financing and credit (see OECD 2009a and OECD 2009b for more on the effects of responses to the economic crisis).

**Figure 1.1. Evolution of world prices of selected agricultural commodities, 2007-09**

Monthly data, January 2007=100



Source: OECD, *Agricultural Outlook database* 2010.

**...even as biofuel production continues to add to overall demand...**

4. Increases in production of ethanol and biodiesel continue to be driven more by policy incentives than economic fundamentals. Use mandates and tax concessions were expanded in many OECD countries in 2009. Mandates for blending were put in place or expanded in *Australia* and in some states in the *United States*. *New Zealand* introduced a Biodiesel Grants Scheme which pays producers up to NZD 0.425 (US 0.30) per litre for pure biodiesel or blended biodiesel. There is growing evidence that

indirect land use change related to biofuels eliminates much of the climate change benefits of this technology, prompting the *European Union* to require in its Renewable Energy Directive that liquid biofuels should contribute to a reduction of at least 35% (50% by 2017) in greenhouse gas emissions compared with petroleum fuels.

*...and concerns about price risk and food security grow*

5. The volatility of prices caused unrest in some non-OECD countries, and raised concern about the sufficiency and stability of food supplies in the long term. Most of the significant price movements occurred in 2008, and prices in 2009 have been fairly stable, though the potential for price instability and concern about its impacts have remained part of the policy debate. In November 2009, the Food and Agriculture Organisation of the United Nations (FAO) hosted a World Summit on Food Security in Rome to discuss this situation. The resulting declaration calls *inter alia* for increased funding for agriculture and new investment in the sector and improved governance of global food issues.

6. Ministers for Agriculture from the OECD countries, and from non-member countries that are major players in food and agricultural markets met in Paris on 25-26 February 2010. This was the first time that Agriculture Ministers had met at OECD since 1998. Ministers released a Communiqué clarifying their principles for agricultural policy in the future and identified areas where the OECD could contribute to the design and implementation of appropriate policies (Box 1.2).

**Box 1.2. 2010 OECD Agriculture Ministerial Meeting**

Ministers' discussions were wide-ranging and forward looking. A focus of discussion was the question of food security. Will the food and agriculture system be able to respond as population growth and changing diets cause demand for food to increase, in a world where pressure on land, water and other natural resource is already evident and where climate change will bring additional challenges? The task for governments is to make sure that the right policies and institutions are in place.

Ministers "agreed to build on and complement the policy principles agreed in 1998 acknowledging that the main priority is the need to provide an adequate supply of safe and nutritious food, on a sustainable basis, for the world's growing population. Specifically, **Ministers recognised:**

a) that an **integrated approach to food security** is needed involving a mix of domestic production, international trade, stocks, safety nets for the poor, and other measures reflecting levels of development and resource endowment, while, poverty alleviation and economic development are essential to achieve a sustainable solution to global food insecurity and hunger in the longer term;

b) that **'green growth' offers opportunities** to contribute to sustainable economic, social and environmental development, that agriculture has an important role to play in the process, as do open markets that facilitate the sharing of technologies and innovations supportive of green growth, and that, in this context, care needs to be taken to avoid all forms of protectionism;

c) that **climate change presents challenges and opportunities** for the agricultural sector in reducing greenhouse gas emissions, in carbon sequestration, and the need for adaptation;

**and Governments should ensure that:**

d) farmers and food suppliers, in developed and developing countries, are able to respond effectively to changing consumer and societal demand, and that the transmission of price signals along the food chain is improved locally, regionally and internationally;

e) the necessary institutional, regulatory and policy frameworks are in place to enable markets for food and agricultural products to function efficiently, effectively transparently and fairly;

f) appropriate policies are developed to facilitate the management of risk at the farm and farm household levels and throughout the agro-food sector, including, where appropriate, in response to the impacts of extreme price volatility on farmers, while maintaining an efficient distribution of responsibilities between private and public actors;

g) policies for the food and agriculture sector are coherent with general macroeconomic, trade, industrial,

*environmental, energy, consumer and social policies (including health and nutrition), and that there is coherence between country policies and efforts to assist developing countries;*

*h) trade play a role in matching global supply and demand, as a reliable source of supply for countries dependent on imports and a reliable outlet for competitive suppliers, through an efficient well-functioning rules-based multilateral trading system, to which an ambitious, balanced and comprehensive conclusion of the Doha Development Agenda would be an important contribution;*

*i) policies are supportive of the efforts of farmers and other participants in the supply chain to effectively manage natural resources to supply sustainably produced commodities;*

*j) incentives and disincentives can be effectively and transparently designed to reflect the total costs and benefits to society, with a view to improving environmental performance, in consistency with multilateral trade rules and commitments; facilitating adaptation to and mitigation of climate change; allowing the food and agriculture system to respond to resource pressures particularly those affecting land and water; reducing losses and waste in the food supply chain; ensuring the provision of public goods and services such as rural amenities, biodiversity, maintenance of landscape and land eco-system functions and contributing to the development of rural areas;*

*k) there is a supportive investment climate in particular with respect to foreign direct investment in emerging and developing countries, in line with internationally agreed guidelines;*

*l) innovation, including transfer of technologies, is fostered in order to increase productivity, enhance efficiency, improve sustainable resource use, respond to climate change and reduce waste including through balanced protection of intellectual property rights, and a regulatory environment conducive to innovation and new technology, and to public-private partnerships;*

*m) consumer protection is enhanced through further development and implementation of efficient, science-based food and feed safety standards, consistent with international agreements;*

*n) policies are explicitly connected to specific objectives or intended beneficiaries, while also limiting the administrative burden on the sector so that total costs to the public are minimised, and that policies are monitored and evaluated regularly for continued relevance, cost-effectiveness and efficiency.”*

Note: The text in italics is extracted from the Communiqué from the Ministers whose complete text can be consulted at [www.oecd.org/agriculture/ministerial](http://www.oecd.org/agriculture/ministerial).

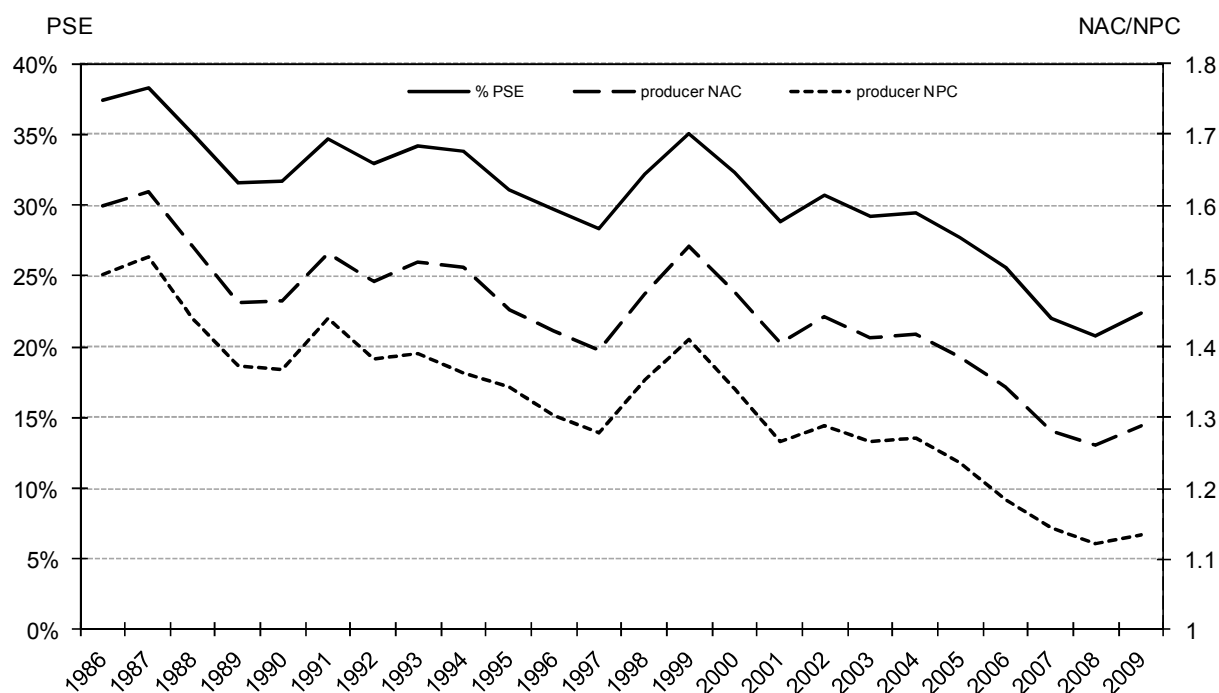
## **Developments in agricultural support**

7. Overall, support to agriculture as measured by the OECD was higher in 2009 as lower world prices increased effective market price support in countries where policies hold domestic prices stable. Lower domestic prices for some commodities also caused counter-cyclical programs based on prices or farm income to be triggered. The following section describes the overall support levels for the OECD as a whole, while later sections focus more specifically on developments in each PSE subcategory and for individual countries.

### ***Producer support up from 2008 lows...***

8. The monetary value of policy transfers expressed as a percentage of gross farm receipts is the percentage Producer Support Estimate (%PSE) and is a key measure of the level of support provided to the agricultural sector. By this measure, which includes both price support from border measures and budgetary payments, support to OECD agriculture has been declining modestly but steadily since it was first measured in 1986 (Figure 1.2). High commodity prices in 2007 and even higher prices in 2008 were behind recent falls in the %PSE, and a return to 2007-level prices has reversed this trend for 2009. The %PSE was 22% in 2009, indicating that producer's gross receipts were increased by about one fifth as a result of agricultural policies (Tables 1.1 and 1.2).

Figure 1.2. OECD: Evolution of Indicators of Support



%PSE: Producer Support Estimate (left scale).

NPC: Nominal Protection Coefficient (right scale).

NAC: Nominal Assistance Coefficient (right scale).

Source: OECD, PSE/CSE database 2010.

9. Two complementary measures of the %PSE are the Nominal Assistance Coefficient (NAC) and Nominal Protection Coefficient (NPC). These measure the ratio of farm receipts with and without support, and the ratio of producer prices to world prices measured at each country's border, respectively. Both of these follow the %PSE in reporting higher levels of support in 2009, though they remain significantly below values seen as recently as 2005, when the NAC of 1.4 indicated that farmer receipts were 40% higher than if they had come entirely from prices at the border. The value of the NAC was 1.29 in 2009. The NPC, at 1.13 in 2009, showed that farmers received prices that were on average 13% above international levels, just higher than the historical low of 1.12 achieved for this measure in 2008. By comparison, the value of the NPC on average in 1986-88 was 1.49 and the NAC was 1.59. There is, however, a wide variation from these averages across countries and commodities.



**Table 1.1. OECD: Estimates of Support to agriculture**

	(USD millions)				
	1986-88	2007-09	2007	2008	2009p
<b>Total value of production (at farm gate)</b>	<b>591 827</b>	<b>1 048 371</b>	<b>1 034 136</b>	<b>1 118 753</b>	<b>992 225</b>
<i>of which share of MPS commodities (%)</i>	72	67	68	67	66
<b>Total value of consumption (at farm gate)</b>	<b>558 195</b>	<b>995 736</b>	<b>986 303</b>	<b>1 053 076</b>	<b>947 828</b>
<b>Producer Support Estimate (PSE)</b>	<b>238 665</b>	<b>256 764</b>	<b>255 720</b>	<b>262 049</b>	<b>252 522</b>
Support based on commodity output	195 839	125 215	132 535	121 427	121 683
<i>Market Price Support</i>	<i>183 435</i>	<i>119 651</i>	<i>127 441</i>	<i>115 321</i>	<i>116 191</i>
<i>Payments based on output</i>	<i>12 404</i>	<i>5 564</i>	<i>5 094</i>	<i>6 106</i>	<i>5 491</i>
Payments based on input use	20 189	33 260	32 474	35 114	32 192
<i>Based on variable input use</i>	<i>9 748</i>	<i>11 889</i>	<i>11 897</i>	<i>12 597</i>	<i>11 173</i>
<i>with input constraints</i>	<i>739</i>	<i>540</i>	<i>501</i>	<i>605</i>	<i>513</i>
<i>Based on fixed capital formation</i>	<i>6 866</i>	<i>12 613</i>	<i>12 037</i>	<i>13 492</i>	<i>12 311</i>
<i>with input constraints</i>	<i>1 235</i>	<i>1 996</i>	<i>1 729</i>	<i>2 262</i>	<i>1 997</i>
<i>Based on on-farm services</i>	<i>3 563</i>	<i>8 758</i>	<i>8 541</i>	<i>9 026</i>	<i>8 707</i>
<i>with input constraints</i>	<i>439</i>	<i>1 101</i>	<i>1 000</i>	<i>1 138</i>	<i>1 165</i>
Payments based on current A/An/R/I <sup>1</sup> , production required	18 735	32 314	28 010	35 195	33 737
<i>Based on Receipts / Income</i>	<i>2 052</i>	<i>3 886</i>	<i>3 321</i>	<i>3 733</i>	<i>4 604</i>
<i>Based on Area planted / Animal numbers</i>	<i>16 683</i>	<i>28 428</i>	<i>24 689</i>	<i>31 462</i>	<i>29 132</i>
<i>with input constraints</i>	<i>3 719</i>	<i>21 961</i>	<i>18 171</i>	<i>24 819</i>	<i>22 893</i>
Payments based on non-current A/An/R/I, production required	533	1 355	1 703	1 328	1 033
Payments based on non-current A/An/R/I, production not required	2 080	58 819	56 174	61 659	58 623
<i>With variable payment rates</i>	<i>181</i>	<i>1 367</i>	<i>1 546</i>	<i>1 544</i>	<i>1 011</i>
<i>with commodity exceptions</i>	<i>0</i>	<i>1 042</i>	<i>850</i>	<i>1 303</i>	<i>971</i>
<i>With fixed payment rates</i>	<i>1 899</i>	<i>57 452</i>	<i>54 628</i>	<i>60 115</i>	<i>57 611</i>
<i>with commodity exceptions</i>	<i>1 561</i>	<i>28 476</i>	<i>33 407</i>	<i>26 404</i>	<i>25 617</i>
Payments based on non-commodity criteria	1 077	5 659	4 763	7 131	5 081
<i>Based on long-term resource retirement</i>	<i>1 076</i>	<i>4 603</i>	<i>3 904</i>	<i>5 954</i>	<i>3 952</i>
<i>Based on a specific non-commodity output</i>	<i>1</i>	<i>826</i>	<i>710</i>	<i>900</i>	<i>867</i>
<i>Based on other non-commodity criteria</i>	<i>0</i>	<i>230</i>	<i>149</i>	<i>277</i>	<i>263</i>
Miscellaneous payments	211	143	61	195	174
<b>Percentage PSE</b>	<b>37</b>	<b>22</b>	<b>22</b>	<b>21</b>	<b>22</b>
<b>Producer NPC</b>	<b>1,49</b>	<b>1,13</b>	<b>1,14</b>	<b>1,12</b>	<b>1,13</b>
<b>Producer NAC</b>	<b>1,59</b>	<b>1,28</b>	<b>1,28</b>	<b>1,26</b>	<b>1,29</b>
<b>General Services Support Estimate (GSSE)</b>	<b>40 023</b>	<b>86 138</b>	<b>77 337</b>	<b>85 807</b>	<b>95 270</b>
Research and development	3 551	8 086	8 066	8 232	7 961
Agricultural schools	842	2 453	2 450	2 516	2 394
Inspection services	1 045	3 289	3 297	3 382	3 189
Infrastructure	13 963	23 505	22 210	26 006	22 298
Marketing and promotion	13 164	45 152	37 488	42 074	55 893
Public stockholding	5 872	962	1 181	886	820
Miscellaneous	1 587	2 691	2 646	2 711	2 716
<b>GSSE as a share of TSE (%)</b>	<b>13,4</b>	<b>22,9</b>	<b>21,4</b>	<b>22,6</b>	<b>24,8</b>
<b>Consumer Support Estimate (CSE)</b>	<b>-159 578</b>	<b>-104 654</b>	<b>-115 263</b>	<b>-101 344</b>	<b>-97 354</b>
Transfers to producers from consumers	-168 672	-116 286	-123 269	-114 210	-111 380
Other transfers from consumers	-22 202	-21 735	-23 353	-19 148	-22 703
Transfers to consumers from taxpayers	19 674	32 199	29 139	31 507	35 950
Excess feed cost	11 622	1 169	2 220	508	779
<b>Percentage CSE</b>	<b>-30</b>	<b>-11</b>	<b>-12</b>	<b>-10</b>	<b>-11</b>
<b>Consumer NPC</b>	<b>1,52</b>	<b>1,16</b>	<b>1,17</b>	<b>1,15</b>	<b>1,16</b>
<b>Consumer NAC</b>	<b>1,42</b>	<b>1,12</b>	<b>1,14</b>	<b>1,11</b>	<b>1,12</b>
<b>Total Support Estimate (TSE)</b>	<b>298 362</b>	<b>375 101</b>	<b>362 197</b>	<b>379 363</b>	<b>383 742</b>
Transfers from consumers	190 874	138 021	146 622	133 358	134 083
Transfers from taxpayers	129 690	258 814	238 928	265 153	272 362
Budget revenues	-22 202	-21 735	-23 353	-19 148	-22 703
<b>Percentage TSE (expressed as share of GDP)</b>	<b>2,25</b>	<b>0,89</b>	<b>0,87</b>	<b>0,86</b>	<b>0,93</b>

**Table 1.2. OECD: Estimates of support to agriculture**  
(EUR million)

	1986-88	2007-09	2007	2008	2009p
<b>Total value of production (at farm gate)</b>	<b>536 113</b>	<b>744 944</b>	<b>755 421</b>	<b>765 208</b>	<b>714 204</b>
<i>of which share of MPS commodities (%)</i>	72	67	68	67	66
<b>Total value of consumption (at farm gate)</b>	<b>505 253</b>	<b>707 671</b>	<b>720 480</b>	<b>720 285</b>	<b>682 247</b>
<b>Producer Support Estimate (PSE)</b>	<b>216 540</b>	<b>182 601</b>	<b>186 800</b>	<b>179 237</b>	<b>181 765</b>
Support based on commodity output	177 606	89 152	96 815	83 054	87 587
<i>Market Price Support</i>	<i>166 300</i>	<i>85 202</i>	<i>93 094</i>	<i>78 878</i>	<i>83 634</i>
<i>Payments based on output</i>	<i>11 306</i>	<i>3 950</i>	<i>3 721</i>	<i>4 176</i>	<i>3 953</i>
Payments based on input use	18 287	23 637	23 722	24 017	23 172
<i>Based on variable input use</i>	<i>8 849</i>	<i>8 450</i>	<i>8 690</i>	<i>8 616</i>	<i>8 043</i>
<i>with input constraints</i>	<i>679</i>	<i>383</i>	<i>366</i>	<i>414</i>	<i>369</i>
<i>Based on fixed capital formation</i>	<i>6 210</i>	<i>8 961</i>	<i>8 793</i>	<i>9 228</i>	<i>8 862</i>
<i>with input constraints</i>	<i>1 124</i>	<i>1 416</i>	<i>1 263</i>	<i>1 547</i>	<i>1 437</i>
<i>Based on on-farm services</i>	<i>3 217</i>	<i>6 227</i>	<i>6 239</i>	<i>6 173</i>	<i>6 268</i>
<i>with input constraints</i>	<i>397</i>	<i>783</i>	<i>731</i>	<i>779</i>	<i>838</i>
Payments based on current A/An/R/I <sup>1</sup> , production required	17 102	22 939	20 461	24 073	24 284
<i>Based on Receipts / Income</i>	<i>1 907</i>	<i>2 765</i>	<i>2 426</i>	<i>2 553</i>	<i>3 314</i>
<i>Based on Area planted / Animal numbers</i>	<i>15 195</i>	<i>20 175</i>	<i>18 035</i>	<i>21 519</i>	<i>20 969</i>
<i>with input constraints</i>	<i>3 300</i>	<i>15 576</i>	<i>13 274</i>	<i>16 976</i>	<i>16 478</i>
Payments based on non-current A/An/R/I, production required	505	965	1 244	908	743
Payments based on non-current A/An/R/I, production not required	1 900	41 802	41 034	42 174	42 197
<i>With variable payment rates</i>	<i>161</i>	<i>971</i>	<i>1 129</i>	<i>1 056</i>	<i>728</i>
<i>With commodity exceptions</i>	<i>0</i>	<i>737</i>	<i>621</i>	<i>891</i>	<i>699</i>
<i>With fixed payment rates</i>	<i>1 739</i>	<i>40 831</i>	<i>39 905</i>	<i>41 118</i>	<i>41 469</i>
<i>With commodity exceptions</i>	<i>1 417</i>	<i>20 301</i>	<i>24 403</i>	<i>18 060</i>	<i>18 439</i>
Payments based on non-commodity criteria	942	4 005	3 479	4 878	3 657
<i>Based on long-term resource retirement</i>	<i>941</i>	<i>3 256</i>	<i>2 852</i>	<i>4 072</i>	<i>2 844</i>
<i>Based on a specific non-commodity output</i>	<i>1</i>	<i>586</i>	<i>519</i>	<i>616</i>	<i>624</i>
<i>Based on other non-commodity criteria</i>	<i>0</i>	<i>163</i>	<i>109</i>	<i>189</i>	<i>189</i>
Miscellaneous payments	198	101	44	133	126
<b>Percentage PSE</b>	<b>37</b>	<b>22</b>	<b>22</b>	<b>21</b>	<b>22</b>
<b>Producer NPC</b>	<b>1,49</b>	<b>1,13</b>	<b>1,14</b>	<b>1,12</b>	<b>1,13</b>
<b>Producer NAC</b>	<b>1,59</b>	<b>1,28</b>	<b>1,28</b>	<b>1,26</b>	<b>1,29</b>
<b>General Services Support Estimate (GSSE)</b>	<b>36 285</b>	<b>61 253</b>	<b>56 494</b>	<b>58 691</b>	<b>68 576</b>
Research and development	3 216	5 751	5 892	5 631	5 730
Agricultural schools	762	1 745	1 790	1 721	1 723
Inspection services	946	2 339	2 408	2 313	2 295
Infrastructure	12 670	16 687	16 224	17 788	16 050
Marketing and promotion	11 959	32 131	27 384	28 778	40 232
Public stockholding	5 294	686	863	606	590
Miscellaneous	1 438	1 914	1 933	1 854	1 955
<b>GSSE as a share of TSE (%)</b>	<b>13,4</b>	<b>22,9</b>	<b>21,4</b>	<b>22,6</b>	<b>24,8</b>
<b>Consumer Support Estimate (CSE)</b>	<b>-144 420</b>	<b>-74 530</b>	<b>-84 198</b>	<b>-69 318</b>	<b>-70 075</b>
Transfers to producers from consumers	-152 848	-82 778	-90 046	-78 118	-80 172
Other transfers from consumers	-20 053	-15 499	-17 059	-13 097	-16 342
Transfers to consumers from taxpayers	17 852	22 904	21 286	21 550	25 877
Excess feed cost	10 628	843	1 621	347	561
<b>Percentage CSE</b>	<b>-30</b>	<b>-11</b>	<b>-12</b>	<b>-10</b>	<b>-11</b>
<b>Consumer NPC</b>	<b>1,52</b>	<b>1,16</b>	<b>1,17</b>	<b>1,15</b>	<b>1,16</b>
<b>Consumer NAC</b>	<b>1,42</b>	<b>1,12</b>	<b>1,14</b>	<b>1,11</b>	<b>1,12</b>
<b>Total Support Estimate (TSE)</b>	<b>270 676</b>	<b>266 758</b>	<b>264 580</b>	<b>259 478</b>	<b>276 218</b>
Transfers from consumers	172 900	98 278	107 106	91 215	96 513
Transfers from taxpayers	117 829	183 980	174 533	181 360	196 046
Budget revenues	-20 053	-15 499	-17 059	-13 097	-16 342
<b>Percentage TSE (expressed as share of GDP)</b>	<b>2,25</b>	<b>0,89</b>	<b>0,87</b>	<b>0,86</b>	<b>0,93</b>

## Notes to Table 1.1 and 1.2

p: provisional. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.

1. A (area planted) / An (animal numbers) / R (receipts) / I (income). MPS is net of producer levies and Excess Feed Cost. MPS commodities: see notes to individual tables in Chapter 2.

2. TSE as a share of GDP for 1986-88 for the OECD total excludes the Czech Republic, Hungary, Poland and the Slovak Republic as GDP data is not available for this period.

Source for Tables 1.1 and 1.2: OECD, PSE/CSE database 2010.

## ...due mainly to the effect of lower international prices

10. Market Price Support (MPS) was sharply higher in *Canada* and significantly so in *Korea*, the *United States* and *Mexico* in each case the main cause was lower border prices for dairy products. MPS declined in only three places—the *European Union*, where domestic prices fell more sharply than world prices, *Iceland*, where the financial crisis reduced the value of the currency, thereby increasing effective border prices and *New Zealand*, where producer support is anyway already near zero.

11. On average, budgetary payments to producers were lower in 2009 than they were in 2008; budgetary payments were significantly higher only in *Canada*, where counter-cyclical payments under the *AgriStability* programme were triggered by falls in farm revenue. Payments rose in *Switzerland* as direct payments were increased according to a realignment of policy from MPS to this form of support. Budgetary support was higher in *Norway* due mostly to production subsidies for livestock, and was modestly higher in *Japan* and *New Zealand* (Table 1.3).

**Table 1.3. Contribution to change in Producer Support Estimate by country, 2008 to 2009**

	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	Miscellaneous	
	USD mn, 2009	% change <sup>1</sup>	% change in PSE if all other variables are held constant									
Australia	927	-36,0	0,1	-36,1	0,0	-13,9	-0,2	0,0	-22,3	0,3	0,0	
Canada	7 794	52,4	36,7	15,7	0,0	-0,2	20,5	-2,0	-8,4	4,9	1,0	
European Union <sup>2</sup>	120 840	-6,3	-5,1	-1,2	0,1	-0,2	0,0	0,0	0,9	-1,8	-0,1	
Iceland	115	-11,8	-9,2	-2,6	1,2	-0,3	0,0	-3,1	0,0	-0,5	0,0	
Japan	46 492	0,7	0,0	0,7	-0,4	-0,2	0,5	0,0	0,8	0,0	0,0	
Korea	17 518	18,6	21,2	-2,6	0,0	-0,7	-1,5	0,0	-0,4	0,0	0,0	
Mexico	5 821	11,5	18,6	-7,1	-2,3	-4,7	-0,4	0,3	0,0	0,0	0,0	
New Zealand	34	-44,1	-44,4	0,2	0,0	-0,6	-0,2	1,0	0,0	0,0	0,0	
Norway	3 711	13,2	11,6	1,7	0,1	0,2	1,9	-0,6	0,0	0,0	0,0	
Switzerland	6 209	7,3	4,6	2,7	-0,2	-0,1	2,6	0,1	0,4	-0,2	0,0	
Turkey	22 603	4,0	8,3	-4,2	0,1	-1,1	0,2	0,0	-3,4	0,0	0,0	
United States	30 598	13,1	14,3	-1,2	-0,5	0,6	-2,3	0,0	0,3	0,8	0,0	
OECD <sup>3</sup>	252 522	1,5	2,7	-1,1	-0,1	-0,4	0,2	-0,1	-0,1	-0,7	0,0	

1. Per cent changes in national currency.

2. EU27

3. 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 to the variation in OECD PSE in any common currency.

Source: OECD, PSE/CSE database 2010.

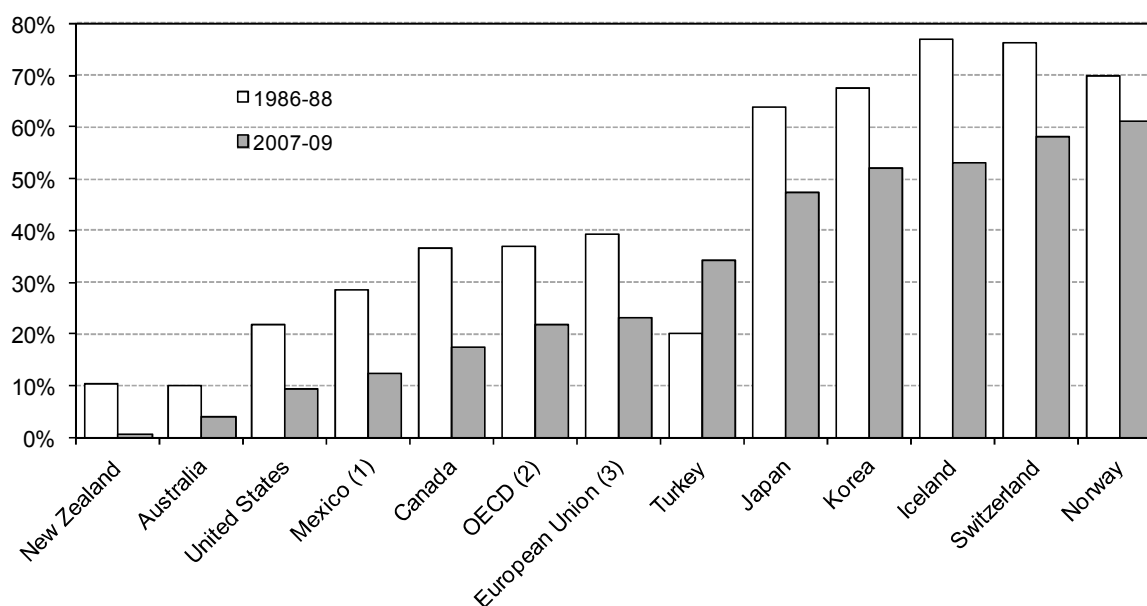
12. In percentage terms, the largest reduction in budgetary support was in *Australia* where exceptional payments related to restructuring the dairy sector came to an end. In other countries declines in budgetary support were modest. In the *European Union* the largest decline was in payments based on non-commodity criteria, with the end of the initiative to buy out sugar quota which had been in place between 2006 and 2008. In *Mexico*, expenditures on electricity and fuel subsidies were lower and expenditures supporting sugar prices made in 2008 did not continue into 2009. Budgetary support was lower in *Turkey*

following the end of direct income support payments under the Agricultural reform Implementation Project (ARIP).

### *A diversity of approaches to support across the OECD*

13. The objectives of agricultural policies and their relative importance vary across the OECD. For example, retaining domestic self-sufficiency in the production of rice is a major objective in **Japan** and **Korea**, while concerns about enhancing cultural landscapes, rural development and animal welfare, are relatively important in **Switzerland** and **Norway**. Agricultural policy in the **European Union** responds to the concerns of 27 member countries, and so reflects a broad array of objectives from supporting farm income, conserving the environment, protecting animal welfare, preserving traditional areas, as well as increasing competitiveness. The **United States** provides many different forms of support to producers, aimed predominantly towards providing a safety net. At the other end of the spectrum, producers in predominantly export-oriented **New Zealand** and **Australia** rely mainly on world market signals to determine what is produced and where, with support forming less than 1% and 3% of producer revenue respectively (Figure 1.3).

**Figure 1.3. Producer Support Estimate by country**  
Percentage of gross farm receipts



Countries are ranked according to 2007-09 levels.

1. For Mexico, 1986-88 is replaced by 1991-93.

2. Austria, Finland and Sweden are included in the OECD total for all years and in the EU from 1995. The Czech Republic, Hungary, Poland and the Slovak Republic are included in the OECD total for all years and in the EU from 2004. The OECD total does not include the non-OECD EU member states.

3. EU12 for 1986-88 and EU27 for 2007-09.

Source: OECD, PSE/CSE database 2010.

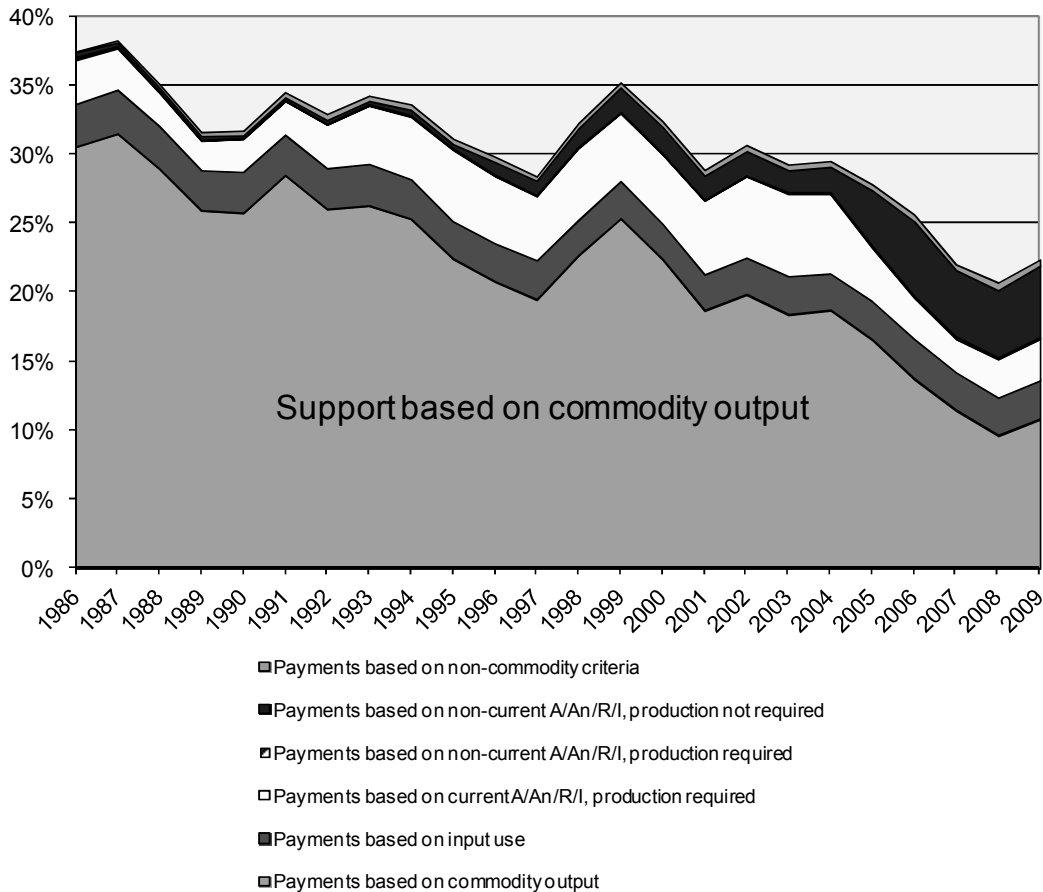
### *The composition of support is important*

14. The level of agricultural support as measured by the %PSE has declined to some extent in every OECD country except **Turkey**, where support as a share of gross farm receipts now exceeds the OECD average. More importantly, the composition of support has also changed in most OECD countries, moving away from support based on commodity output to other criteria that may or may not require production as a condition of eligibility. While support based on output, most of which is in the form of MPS, remains the

single largest component of the PSE, its share fell from 30% of gross farm receipts, more than 85% of all support in 1986-88, to just over 10% of gross farm receipts representing about half of the PSE in 2007-2009 (Figure 1.4).

**Figure 1.4. OECD: Composition of Producer Support Estimate, 1986-2009**

Percentage of gross farm receipts



Source: OECD, PSE/CSE Database 2010.

15. The composition of support is important because how support is provided determines its impact on the agricultural sector and the distribution of benefits to society as a whole. For example, support provided as market price support can have a large effect on production and trade and has been a source of friction with trading partners, imposes additional and regressive costs on domestic consumers, while doing a poor job of addressing objectives such as farm income, environmental protection and preservation of rural areas. On the other hand, income support not based on current commodity production is much more effective at improving farm income with less spill-over effects. Policies that directly target non-commodity criteria such as landscape elements, environmental performance or traditional breeds of animals are also typically more effective at reaching these societal objectives, although concerns have been raised over the budgetary and transactions costs involved in some cases.

***More support in the form of budgetary payments with associated conditions...***

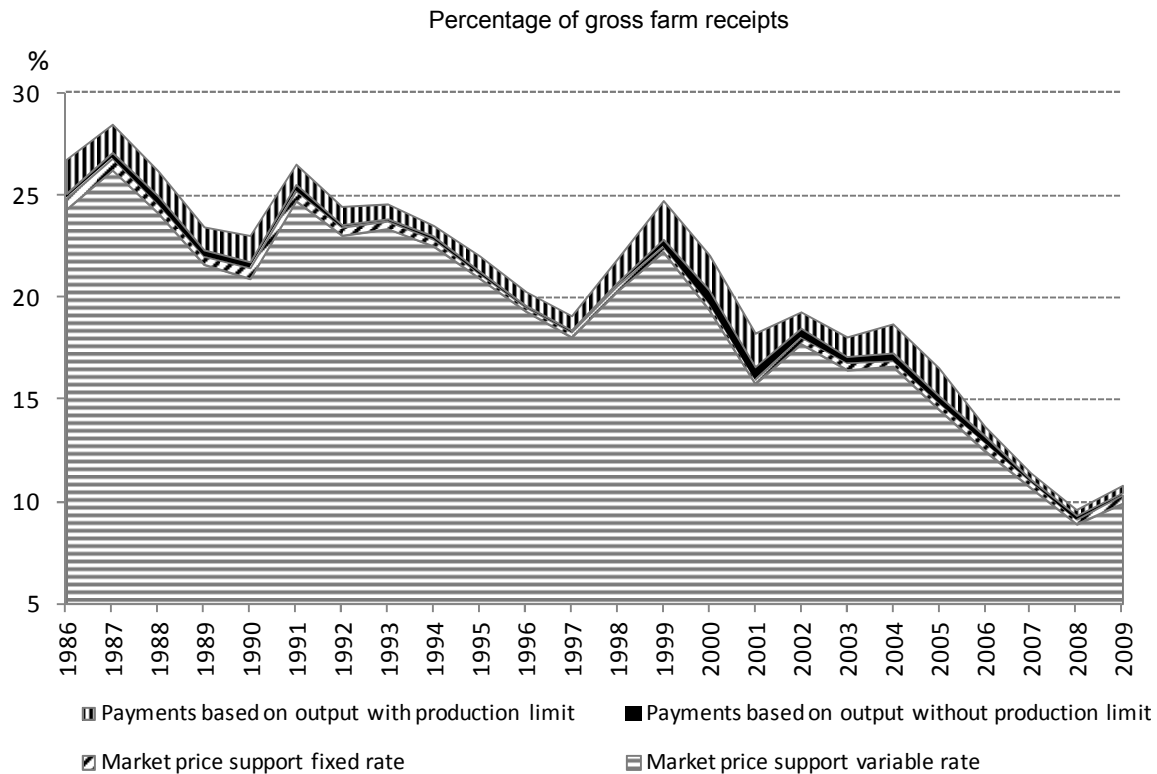
16. An important trend in agricultural support in OECD countries that has been underway for some time is the delinking of support from commodity production and increased use of taxpayer-financed payments that are either not contingent on commodity production or place obligatory constraints or conditions on recipients, such as cross-compliance or particular on-farm investments, or specifically targeted to the voluntary provision of non-commodity outputs. The share of total support that does not require production increased significantly, from less than 1% of the PSE in 1986-88 to 23% in 2007-09. Including all payments that are based on factors other than output (area, animals, receipts or income) increases this share to 36% — over a third of total support to producers. Payments based directly on non-commodity outputs such as biodiversity, wetlands or landscape elements that were essentially non-existent in 1986, now form 2% of the PSE and continue to grow as a share of the PSE.

***...but support based on output remains dominated by Market Price Support***

17. Tables 1.1 and 1.2 show the complete set of PSE categories, which classify support according to the means by which they are implemented; the following sections will look at each of these in turn<sup>1</sup>. Category A measures support based on commodity output. This is the first and largest category of the PSE. The majority of support provided on the basis of commodity output is in the form of market price support (MPS) with variable rates, which forms more than 90% of the support measured in this category of the PSE (Figure 1.5). MPS is considered to be made on the basis of “variable rates” when the formula determining support is triggered by changes in prices. The most common example is when policy holds the domestic price of an agricultural commodity relatively fixed in the face of varying world prices and thus the amount of support varies inversely according to changes in world prices. This phenomenon has been central to explaining changes in the PSE in 2009. MPS labelled as based on “fixed rates” are similar to an *ad-valorem* tariff, which allows transmission of world prices into the domestic market while maintaining a domestic price above the world price.

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1. Category D, payments based on non current area, animal numbers, receipts or income with production required is a relatively small part of the PSE and is not discussed separately in this chapter.

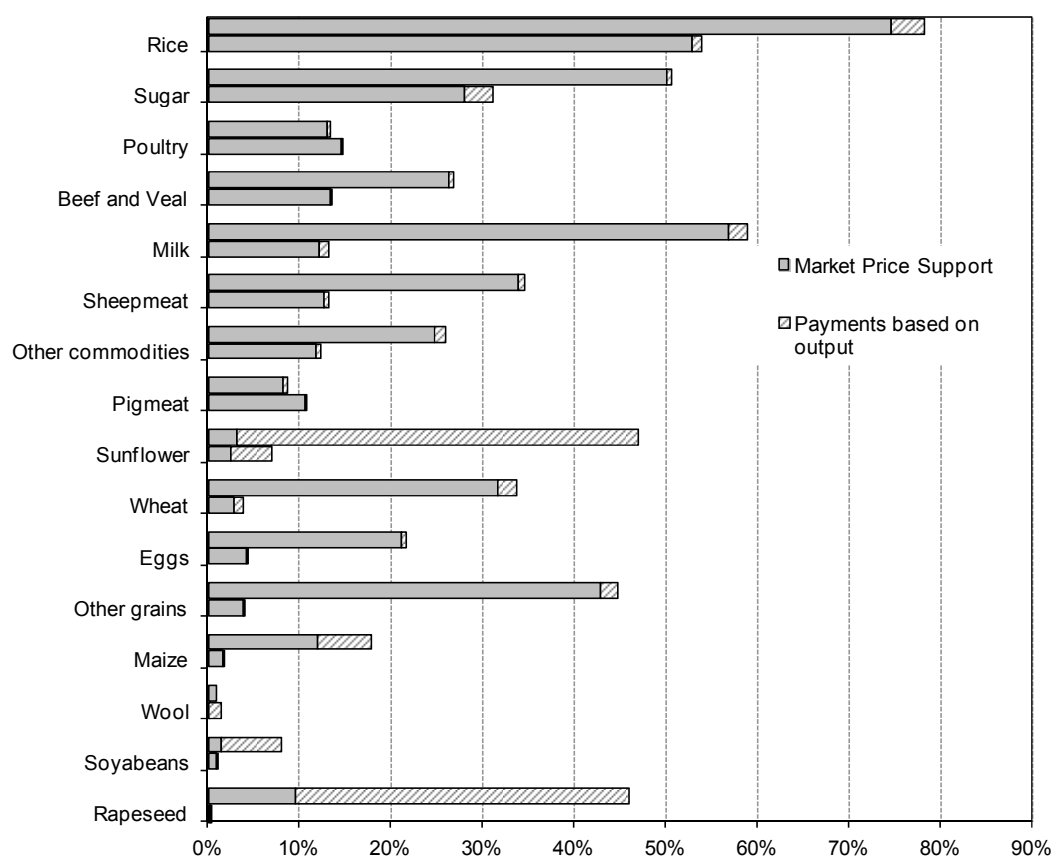
**Figure 1.5. OECD: Evolution of support based on commodity output, 1986-2009**

Source: OECD, PSE/CSE database 2010.

18. Other forms of support based on commodity output involve output (deficiency) payments, which usually involve some sort of payment formula. This may take the form of a cap on the total allowable payment to a particular farmer, or an obligation on the producer's part to hold production below some maximum eligible amount. Such limits can help to control the budgetary outlays made by a program or are intended to reduce the production-distorting effects of such payments.

19. Rice, sugar, livestock and dairy are traditionally the largest recipients of support based on commodity output, though the amount of support for dairy products has declined significantly (Figure 1.6). This is partly due to the effect of high average dairy prices in the 2007-2009 period, but also due to reforms such as the phasing out of dairy quota systems which has begun in the *European Union* and is now complete in *Switzerland* and the reduction of intervention prices for dairy products in the *European Union*.

**Figure 1.6. OECD: Support based on output by commodity, 1986-88 and 2007-09**  
Percentage of gross farm receipts for each commodity



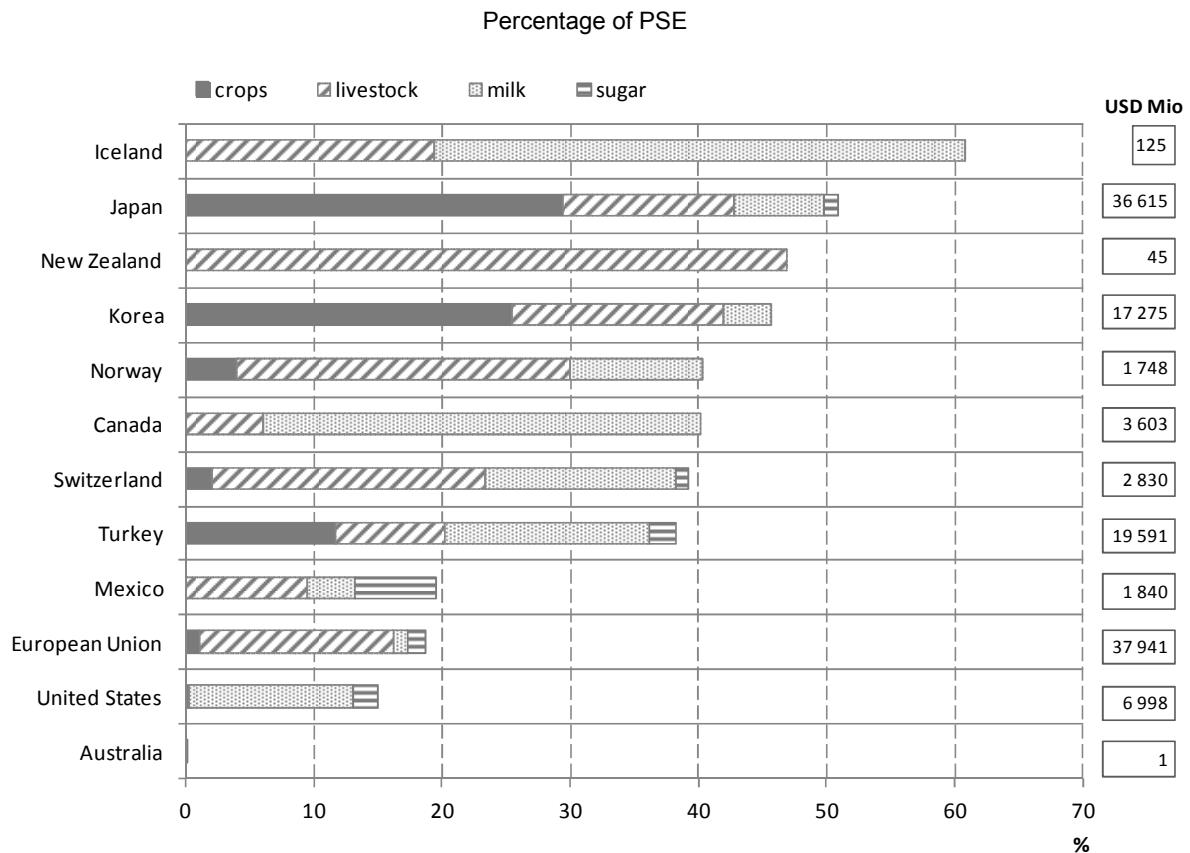
Commodities are ranked according to % SCT levels in 2007-09. The top bar relates to 1986-88, the bottom bar to 2007-09.

Source: OECD, PSE/CSE database 2010.

20. Most countries provide the majority of their commodity-specific support to livestock and dairy (Figure 1.7). *Japan* and *Korea* are the only countries for which crop production receives the greatest share of this form of support, while support to specific commodities is relatively evenly divided in *Turkey*. Reforms in the *European Union* have dramatically reduced MPS for dairy products, though total support based on commodity output in monetary terms remains the highest in the OECD.



Figure 1.7. Support based on output by commodity, by country, 2007-09



Source: OECD, PSE/CSE database 2010.

21. Dairy quotas, used as part of MPS policies for dairy were abolished in *Switzerland* following a three year transition period, and were increased in the *European Union* with a view to their elimination by 2015. Dairy quotas were expanded temporarily in *Norway* in 2009, and flexibility for renting quota was increased.

### *Payments based on input use cover a broad spectrum of policies*

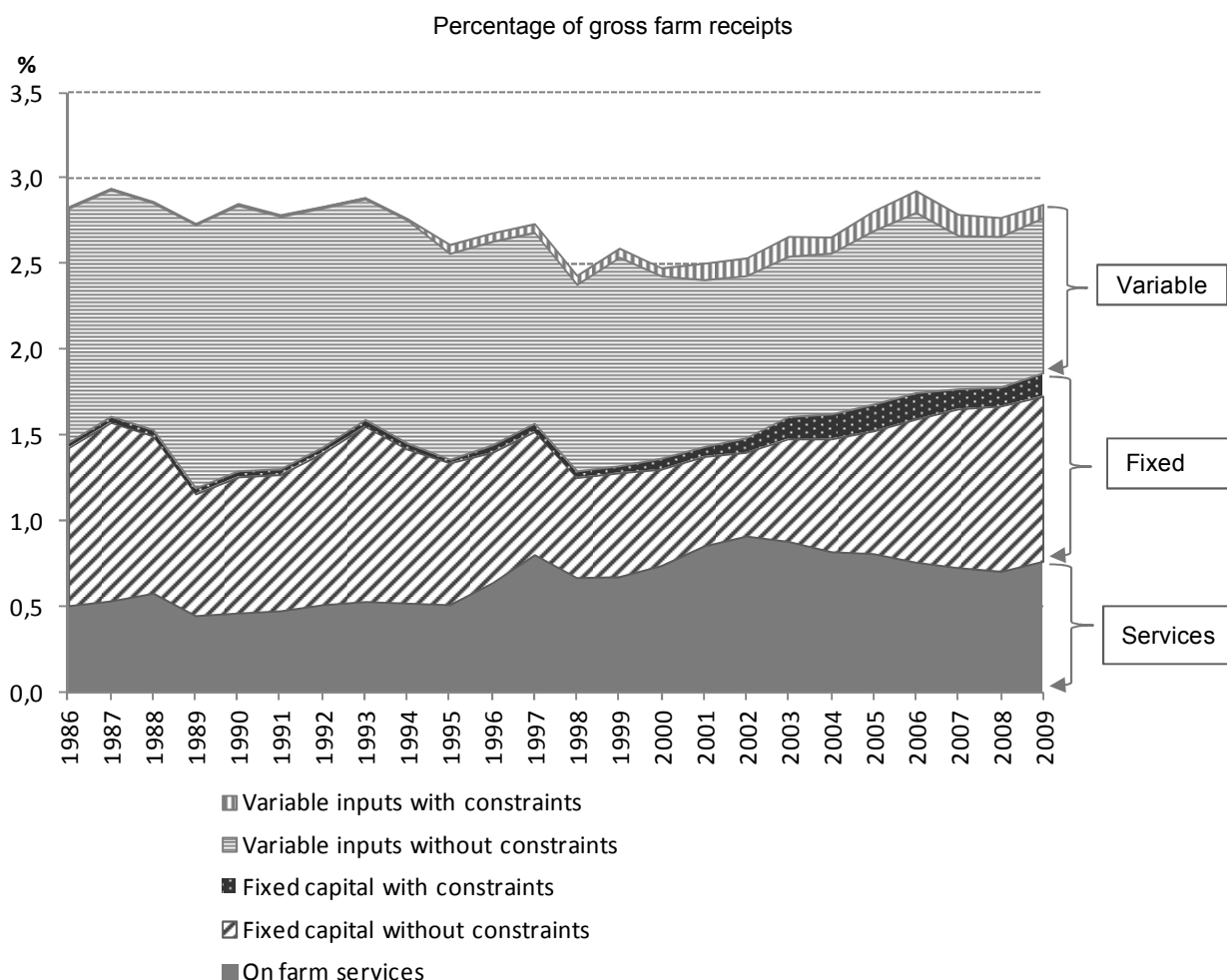
22. Payments based on input use are classified in Category B of the PSE. Payments in this category can be the most distorting of production and least effective means to support producers' incomes. At the same time, input-based policies are growing in importance as a means of achieving environmental and animal welfare goals, improving production efficiency, and achieving structural change in the sector. The effect on production and trade has to do with the way support is delivered, and this category covers a very broad spectrum of policy measures.

23. There are three main targets of policies supporting input use: policies may support the (unconstrained) use of variable inputs such as credit, fertilisers, fuel or water—these are the types of policies that distort production most. Policies may be directed at fixed capital formation—supporting on-farm investments in manure storage, for example. Policies supporting use of variable inputs and fixed capital formation are often accompanied by constraints on the use of the inputs concerned. Such constraints usually indicate that the policy is aimed at changing the production processes on farm, offering payments that are contingent upon following or avoiding certain production processes. A common motivation for such policies is to improve the environmental performance of the farm—reducing pollution risks,

improving soil quality, animal housing or biodiversity for example. Payments based on input use may also be directed at providing on-farm services. This includes pest and disease control, extension services that provide production and marketing advice to producers, seed and soil testing, or other services that can improve the efficiency and profitability of farming.

24. Support to input use in OECD countries is evenly divided across these three approaches, though it is clear that input support with associated constraints forms a small fraction of the whole (Figure 1.8). Payments based on fixed inputs account for a larger share of this form of support over time, as has support with constraints, in particular after 2002. Variable payments without constraints are mainly tax concessions for fuel and have reduced as a share of the total since the mid-1990s.

**Figure 1.8. OECD: Evolution of payments based on input use, 1986-2009**

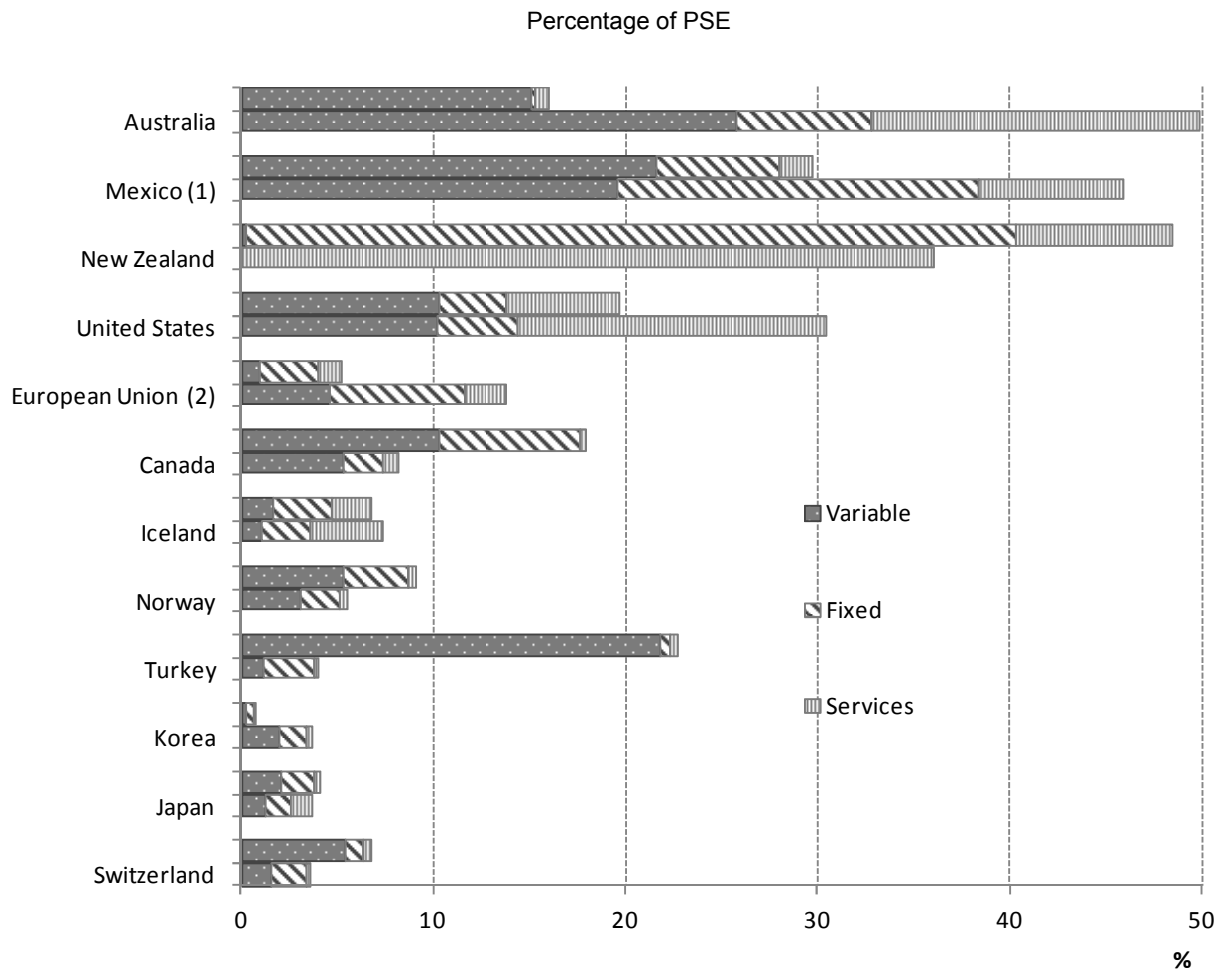


Source: OECD, PSE/CSE database 2010.

25. *Australia* is the largest user of payments based on input use when expressed as a share of the PSE, forming nearly 50% of all support (Figure 1.9). There, interest concessions related to drought, extension services and disease control measures predominate. In *Mexico*, support to the cost of price hedging and support to on-farm productive investments have become important in recent years. In the *United States*, tax concessions for fuel, support for environmentally-friendly farming practices, and extension, are major elements of this category of support. In *Korea*, credit concessions for feed purchases were increased in 2009 in response to higher feed import costs, and *Canada* replaced an existing *Farm*

*Improvement and Marketing Co-operative Loans* programme with a new programme providing enhanced loan guarantees to producers and agricultural cooperatives.

**Figure 1.9. OECD: Payments based on input use, 1986-88 and 2007-09**



The top bar represents 1986-88. Data are ranked according to 2007-09 levels.

1. For Mexico, 1986-88 is replaced by 1991-93.

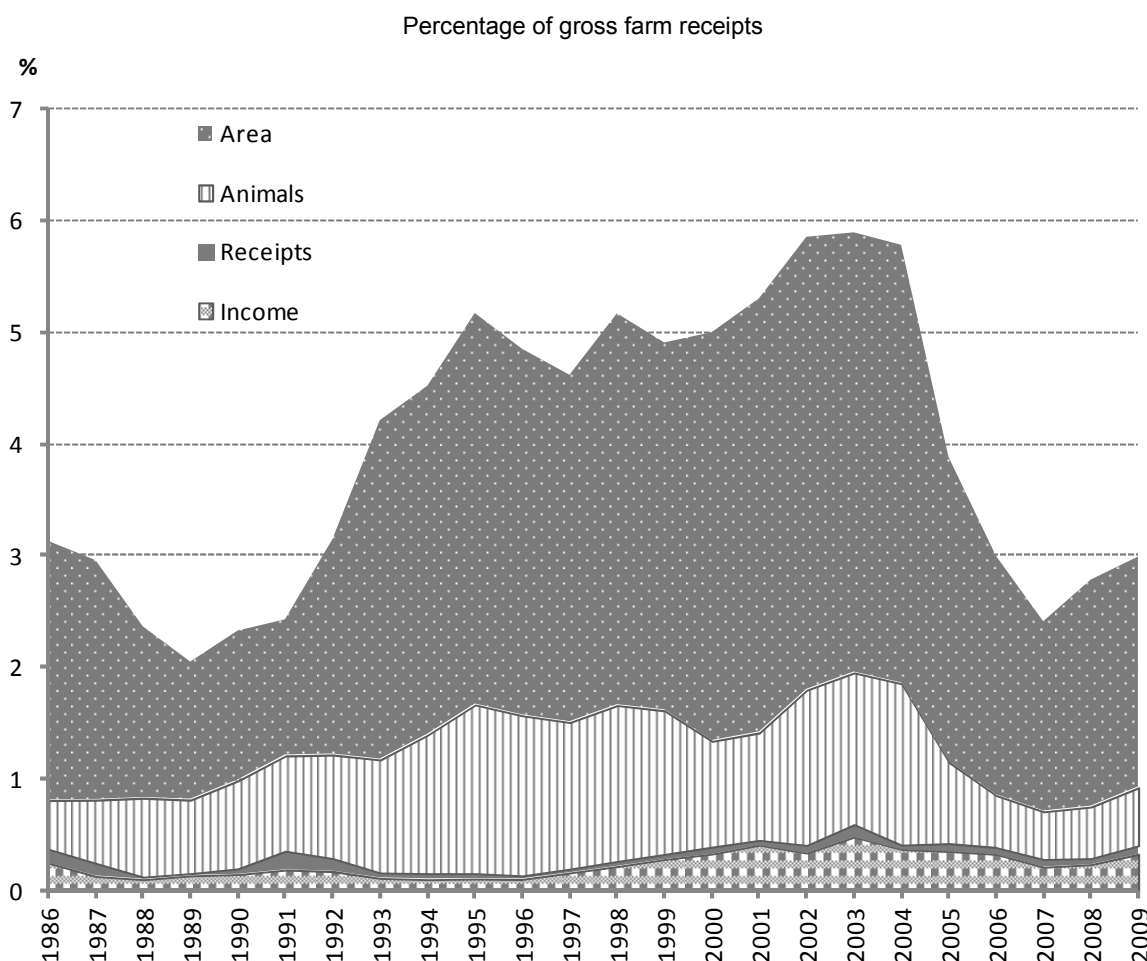
2. EU12 for 1986-94 including ex-GDR from 1990; EU15 for 1995-2003; EU25 for 2004-06 and EU27 from 2007.

Source: OECD, PSE/CSE database 2010

### ***Budgetary payments are directed at different farm characteristics***

26. Category C of the PSE contains payments based on area, animal numbers, receipts or income, and which require production of an agricultural commodity as a condition of eligibility. In this category of support, payments based on area or animal numbers predominate, though these have reduced in importance following the introduction of the Single Payment Scheme in the *European Union* (Figure 1.10).

**Figure 1.10. OECD: Evolution of payments based on current area, animal numbers, revenue or income, production required, 1986-2009**



Source: OECD, PSE/CSE database 2010.

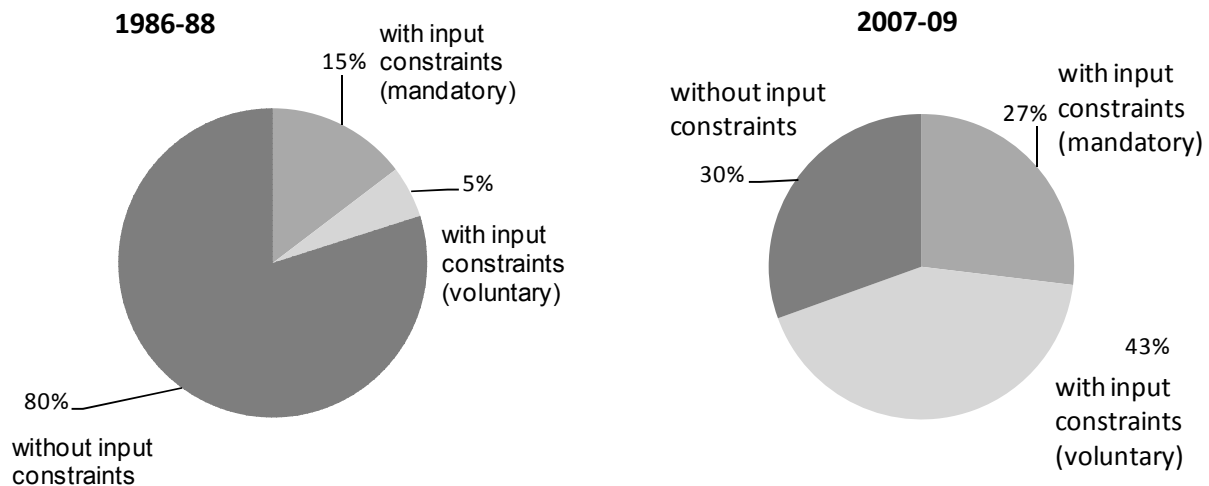
27. Payments based on income have increased in importance, though they remain a small part of the total. In particular, *Canada* uses counter-cyclical payments based on the net returns of the farm as a whole to stabilise farm income over time. Payments based on area in the *European Union* include those for production in less-favoured areas, for agri-environmental purposes, and payments maintained for crops in *France* and *Spain* as a part of flexibility in implementation of the Single Payment Scheme. In the *United States*, payments based on area come from crop insurance programs, disaster payments, and the *Average Crop Revenue Election (ACRE)* programme, newly introduced in the 2008 Farm Bill. This program is offered as an alternative to other commodity programs; currently 8% of eligible farms representing 13% of base area (historical land use in a reference period) have enrolled in the programme.

28. Payments based on area, animal numbers, receipts or income also frequently involve constraints with respect to actions the farmer must take or refrain from as a condition of eligibility. As was the case for payments based on input use, the most common reason for such constraints is to achieve a specific policy objective such as environmental enhancement, avoidance of pollution, or preservation of rural areas, for example. Such constraints may be required by regulation, with the policy acting as compensation or incentive to meet such regulatory requirements. These are termed in the PSE as “mandatory” input constraints. More frequently, the constraints are not a legal requirement but rather are part of the design of

the program, becoming obligatory only when the farmer chooses to participate in the program. Such constraints go beyond minimum legal requirements and are termed “voluntary” constraints.

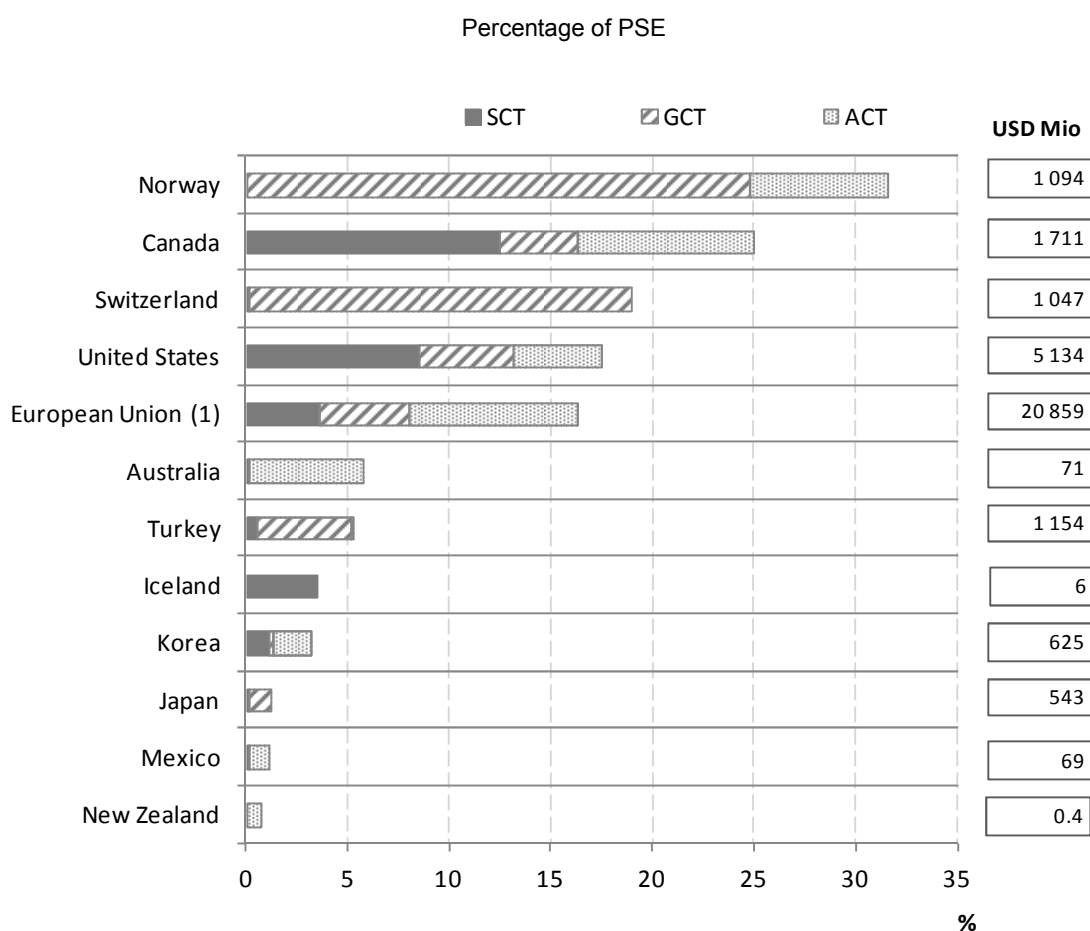
29. In the period 1986-88 payments with voluntary constraints were the smallest share of the total, at 5% of all payments in this category while payments without constraints dominated. This situation has reversed over time and in the 2007-09 period payments with voluntary constraints formed the largest share at 43% of the total for this category of support (Figure 1.11)

**Figure 1.11. OECD: Payments based on area, animal numbers, receipts or income**



Source: OECD, PSE/CSE database 2010.

30. Support offered in this way may be directed to specific commodities (SCT) or commodity groupings (GCT — such as all oilseed crops, or all ruminant animals), or to all commodities without distinction (ACT). Typically, the more broadly-available and less commodity-specific a program is, the less distorting of overall production it will be. In most cases, payments targeted at area, animals, revenue or income are not also directed towards specific commodities (Figure 1.12). In *Canada* and the *United States* crop insurance accounts for a large share of commodity-specific support (SCT) based on area, animals, revenue or income. *Norway* makes the most use of these forms of support as a share of the PSE, mainly in the form of a production subsidy for livestock and a subsidy for vacations for farmers (GCT). Several programs in *Switzerland* aimed at maintaining livestock on pasture and in less favoured areas comprise the majority of GCT support in that country; these payments were increased in 2009.

**Figure 1.12. Payments based on current area, animal numbers, receipts or income, production required by country, 2007-09**

SCT: Single commodity transfers; GCT: Group commodity transfers; ACT: all commodity transfers.  
1. European Union 27.

Source: OECD, PSE/CSE database 2010.

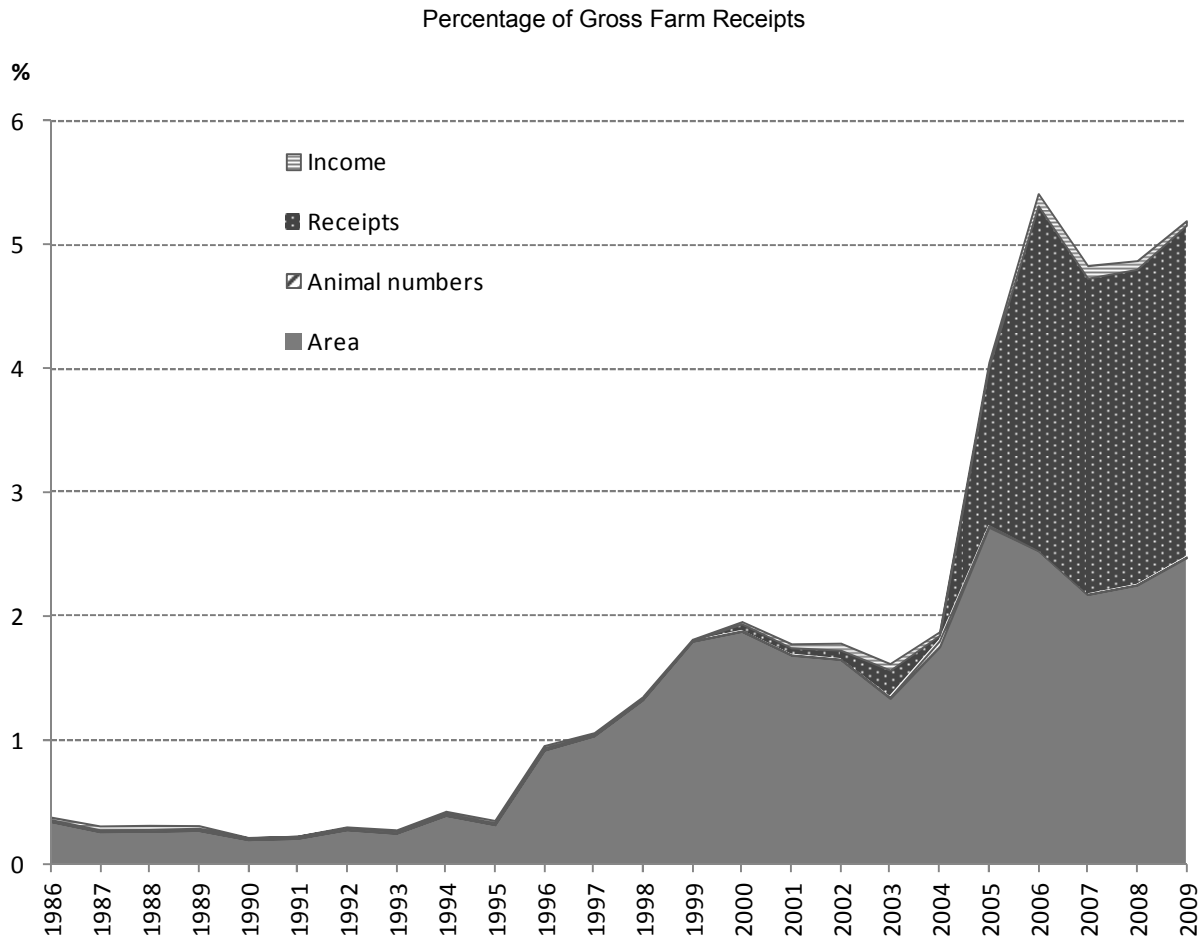
### ***Payments based on non-current factors have grown strongly...***

31. No category of support better demonstrates the changes in the way that agricultural policies have been implemented in the last decade than Category E, payments based on non-current area, animal numbers, receipts or income that do not require production as a condition of eligibility. Payments in this category reduce production distorting effects while working towards achieving their policy objectives. Many of the payments in this category are explicitly designed to support income, and OECD research suggests that this form of support can be particularly effective in that regard, though they do result in capitalisation in land values.

32. In the **European Union**, the Single Payment Scheme (SPS) and Single Area Payment Scheme (SAPS) fall in this category. Payments under the SAPS scheme increased in 2009 as scheduled. The SPS scheme replaced earlier price support and area payments and is the largest budgetary outlay under the Common Agricultural Policy (CAP). The “historical” implementation of the program is paid according to former receipts from support (classified in the PSE as based on farm receipts) while the “regional” implementation is classified as based on area. SPS payments increased in 2009 following reform to the fruit and vegetable schemes. In the **United States**, payments paid according to base acres (historical land

use in a reference period) also fall in this category. These include fixed direct payments as well as counter-cyclical payments which are dependent on current prices. For the OECD as a whole, this category of support has grown from a small share before 1995 to nearly one quarter of the PSE in 2009 (Figure 1.13).

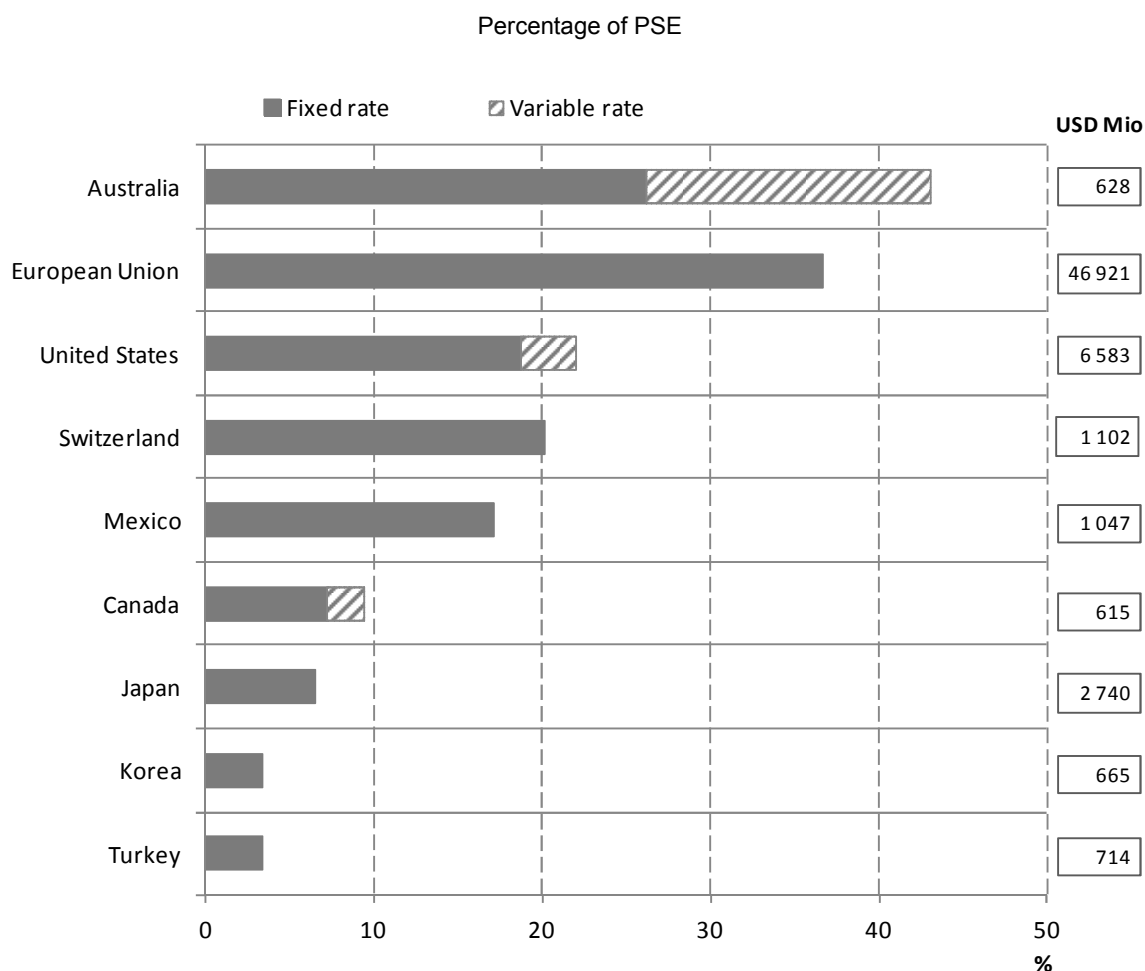
**Figure 1.13. OECD: Evolution of payments based on non-current A/An/R/I, production not required, 1986-2009**



Source: OECD, PSE/CSE database 2010.

33. In *Switzerland, Korea, Turkey* and *Mexico*, direct payments made in this category are part of farm income support policy, replacing in part previous market price support. In *Mexico*, the PROCAMPO program was extended for the period 2009-2012. In *Japan*, the policy to divert rice production to other crops (such as wheat and soybean) was strengthened through increasing the diversion payments. Programmes in this category in *Canada* are mostly to respond to disasters caused by drought, disease, or to price volatility. In *Australia* such payments are primarily for drought relief and restructuring of the dairy sector (support for both ended in 2008). Payments may be made either at fixed rates, offering essentially a fixed payment to recipients, or at variable rates, where the producer may not be able to directly control the level of the payment, but it nevertheless may change according to factors such as price (Figure 1.14).

Figure 1.14. Payments based on non-current A/An/R/I, by country, 2007-09



Countries with zero payment level not shown.

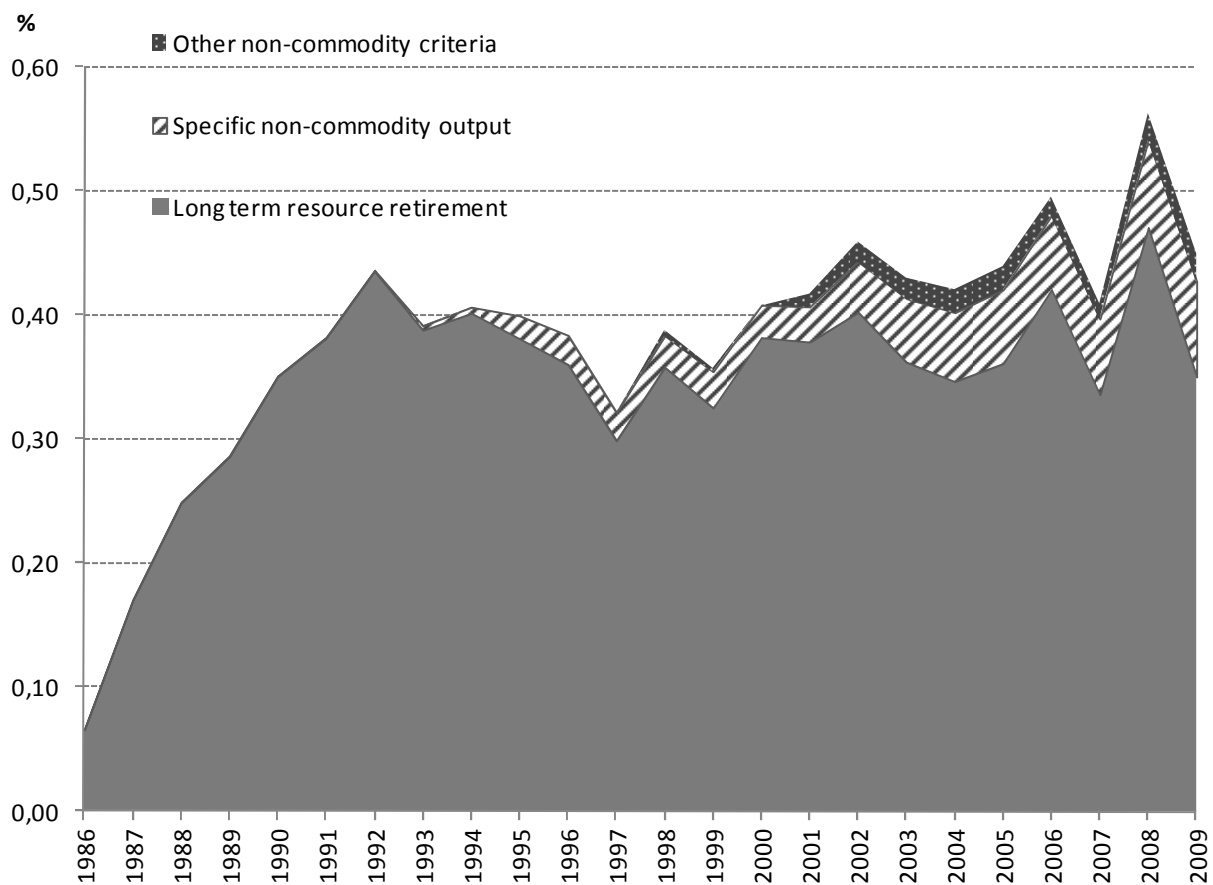
Source : OECD, PSE/CSE database 2010.

***...and more payments directed at non-commodity output also reflect wider policy objectives***

34. Support based on non-commodity criteria (Category F) is targeted at specific objectives not directly connected to agricultural production. While this category covers a broad variety of environmental and social objectives, the largest share of support in this category goes to resource retirement, such as buying up of production quota or payments to remove grapevines. These payments help farmers adjust after a change in policies or other cases where structural adjustment is needed (Figure 1.15).

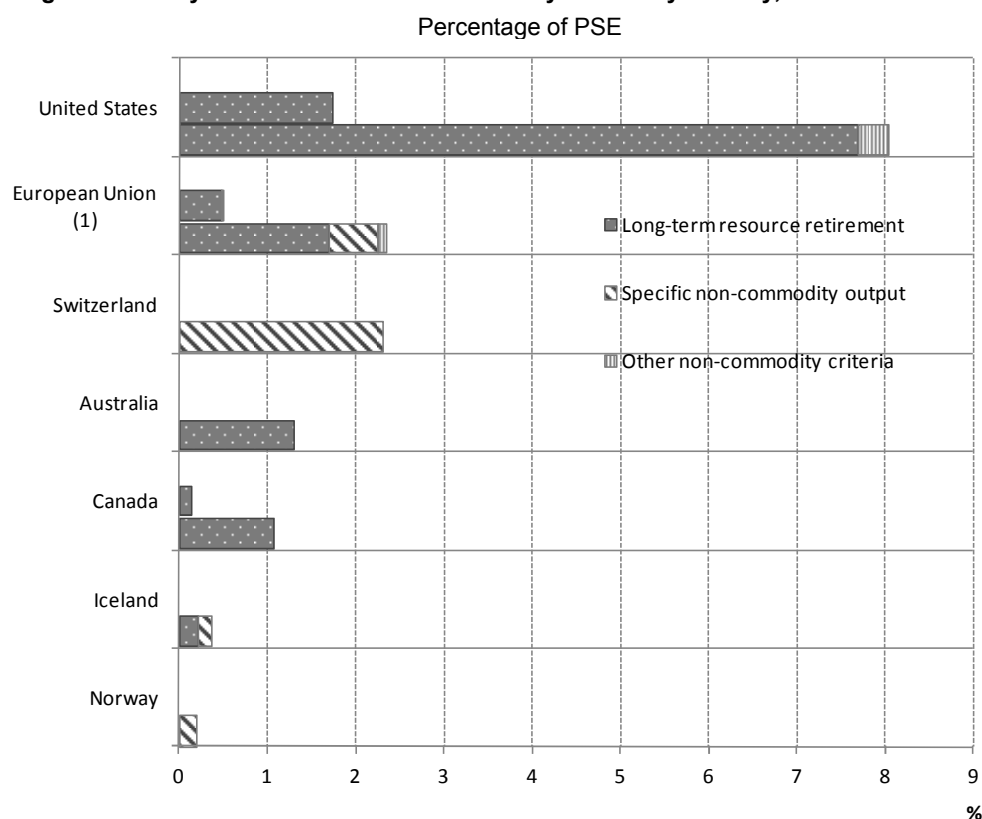


**Figure 1.15. OECD: Evolution of payments based on non-commodity criteria, 1986-2009**  
Percentage of Gross Farm Receipts



Source: OECD, PSE/CSE database 2010.

35. In the *United States*, the largest share of support in this category is due to the Conservation Reserve Program (CRP), in which farmers engage in long-term contracts to conserve land outside of agricultural production (Figure 1.16). For the *European Union*, resource-retirement programs include grubbing-up of grape vines, buyback of sugar quota and promotion of afforestation. In *Canada*, a tobacco quota reduction scheme is the largest item, and in *Australia* it is also for tobacco growers as well as those leaving the sector due to drought. Specific non-commodity outputs targeted by the *European Union* are preservation of biodiversity, landscape elements and amenities such as terraces, stone walls or hedges. In *Switzerland* payments are directed, for example, at extensive meadows, tall fruit trees and environmentally-friendly production methods.

**Figure 1.16. Payment based on non-commodity criteria by country, 1986-88 and 2007-09**

Countries with zero payment level not shown. Top bar is 1986-88.  
 Source: OECD, PSE/CSE database 2010.

### ***Payments to general support services are growing especially for marketing and infrastructure***

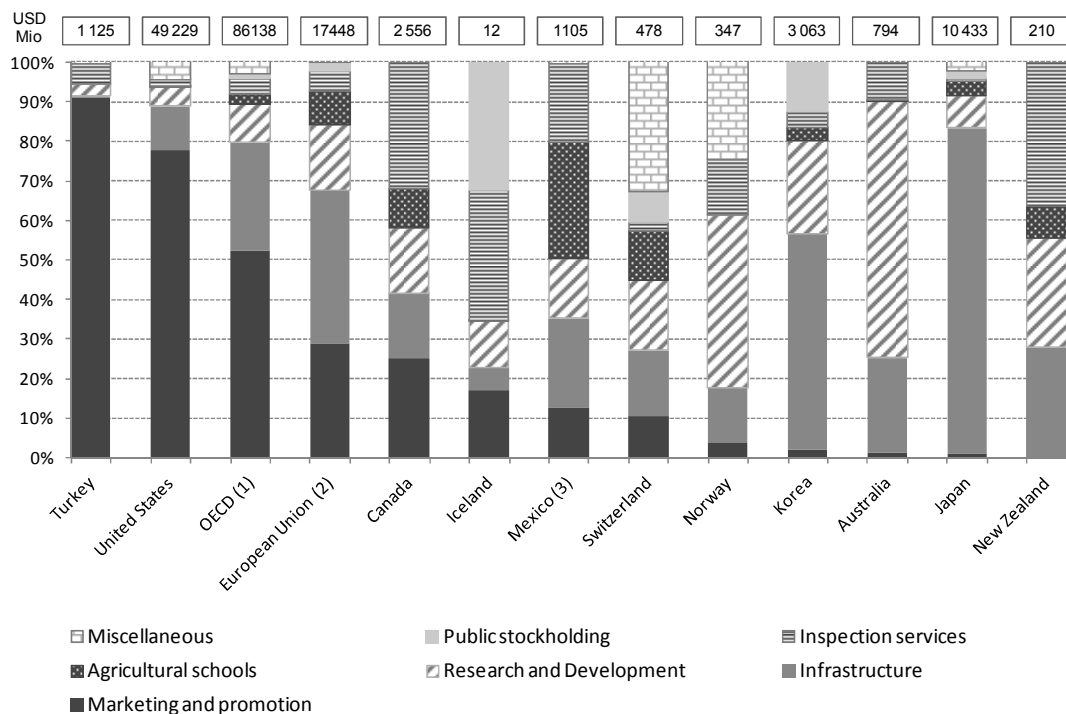
36. The share of support provided to general services benefitting the agricultural sector as a whole has increased by 50% from 13% in 1986-88 to 23% of the total support to agriculture in 2007-2009. In 2009, the share of spending on this form of support increased by more than two percentage points from 2008, forming nearly one-quarter of all spending on agricultural support; summing the PSE, the budgetary transfers component of the CSE and the General Services Support Estimate (GSSE) yields the Total Support Estimate (TSE), which enumerates support provided to producers individually and collectively, as well as subsidies to consumers (Tables 1.1 and 1.2). The growing share of support that is provided to the agricultural sector as a whole rather than to individual producers is an important re-orientation of agricultural support spending to forms that can bring significant benefits to producers and consumers, with potentially less production and trade distortions.

37. With the exception of public stockholding, an activity related to the operation of market price support policies, all components of the GSSE have grown over time. The most significant growth has been in marketing and promotion, which now accounts for more than half of the GSSE. In the *United States*, the Supplemental Nutrition Assistance Program (SNAP) — which provides assistance to poorer consumers to purchase food — has nearly tripled in size, averaging USD 34 billion in 2007-2009 compared with USD 9 billion in 1986-1988. This single program now accounts for 32% of the TSE for the United States. In most other countries, marketing and promotion expenditures are used to develop existing markets, open new markets, and help domestic producers gain market share abroad.

38. Infrastructure spending supports the agricultural sector by providing public services such as roads and other means to transport agricultural products, irrigation infrastructure and other facilities used in the production and marketing of agricultural products. In some cases, this spending benefits rural areas as a whole while in others it is more directly of benefit to producers. Other forms of support measured in the GSSE are for research and development, agricultural schools and inspection services.

39. The OECD average masks considerable variation across countries in how they support general services. In *Australia*, most of this support is for research and development, mainly directed towards the Commonwealth Scientific and Industrial Research Organisation (CSIRO) (Figure 1.17). In *Japan*, infrastructure spending dominates as the government assists in the maintenance of paddy fields, as well as for flood control, and road building.

**Figure 1.17. Composition of General Services and Support Estimate by country, 2007-09**  
Percentage share of GSSE



Countries are ranked according to the percentage shares of Research and Development.

1. The OECD total does not include the non-OECD EU member states.

2. European Union 27.

Source: OECD, PSE/CSE database 2010.

### ***Progress, but the need for more progress***

40. In the 2008 edition of *Agricultural Policies in OECD Countries*, higher commodity prices were seen as an opportunity to change the focus of agricultural policy, as they reduced the need for market price support and other forms of income support to producers. While prices have declined from those peaks, the need for new approaches remains. In the context of the financial crisis and the fiscal belt-tightening currently underway, the cost of agricultural policies to consumers and taxpayers calls for a fresh look. Multilateral negotiations, in the form of the Doha round, have not yet yielded agreement and require new momentum. Bilateral and regional trade agreements, while sometimes dealing with complicated issues

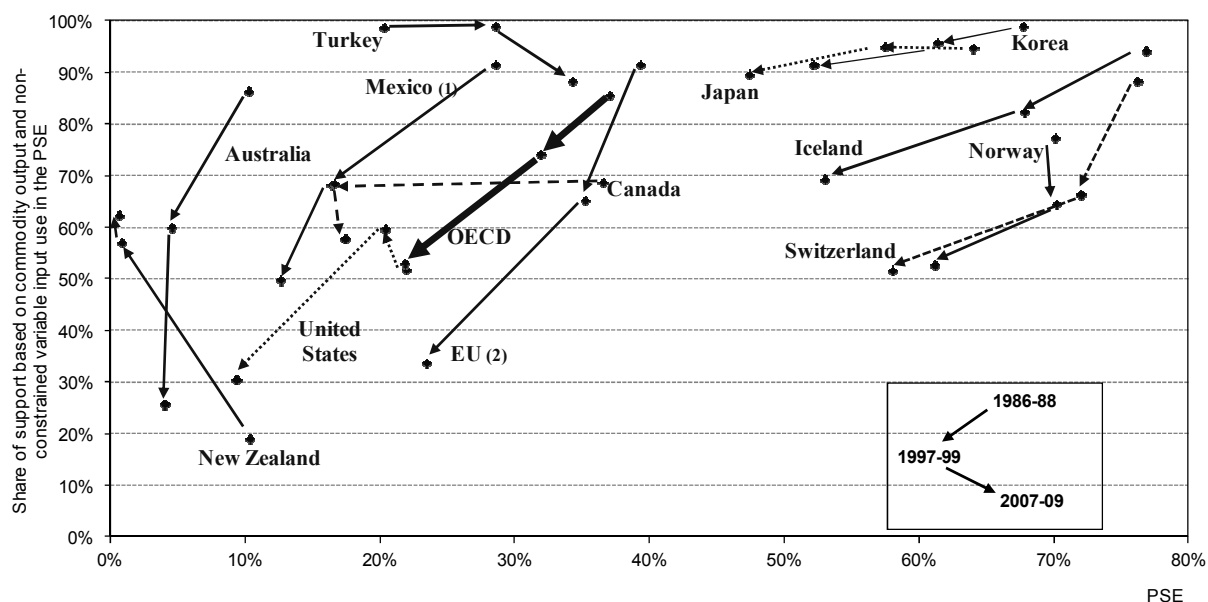
such as sanitary and phyto-sanitary regulations and non-tariff barriers, often limit liberalisation for sensitive agricultural products.

41. The rapidity of growth in agricultural commodity prices in 2007 led to concerns about the impact on consumers and the sufficiency of food supplies in the face of growing global demand. The fall in prices at the end of 2008 led once again to concerns about the sufficiency of food supplies due to pressure on farm income and profitability. It seems to be the case that the problem is not only that prices are too high or too low, but rather rapid changes in prices that mobilise protest and put pressure on policy makers to act while testing the ability of the food system to respond.

42. Some countries put considerable effort into reducing price risk faced by producers, typically by compensating for low prices or income. Similarly, some countries insulate their consumers from price variability through the use of export or price controls. These efforts contribute to higher price variability in world prices as these countries “export” their price variability abroad. Furthermore, price stabilization is not always capable of reducing farmers’ revenue and income variability, and its distributional and overall welfare impacts depend on the source of the price variability. Effective risk management policies need to assess the different sources of risk affecting farmers or consumers and apply diversified risk management strategies that help farmers and consumers to manage the impact of the whole set of risks they face. A long-term solution will include supporting better functioning and transparent global markets that can reduce price variability.

43. OECD countries have made good progress in transforming their agricultural policies, and the success of these efforts provides evidence that better targeted, decoupled policies can deliver benefits to producers and savings to consumers and taxpayers. Every OECD country has reduced the share of support delivered in the most distorting forms (Figure 1.18). The only exception is *New Zealand*, where results are skewed by remaining sanitary restrictions on poultry imports (included in MPS) in the context of a near total elimination of support.

Figure 1.18. OECD: Changes in level and composition of producer support



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 2007-09.

2. 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 2010.

44. While progress in reducing the level of support, and further improving its composition away from support based on output, has slowed recently, still much can be done to improve the way support is delivered. Governments can:

- Clarify the objectives of agricultural policies, improve the transparency of their operation, and use evidence-based approaches to evaluate progress.
- Better target income support to those farmers with low income, and focus on risk management strategies to address income variability due to prices or disasters while avoiding market distortions.
- Enhance environmental performance through the application of the polluter pays principle and encourage innovative approaches to incentivise farmers to provide ecosystem services that are not remunerated by the market.
- Facilitate producers' responses to climate change and conservation of natural resources and biodiversity.
- Invest in infrastructure to help ensure that markets for food and agricultural products function efficiently.
- Promote innovations that can enhance the efficiency and sustainability of the sector, to ensure safe, plentiful and desirable food production into the future.

45. The OECD commitment towards a Green Growth Strategy<sup>2</sup>, as well as the vision for the future expressed by Agriculture Ministers in OECD in 2010 demonstrates confidence in the agricultural sector's potential to provide safe and nutritious food for the world's growing population while contributing to sustainable economic, social and environmental development.

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2. OECD will continue to work on the Growth Strategy with the aim of identifying policies that will contribute to sustainable economic growth taking into account progressive and achievable objectives, both for the developed and developing countries.

## ANNEX 1A.

### 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).

### Annex Box 1. Definitions of categories in the new 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).

#### 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.

*Continued*



**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 constraints 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*).

**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.

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