Chapter 3.

An Overview of Risk-Related Policy Measures

Which policy measures have a direct risk dimension?

All agricultural policy measures have an impact on risk.[1] Some measures, however, are specifically designed to reduce price, yield or income variability, or to smooth consumption, and thus help farmers manage risk, either because they prevent or reduce the occurrence of risk (risk reduction), or because they limit the effect of risk on income (risk mitigation) or consumption (risk coping). Risk reduction measures would be, for example, disease control measures such as vaccination, which aims to limit the occurrence and spread of animal diseases and thus prevent/reduce potential losses in livestock receipts. Market price support (MPS) measures, which stabilise domestic prices, also reduce domestic price risk. Risk mitigation and coping can operate through established (*ex ante*) mechanisms such as insurance schemes or income stabilisation programmes, or through *ex post* interventions such as *ad hoc* assistance to compensate income losses.

In this chapter, the policy measures that are specifically designed to reduce price, yield or income variability, or to smooth consumption are referred to as “risk-related” measures. Following the conceptual framework developed in OECD (2009a), they are classified as either contributing to risk reduction or risk mitigation/coping.[2] Among risk reduction measures, MPS is identified separately as it dominates any other risk reduction measure in many countries in terms of support level.

Other support measures that provide a stable (fixed rate) transfer to income can also have risk impacts and enter into farmers' risk management strategies. This is the case for direct income payments, in particular those that are highly decoupled. Decoupled income payments provide stable support, which contributes to reducing the coefficient of variation (ratio of standard deviation to mean) of farm receipts, as it increases the mean. They may also change farmers' aversion to risk. They are not, however, considered in this study as risk-related measures, as they are not designed to reduce variations in farm receipts.

The classification of risk-related measures mentioned above is used in this report to present an overview of the policies that reduce risk or mitigate the consequences of risk faced by farm households in OECD countries and selected emerging economies. This report is based on information from the OECD PSE database, WTO notifications on domestic support commitments and former OECD studies (notably OECD, 2001 and 2005).

The PSE database contains information on transfers to producers arising from policy measures that support agriculture. In the database, each individual measure is classified into one of the categories of support defined in Box 3.1, which are based on the following implementation criteria:

- the transfer basis for support: output, input, area/animal numbers/revenues/incomes, non-commodity criteria;
- whether the support is based on current or historical (fixed) basis; and
- whether production is required or not.

In addition, a number of labels may be applied to individual policies to provide further specification of the way each measure is implemented: with or without production limits or input constraints, whether payments have fixed or variable rates (Box 3.1). [3]

Information contained in the PSE database is used to measure the share of risk-related policies in total support to producers. Each individual measure in the various PSE categories is considered, and classified according to its risk-related features. In addition, the variable rate label is used to identify policies with countercyclical features: as the rate of support varies inversely with a change in price, yield, net revenue or income, these measures are designed to reduce price, yield or income variability.

Information on the share of support from policies identified here as risk-related in the overall domestic support notified to the WTO.

This section briefly describes the various types of measures identified as reducing price, yield or income variability or smoothing consumption (called here risk-related policies) in place in OECD countries and selected emerging economies and, based on Tables 3.1 and 3.2, comments on their occurrence.

Box 3.1. Classification of agricultural policy measures in the Producer Support Estimates (PSE)

The PSE includes the following categories

MPS **Market price support:** 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.

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

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

-- **PIV Variable input use** that reduces the on-farm cost of a specific variable input or a mix of variable inputs.

-- **PIF Fixed capital formation** that reduces the on-farm investment cost of farm buildings, equipment, plantations, irrigation, drainage, and soil improvements.

-- **PIS On-farm services** that reduce the cost of technical, accounting, commercial, sanitary and phytosanitary assistance and training provided to individual farmers.

PC **Payments based on current A/An/R/I,[1] production required**: transfers from taxpayers to agricultural producers arising from policy measures based on current area, animal numbers, revenue, or income, and requiring production.

PHR **Payments based on non-current A/An/R/I,[1] 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.

PHNR **Payments based on non-current A/An/R/I,[1] 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.

PN **Payments based on non-commodity criteria**: transfers from taxpayers to agricultural producers arising from policy measures based on the long-term retirement of factors of production from commodity production; the use of farm resources to produce specific non-commodity outputs of goods and services, which are not required by regulations; and transfers provided equally to all farmers, such as a flat rate or lump sum payment.

Definitions of labels attributed to individual measures

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.

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.

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. The payments with input constrains are further broken down to 1) Payments conditional on compliance with basic requirements that are mandatory (with mandatory); 2) 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[1] of commodity(ies).

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.

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.

1. A (area), An (animal numbers), R (receipts) or I (income).
Source: OECD (2008).

Risk reduction measures

These measures reduce the occurrence of risk as they increase domestic price stability, limit production losses, reduce marketing uncertainties, and encourage the adoption of risk management techniques. Government intervention in risk reduction includes price stabilisation; inspection and food safety measures; and support to production and marketing techniques. A number of specific measures to reduce the occurrence of risk are identified in OECD countries and selected emerging economies (Tables 3.1 and 3.2 respectively). These are:

- market price support measures, through price stabilisation;[4]
- market interventions such as private storage or non-marketing of agricultural products;
- support to production techniques such as water management (irrigation, drainage, flood control and other); purchase of certified seeds and animal breeds; pest and disease control;
- technical assistance and extension; and
- inspection of agricultural products and food safety measures.

Market price support measures, through price stabilisation

In addition to supporting domestic prices, *i.e.* raising them above world price levels, price support measures often contribute to domestic price stabilisation, via the mechanisms described below. Price stabilisation need not involve support, but *de facto* does in most countries. As defined in OECD (1994), an income stabilisation measure that does not provide long-term support is a one that follows a trend reflecting the long-term evolution of prices. Positive and negative government transfers to farmers would be mutually offsetting over time and costs would be limited to administrative costs.

Price support measures generally reduce the transmission of world price changes in domestic markets and thus reduce domestic price variability. Domestic measures such as administered prices triggering intervention purchase and public storage reduce domestic price fluctuations by preventing prices from falling below a given limit.

Export subsidies also stabilise domestic prices as they facilitate exports of excess supply and thus export domestic variability onto world markets. Export taxes or bans are used to prevent domestic prices from increasing as much as world prices.

While simple tariffs do not necessarily reduce domestic price variability, high levels of protection, which strongly limit imports (in particular tariffs that are so high as to be prohibitive), isolate domestic producers from world price variability, but not from domestic variability. Since the Uruguay Round Agreement on agriculture in 1995, which banned countercyclical border measures (variable levies), maximum tariffs are fixed (*i.e.* bound), but countries can react to world price fluctuations by modifying applied tariffs and applying special safeguard measures within WTO rules. All countries examined have price stabilising support for at least some commodities.[5]

Market interventions such as private storage or non-marketing of agricultural products

Farmers generally use marketing techniques, such as spreading sales over time, to deal with short-term price variability. Government assistance to private storage is thus considered as a risk reduction measure. While spreading sales is a very widespread risk management strategy used by farmers and agro-food industries, very few countries subsidise private storage, and when they do, it is to a very limited extent. Payments for the non-marketing of agricultural products (when prices are low) are rare. Under the reformed common market organisation for fruit and vegetables implemented at the beginning of 2008 in the European Union (EU), for example, market withdrawals for fruits and vegetables can only be carried out by producer organisations, with limits set on the volume of withdrawals and EU funds available.

Support to production techniques

Various production techniques help farmers reduce the risk of production failure. They include opting for production that is better adapted to the land and climatic environment. This may involve using high quality seeds and breeds also adapted to the specific conditions in the field; managing water supply to crops through irrigation and drainage; and the prevention, monitoring and treatment of pests and diseases. Regarding the choice of seeds and breeds, risk management strategies can be diverse and often involve various trade-offs between productivity, marketability, resistance to pests and disease and preservation of diversity that may contribute to future pest and disease resistance. Subsidies to inputs (*e.g.* seeds or irrigation water) and investment assistance (for irrigation projects) reduce the costs for farmers of adopting these risk management techniques, but their main objective is usually to raise productivity.

These risk management techniques are widely used by farmers. In many countries, governments provide support to farmers for the adoption of these techniques (*e.g.* irrigation investments), or provide the service directly (pest and disease control). In the EU, support for the adoption of these techniques or the provision of these services is mainly the responsibility of member states.

Technical assistance and extension

Among the many areas in which they advise farmers, extension services play an important role in disseminating information on production and marketing techniques for risk management, and in encouraging their adoption. In the area of risk management, they also have a more general role in advising farmers on best strategies outside this classification of government intervention.

Inspection and food safety measures

Inspection and food safety regulations contribute to reducing marketing risk. Governments set minimum food safety standards and monitor compliance. In addition to developing its own standards, the food industry contributes to financing and implementing food safety regulations, but inspection of agricultural products is supported by governments in all examined countries.

Risk mitigation/coping measures

These measures contribute to smoothing income or consumption by helping farmers to get insurance against drops in price or yield and by providing assistance in the event of income losses. Tables 3.1 and 3.2 distinguish *ex ante* mechanisms for mitigating the consequences of risk and *ex post* interventions, such as *ad hoc* payments. However, the distinction is sometimes difficult to make, for example in the case of disaster payments made after the damage has been registered but using established mutual funds.

Ex ante measures

The main types of *ex ante* measures for smoothing farm household income are:

- payments with a variable rate (or countercyclical payments) compensating for all or part of the income losses suffered according to a pre-established formula;
- subsidies for risk management tools such as insurance systems or futures markets;
- income tax smoothing systems; and
- income diversification support.

Payments with a variable rate (or countercyclical payments)

Some programmes are implemented explicitly to stabilise farmers' receipts (*ex ante*). They only generate transfers when receipts are lower than a target level. Variable rate (or countercyclical) payments are identified in the PSE database using a label defined in Box 3.1. This label may apply to all categories of PSE measures, but in the context of this report, only payments based on output (PO), area, animal number, receipts and income (PC, PHR, PHNR)[6] that have a variable rate are considered. Some sort of countercyclical payment is currently used in many of the countries examined, with the exception of Iceland, Norway, Switzerland, Chile, China, South Africa and Argentina. However, the extent to which they are used varies a lot by country (see next section). In particular, countercyclical payments in the EU are mostly payments for disaster relief by member states.[7]

Risk management tools: subsidies to insurance systems or futures contracts and options

Futures markets are used to reduce price risk by co-operatives and wholesalers, but also by individual farmers, often on large farms. Some governments encourage farmers to use futures markets, mainly by providing information and technical advice. Canada and the United States have offered pilot programmes to subsidise premiums on option contracts. In the 1990s, the Cattle Option Pilot Program in Canada offered a customised option contract to cattle producers, who had to pay the premium and the transaction fees but no registration fees. It was discontinued because of low participation rates. The Dairy Option Pilot Program was introduced in the United States under the Fair Act 1996. The government paid up to 80% of the premium of each option and broker fees up to USD 30 per option. It ended in 2007.

Among the countries examined, the only one, which currently provides subsidies for options contracts to farmers is Mexico. The Agricultural Products Option Programme (APOP) provides subsidies to farmers who buy commodity options on United States futures markets. ASERCA acts as an intermediary between the producers and United States brokers and subsidises part of the option premium (OECD, 2001, Box 9). The programme started in 1994 with cotton and has been mainly used for wheat, maize, sorghum and cotton, but an increasing number of additional commodities are covered: beef, coffee, orange, pork, safflower and soya in 2007. In Brazil, the risk premium for private option contracts is subsidised for agro-food industries.

Subsidies to agricultural insurance systems are more widespread. They may include subsidies to premiums, reinsurance or administrative costs. There is a wide variety of insurance systems in countries examined, with large differences in coverage and implementation systems.

In many countries, private insurance systems cover losses from specific natural events that farmers cannot influence, such as hail, drought or floods. Some are subsidised, but not all. Multi-risk, crop insurance schemes, which compensate for losses in yield whatever the cause, always operate with government support. Government involvement in insurance systems can include setting a legal framework, subsidising farmers' premium and/or insurance companies' administration costs as well as providing reinsurance. In most countries examined, insurance systems are operated by private insurance companies, but in Canada, the government manages insurance programmes directly.

Some countries like Canada, the United States and Spain have a long history of subsidised crop insurance systems. They are being developed in other countries like France. While there is no insurance system at the EU level, many EU member states subsidise agricultural insurance systems to some extent (Table 3.2). In Canada and the United States, more comprehensive systems also cover losses in revenue or net income.

There are also insurance systems that are not specific to the agricultural sector, for example against risks that affect buildings (fire, water damage, hurricanes) or household members (health insurance, labour replacement). Some countries like the United States provide subsidies to these insurance systems.

Box 3.2. Examples of income tax smoothing systems in OECD countries

In Australia, the Income Tax Averaging Scheme is a long-standing tax concession, which allows farmers to be taxed at their average rate of income over a rolling five-year period (OECD, 2001). In case of natural disasters, income from forced disposal or death of livestock or sales of wool can be deferred or spread, and income from insurance recoveries can be spread. Individual farmers in Ireland have the option of being taxed on the basis of averaging farming profits or losses over three years, as long as neither farmer nor spouse have another trade or employment. A similar option is offered to individual farmers in the United Kingdom, but with a two-year averaging period. This is not specific to farmers (writers also benefit) but they are the main users. Special rules apply to "hobby" farmers to limit the use of continuous farm losses to reduce taxation on other income. Tax averaging in the United States is available for sole farmers and partnerships over a three-year period. This is only applicable to farmers and farm income. In the Netherland, income averaging over a three-year period for taxation purpose is allowed for all business income, including from farming.

In Australia, the Farm Management Deposit Scheme, which replaced the Income Equalization Deposit Scheme in 1999, allows farmers to reduce their tax liabilities by setting aside money in high income years and withdrawing it as income in low income years.

The Income Equalisation Scheme in New Zealand allows farmers, fishers and foresters who are eligible taxpayers to even out fluctuations in income by spreading their gross income from year to year. They are allowed to deposit income from farming, fishing or forestry with Inland Revenue into a special account. The deposit is held for a maximum period of five years and earns interest at 3% per annum on amounts left on deposit for more than 12 months. The interest paid becomes part of the deposit for tax purposes. Deposits are tax deductible in the year for which they are made and withdrawals (including interest) are assessable in the year for which they are made. The adverse event income equalisation scheme operates in conjunction with the standard income equalisation scheme. It allows the deferral of income tax on additional income which is generated by the forced sale of livestock from the year of sale to the year the livestock is replaced. Those deposits earn interest at a rate of 6.5% per annum from the date of receipt until the deposit is refunded.

In Sweden, a tax allocation reserve (or profit equalisation system) was introduced in 1994 in place of earlier reserve systems (The Investment Reserve System (1979-90) and the Tax Equalisation System (1991-93)). It applies to business profit of any enterprise. Legal entities may deduct up to 25% of annual taxable income (farm profit) in a given year and private entrepreneurs and people who own a share of a partnership may deduct up to 30%. Such deductions shall be included to taxable income no later than the sixth year after they were made (update from OECD, 2001, Box 7).

In France, an income tax smoothing system was introduced in 2002 and refined in 2006 (*déduction pour aléas*, DPA).[1] Farmers taxed on the basis of real profits (standard or simplified), who have subscribed an insurance plan for damages to crops and losses from animal death, can deduct a portion of their profits from their annual taxable income and place it in a professional savings account. From 2006, up to EUR 26 000 can be saved annually for both the DPA and another tax deduction scheme for investments (*déduction pour investissement*, DPI). Money placed in the saving account can be used in cases of climatic (hail, frost), economic (break in land rent contract), sanitary (contagious disease) or family (divorce, invalidity) unforeseen problems, within five to seven years depending on the problem. Sums on these accounts become taxable when used or if not used, after seven years.

In Canada, NISA allowed farmers to set aside money in individual accounts to be withdrawn in low income years. The government also contributed to NISA accounts. Taxes on government contributions and interests earned were deferred until funds were withdrawn by participants. In 2003, the NISA programme was replaced by the Canadian Agricultural Income Stabilization (CAIS) programme and all NISA funds must be withdrawn by 31 March 2009. In various circumstances, farmers can defer taxation of some receipts from one year to the other with the effect of smoothing annual income. This applies to compensation payments for the compulsory destruction of livestock and to receipts from sales of breeding livestock in drought stricken areas.

1. http://www.impots.gouv.fr/

Source: OECD (2005) and national tax web sites

Income tax smoothing systems

They consist in allowing taxable income to be spread over a multi-year period, thereby smoothing disposable income. They can be specific to farmers within the tax system or they can apply to any business profit. They were identified in several countries in an OECD report looking as taxation systems and tax concessions in agriculture (OECD, 2005). Tax averaging systems are available in Australia, Ireland, the Netherlands, the United Kingdom and the United States, while income equalisation systems are available in Australia, France, New Zealand and Sweden. In Canada, a tax deferral applies to government contributions to a risk management programme (Net Income Stabilisation Account, NISA) until 2009 and to specific disaster relief payments. A brief description of these systems is given in Box 3.2.

Support to diversification of activities

Diversification into activities with different risk characteristics is a traditional risk management strategy. Increasingly, farm households rely on various sources of income. While their motivations are diverse, securing higher and more stable income levels is an important one.[8] There is evidence that, at the aggregate level, off-farm income stabilises farm household income as it is often more stable than farm income[9]. It may even be countercyclical in some cases. In some countries, such as Chile and a number of EU member states, support is granted to develop alternative sources of income within the agricultural sector or outside. As support to diversification of activities outside the agricultural sector is not included in the PSE, this list may not be exhaustive.

Ex post measures

The main types of *ex post* measures for smoothing income or consumption are:

- disaster relief payments;
- *ad hoc* assistance; and
- other measures such as debt relief, social assistance or labour replacement services.

Disaster relief payments and ad hoc payments

Ad hoc payments are made in response to an emergency situation such as a sharp reduction in farm income whatever the cause: output price decreases, input price increases, animal disease outbreaks, etc. When the cause is a natural disaster, this is considered as a disaster relief payment. *Ad hoc* payments compensate all or part of the losses with no systematic mechanism in place to trigger them and set the amount. *Ad hoc* support can also come from reductions in input costs. For example, in recent years fuel tax rebates for farmers have been raised in several countries as prices increased. In France, temporary reductions or deferrals of social contributions have been used in times of income crisis.

Disaster relief payments are made to compensate for losses in income (and are often paid on the basis of current or past hectares, animal heads or farm receipts) or assets (investment assistance), due to natural disasters. In a few countries they help farmers buy new variable inputs. They are implemented in many ways, including specific payments, supplementary payments within existing measures, investment grants, or interest concessions on loans to meet investment, consumption or input purchase needs. In some countries, there are procedures and specific funds for the provision of disaster payments. In France, a mutual disaster fund (*Fonds national de garantie des calamités agricoles*) receives contributions from producer levies and government subsidies. In Australia, a specific disaster relief scheme delivers Exceptional Circumstances assistance.[10] When disaster payments are made as part of an existing scheme/fund, they are considered as having variable rates in the PSE database. When they come from *ad hoc* funds and are made outside an established mechanism, disaster payments are considered as having fixed rates.

Most countries, with the exception of Chile, Switzerland and Ukraine, use disaster payments (Table 3.1). In EU member states, they are funded and implemented at the national level, and are not part of the Common Agricultural Policy (Table 3.2). Payments identified as *ad hoc* are mainly used in Canada and to some extent in Chile, the EU and Russia. It is not clear whether in the PSE database all disaster or *ad hoc* payments are identified as such. They may be included in aggregate items such as interest concessions or infrastructure assistance.

Other risk-related measures

- Support to farm relief services, which advise farmers in adverse situations about their options and often provide short-term assistance/credit.
- Debt rescheduling/write-off, which alleviates debt burden.
- Labour replacement services, which provide support for replacing farmers in case of health problems.
- Social assistance, which consists in providing transitional/short term assistance to smooth consumption.

Other agriculture-related measures, which do not necessarily generate transfers to farmers, may reduce risk for farmers by providing information, capacity-building and clear regulations that contribute to stabilising their business environment. Finally, many economy-wide policies and regulations contribute to reduce risk for farmers to the extent they provide a stable macro-economic environment, well-functioning markets, education, or health systems and general social support.

Table 3.1. Risk-related policies in OECD and selected emerging economies, 1986-2007

	Risk reduction										Reducing consequences of risk (mitigation/coping)														
	Production and marketing techniques								Inspection	Price stab.	Ex ante									Ex post					
	Private storage / Non-marketing		Water management		Certified crop seeds/animal breeds		Technical assistance/ Extension	Pest and disease control	Inspection	Market price support	Variable rate (countercyclical) payments				Subsidies to risk management tools: Insurance	Subsidies to risk management tools: Futures m.	Income tax smoothing[8]	Income diversification support[9]	Farm relief service	Disaster relief		Ad hoc assistance	Social assistance Labour replac.[9]	Debt rescheduling / write-off	
PSE category		PSE cat.		PSE cat.		PSE cat.	PIS	PIV	GSSE	MPS	PO	PC	PHR	PHNR	PIV	PIV	PHRN or excluded	GSSE or excluded	PIS		PIF/PC	PC/PHR/ PHNR	PIV/PC		PSE cat.
OECD countries																									
Australia			IR	PIF[1]/PIS[2]/GSSE			x	x	x	x				x			x		x	x	PIV/PIF/ PC/PHNR	x	x		
Canada[5]							x	x	x	x (partly)	x	x	x	x	x (PC)					x	PIF/PC/PHNR	x		x	PIF
EU[10]	NM/PS (MK)	PO	IR	PIF	x	PIV	x	nat.	x	x	x				nat.			x		x			nat.		
Iceland							x	x	x	x										x	PIF		x		
Japan			IR/DR	PIF/GSSE			x	x	x	x	x	x			x					x	PIF/GSSE				
Korea			IR/DR	PIV/GSSE	x	PIS	x	x	x	x	x				x (PC)					x	PC				
Mexico			IR	PIV/PIF/GSSE	x	PIV/PIF	x	x	x	x	x	x			x	x				x	PC		x (PC)	x	PIF
New Zealand			IR/DR/FL	GSSE				x	x	x		x					x			x	PC			x	PO/PHR
Norway	PS	PO						x	x	x										x	PIF/PC		x (PC)		
Switzerland					x	PIS	x	x	x	x															
Turkey			IR/OT	PIV/PIF	x	PIF/PIV			x	x		x			x (PC)					x	PIF				
United States	PS	PIF	IR/FL	PIV/PIF/PIS/ GSSE[3]			x		x	x	x	x		x	x (PC)		x			x	PO/PC				
Emerging economies																									
Brazil	PS	PIV	IR	GSSE			x	x (GSSE)	x	x	x	x[6]			x (+PC)	x (CSE)								x	PC
Chile			IR	PIF/PIS/GSSE			x	x	x	x					x			x (PIF)		x	PC				
China			IR	PIF/GSSE[4]	x	PIV	x	x	x	x										x	PC		x		
Russia			IR	PIF/GSSE	x	PIV		x	x	x		x[7]			x					x	PIS/PC	x (PIV)		x	PIV/PC
South Africa			IR	PIV/GSSE					x	x		x[7]								x	PIF/PC				
Ukraine			IR/DR	PIS/GSSE				x (GSSE)	x	x	x				x									x	PIV/PC
Argentina (1995-2003/04)							x	x	x	x (tobacco)					x					x					
Israel (1999)			IR/DR				x	x	x	x	x									x					

Notes to Table 3.1

Nat.: national measure; MK: Milk; IR: Irrigation; DR: Drainage; FL: Flood control; OT: Other water management systems. NM: non marketing; PS: private storage (EU POSEI).

PIV: Payments based on variable input use; PIF: Payments based on fixed capital formation; PIS: Payments based on on-farm services, PO: Payments based on output; PC: Payments based on current area planted/animal numbers/ receipts/ income (A/An/R/I); PHR: payments based on non-current A/An/R/I, production required; PHRN: payments based on non-current A/An/R/I, production not required; GSSE: General Services Support Estimate.

1. Debt write-off on water facilities for primary producers and tax deductions for capital expenditures.

2. Water fund to invest in water infrastructure, improved water management and better practices.

3. Research and infrastructure.

4. Water management expenditures are not identified separately in fixed capital formation or infrastructure support.

5. For NISA, fixed government contributions to the system are considered under insurance. For other stabilisation programmes, countercyclical payments received by farmers are considered.

6. Insurance payments.

7. Disaster payments.

8. Taxable income can be averaged over several years (Box 2).

9. In the EU, Measures for Promoting the Adaptation and Development of Rural Areas under the Rural Development Regulation include support for the Setting-up of Farm Relief and Farm Management Services, and for the diversification of activities.

10. More details on national or co-financed measures are presented in Table 3.2.

Source: OECD, PSE database 2006 and 2008; WTO notifications on domestic support commitments; OECD (2005).

Table 3.2. Risk-related policies in EU member states, 1986-2007

	Risk reduction										Reducing consequences of risk (mitigation/coping)														
	Production and marketing techniques								Inspection	Price stab.	Ex ante									Ex post					
	Private storage / Non-marketing		Water management		Certified crop seeds/animal breeds		Technical assistance/ Extension	Pest and disease control	Inspection	Market price support	Variable rate (countercyclical) payments				Subsidies to risk management tools: Insurance	Subsidies to risk management tools: Futures m.	Income tax smoothing[1]	Income diversification support[2]	Farm relief service	Disaster relief		Ad hoc assistance	Social assistance Labour replac.[2]	Debt rescheduling / write-off	
PSE category		PSE cat.		PSE cat.		PSE cat.	PIS	PIV	GSSE	MPS	PO	PC	PHR	PHNR	PIV	PIV	PHRN or excluded	GSSE or excluded	PIS		PIF/PC	PC/PHR/ PHNR	PIV/PC		PSE cat.
EU MS																									
Austria								x							x			x		x	PC				
Belgium								x							x					x	PC				
Czech Rep.			IR	PIF	x	PIV		x							x					x	PC			x	PIF
Denmark							x	x											x	x	PIF		x		
Finland							x											x		x	PC		x		
France	PS (CH)	PO	IR	PIF			x	x							x		x	x	x	x	PIF (credit)		x		
Germany							x	x							x			x		x	PIF/PC				
Greece	PS (CH)	PO	IR	PIF	x	PIV	x	x												x	PIF			x	PIF
Hungary			IR/DR	PIF	x	PIV (credit)	x	x							x					x	PIF/PC		x		
Ireland			DR	PIF			x	x									x								
Italy	PS (CH)	PO	IR	PIF			x	x										x		x	PIF		x		
Luxembourg								x							x				x						
Netherlands							x	x							x		x	x		x	PC				
Poland			DR/OT	PIF	x	PIV (credit)	x	x							x					x	PIF				
Portugal	PS (CH)	PO	IR/DR	PIF			x	x							x										
Slovak Rep.			IR	PIV/PIF	x	PIV (credit)	x	x							x								x		
Spain	PS (CH)	PO	IR	PIV/PIF			x	x							x			x		x	PIF		x		
Sweden							x	x									x	x	x				x		
United Kingdom			DR/OT	PIF			x	x									x	x	x						
Non OECD EU MS																									
Bulgaria			IR	PIV/PIF	x	PIS														x	PC				
Cyprus							x	x							x										
Estonia					x	PIV																	x		
Latvia			OT	PIF	x	PIV/PIS	x	x							x					x	PIV/PC				
Lithuania					x	PIV	x	x							x										
Malta							x	x																	
Romania			IR	PIV/PIF	x	PIV		x							x					x	PC				
Slovenia			IR/OT	PIF			x	x							x								x		

MK: Milk; IR: Irrigation; DR: Drainage; FL: Flood control; OT: Other water management systems. NM: non marketing; PS: private storage (EU POSEI).

PIV: Payments based on variable input use; PIF: Payments based on fixed capital formation; PIS: Payments based on on-farm services, PO: Payments based on output; PC: Payments based on current area planted/animal numbers/ receipts/ income (A/An/R/I); PHR: payments based on non-current A/An/R/I, production required; PHRN: payments based on non-current A/An/R/I, production not required; GSSE: General Services Support Estimate.

1. Taxable income can be averaged over several years (Box 2).

2. In the EU, Measures for Promoting the Adaptation and Development of Rural Areas under the Rural Development Regulation include support for the Setting-up of Farm Relief and Farm Management Services, and for the diversification of activities.

Source: OECD, PSE database 2008; OECD (2005).

Risk-related policies in the PSE

Most risk-related measures discussed above generate support to individual farmers, which is included in the Producer Support Estimate (PSE). In the PSE database, transfers from individual measures are classified in various categories defined in Box 3.1. this database is used here to identify transfers under various risk-related measures. In the PSE database, support for risk reduction techniques, such as irrigation or pest and disease control, is often based on input use, while risk mitigation/coping support is generally based on output, area, animal numbers, farm receipts or income (Tables 3.1 and 3.2). Risk-related measures may also generate support to agricultural producers collectively, in which case it is included in the General Services Support Estimate (GSSE). This is in particular the case for inspection services, some collective pest and disease control measures, and investments in large irrigation infrastructure projects. While some elements of research and training can also help reduce risk faced by farmers, these are generally not identified separately and are not considered here.

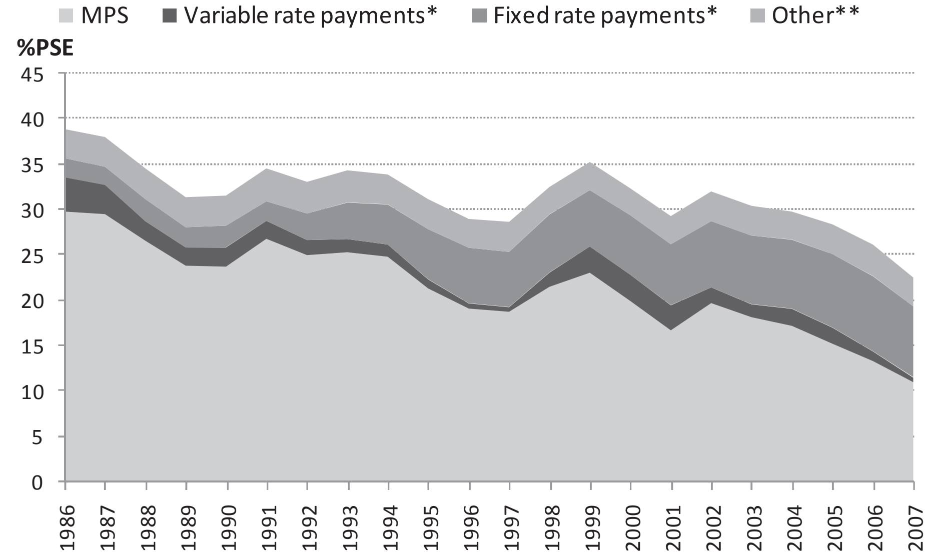
This section first presents estimates of the share in total support of risk-related measures, notably market price support (MPS) and payments with a variable rate. To provide more insight into the various types of risk-related measures, it then classifies individual measures from various PSE categories into risk-related categories identified above[13] and analyses the share of support from those various categories of risk-related measures in the overall support environment. MPS is reported as a risk-reduction measure because of its contribution to price stabilisation. However, when looking at trends in world prices, it is clear that in many countries, MPS is well above the level needed to stabilise prices around their longer-term trend. Reflecting the dual nature of this type of support in most countries market price support is reported separately from other risk-related measures.

Share of MPS and variable rate payments in the PSE

Figures 3.1, 3.2 and 3.3 illustrate how PSE categories and labels can be used to identify some of the broad types of risk-related policies identified above, such as MPS and variable rate payments (*i.e.* payments based on output, area, animal numbers, revenue or income with a variable rate label). These two categories of risk-related measures are shown, for comparative purposes, alongside measures with fixed rate (*i.e.* payments based on output, area, animal number, revenue or income with a fixed rate label), which are not considered in this study as risk-related instruments, and with a category “other”, which is a residual. This residual includes policies identified above as risk-related, which are identified separately in Tables 3.3 and 3.4.

Figure 3.1 shows that overall in the OECD area, MPS is the risk-related measure that generates the largest share of support. Its share in the PSE as a percentage of farm receipts (%PSE) has, however, been decreasing over the period 1986-2007, while payments with a fixed rate have increased. By design, the share of payments with a variable rate varies counter-cyclically with market conditions. While fixed rate payments based on output, area, animal numbers, receipts or income were slightly less than the same group of payments with a variable rate in the mid-1980s (1986-88), they were almost five times higher in the 1990s (1992-97) and close to six times higher in the 2000s (2002-07).

Figure 3.1. Share of MPS and variable rate payments in the %PSE of the OECD area, 1986-2007



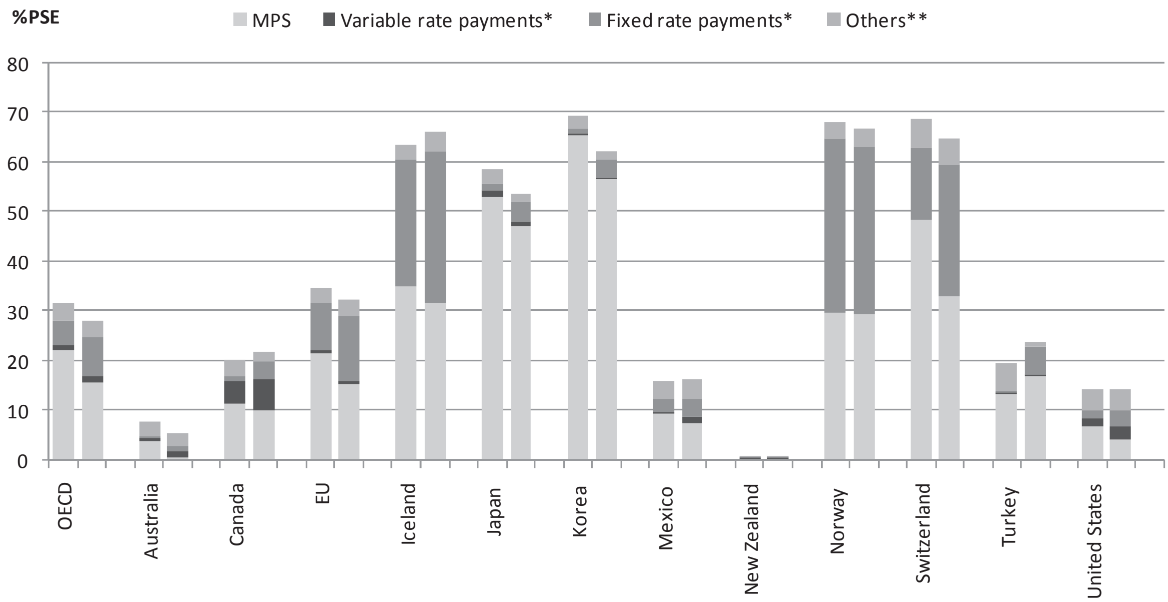
%PSE: PSE as a percentage of farm receipts.
* Within PO, PC, PHR and PHRN categories.
** Payments based on input use (PI), payments based on non-commodity criteria (PN) and miscellaneous payments (PM).

Source: OECD, PSE database 2008.

There are large differences between countries in the level and composition of support (Figures 3.2 and 3.3). While support to producers as a percentage of farm receipts varies greatly among OECD countries, from 1% in New Zealand to over 60% in Iceland, Korea, Norway and Switzerland, MPS remains an important component in most countries except Australia (Figures 3.2 and 3.4). In the emerging economies examined, MPS fluctuated a lot in the 1990s, reaching large negative numbers in some countries, and domestic markets were isolated from world prices. In 2002-05, MPS was generally positive except in Ukraine, and support levels as a percentage of farm receipts were below 10% in most countries except Russia where it was below 20% (Figure 3.3).

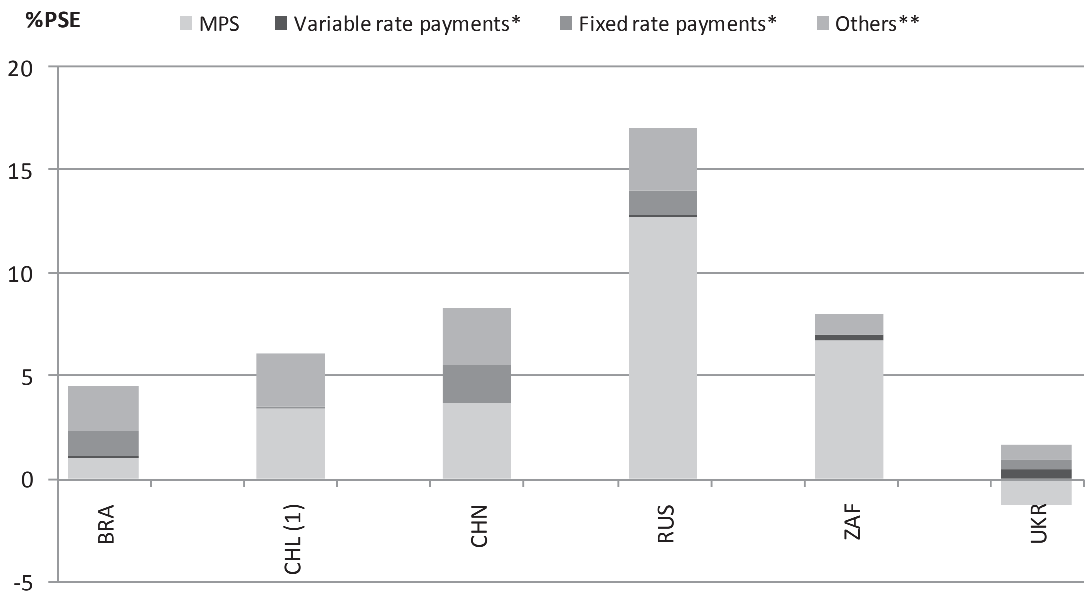
Payments with a variable rate are negligible in most countries examined. Canada and the United States are the two countries where they are most significant, both in absolute terms and as a percentage of the PSE. In both countries, they co-exist with MPS and fixed rate payments. Variable rate payments are also significant in Australia and Mexico. In a context of decreasing MPS, variable rate payments have increased in Australia, Canada, Mexico and the United States between the two periods 1992-07 and 2002-07. In Japan, they account for a small, but steady share of a PSE largely dominated by MPS. Korea's PSE is largely made of MPS, while the EU, Iceland, Norway and Switzerland use both MPS and fixed rate payments to support their farmers. In Brazil, Canada, Turkey and the United States, variable rate payments partly correspond to insurance payments, while in Russia, South Africa, and partly in EU member states, Mexico, Korea and the United States, they bring disaster relief (Tables 3.3 and 3.4).

Figure 3.2. Share of MPS and variable rate payments in the %PSE of OECD countries, 1992-97, 2002-07



The left bar is the average of 1992-97, the right bar is the average of 2002-07.
%PSE: PSE as a percentage of farm receipts.
* Within PO, PC, PHR and PHRN categories.
** Payments based on input use (PI), payments based on non-commodity criteria (PN) and miscellaneous payments (PM).
Source: OECD, PSE database 2008.

Figure 3.3. Share of MPS and variable rate payments in the %PSE of selected emerging economies, 2002-05



%PSE: PSE as a percentage of farm receipts.
1. Average of 2002-06.
* Within PO, PC, PHR and PHRN categories.
** Payments based on input use (PI), payments based on non-commodity criteria (PN) and miscellaneous payments (PM).
Source: OECD, PSE database 2006.

Share of risk reducing and risk mitigation/coping support in OECD indicators of support

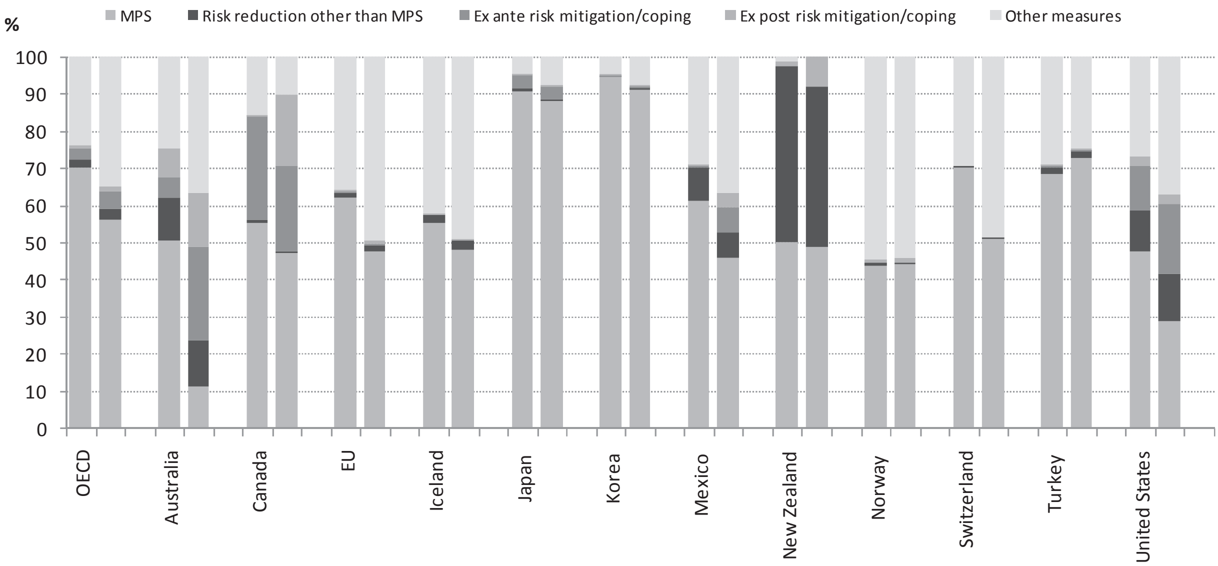
Using the same the classification of risk-related measures as in Tables 3.1 and 3.2, Tables 3.3 and 3.4 identify support associated with measures used respectively for risk reduction, and for risk mitigation and coping, and including both support to producers (PSE) and general services (GSSE). The shares of these groups of risk-related measures in the PSE and the GSSE are also presented graphically in Figures 3.4 to 3.8.

Overall, risk-related measures accounted for two-thirds of support to OECD producers in 2002-07, compared to three-quarters a decade earlier (Figure 3.4, Table 3.3). Their share exceeds 50% in all OECD countries (except Norway, where it was slightly below). In emerging economies, the share of risk-related measures in total support has also been above 50% in most recent years. Countries with a share of risk-related measures over 80% include Japan, Korea, Russia and South Africa, where MPS accounts for close or over 90% of the total of those measures, as well as Canada and New Zealand, where over half of risk-related support comes from non-MPS measures

The importance of MPS in OECD countries is confirmed (Figure 3.4). While its share in the OECD PSE decreased from 70% in 1992-07 to 56% in 2002-07, its share in risk-related support decreased from 92% to 86%. In 2002-07, MPS accounted for over 40% of the PSE in all OECD countries except Australia, where it was slightly over 10%, and the United States where it was slightly below 30%. Support for measures helping farmers deal with the consequences of risk is negligible in a majority of OECD countries. It is significant as a share of producer support in Australia, Canada, Mexico, New Zealand and the United States (Figure 3.4) and as a share of budgetary support (Figures 3.5 and 3.6). *Ex post* measures, which include disaster relief, *ad hoc* assistance, social assistance and debt relief, are mainly used in Australia, Canada, New Zealand and emerging economies.

Risk reduction support other than MPS includes mainly government expenditures on pest and disease control, extension and water management. It is significant in Australia, Mexico, the United States, where support to technical assistance dominates, and particularly important in New Zealand, where support for pest and disease control measures is of the same magnitude as MPS. In New Zealand, risk-related measures, which include MPS, pest and disease control and some disaster payments, make up for almost all support to producers, which is 1% of farm receipts. In the emerging economies considered, risk reduction measures other than MPS are particularly significant in Chile, where they consist of technical assistance to farmers. Government support to technical assistance provided to individual farmers is also significant in Brazil and China, but does not exist in Russia, South Africa and Ukraine. For emerging economies, Figure 3.6 showing the composition of support to producers excludes MPS because of negative numbers (Table 3.4).

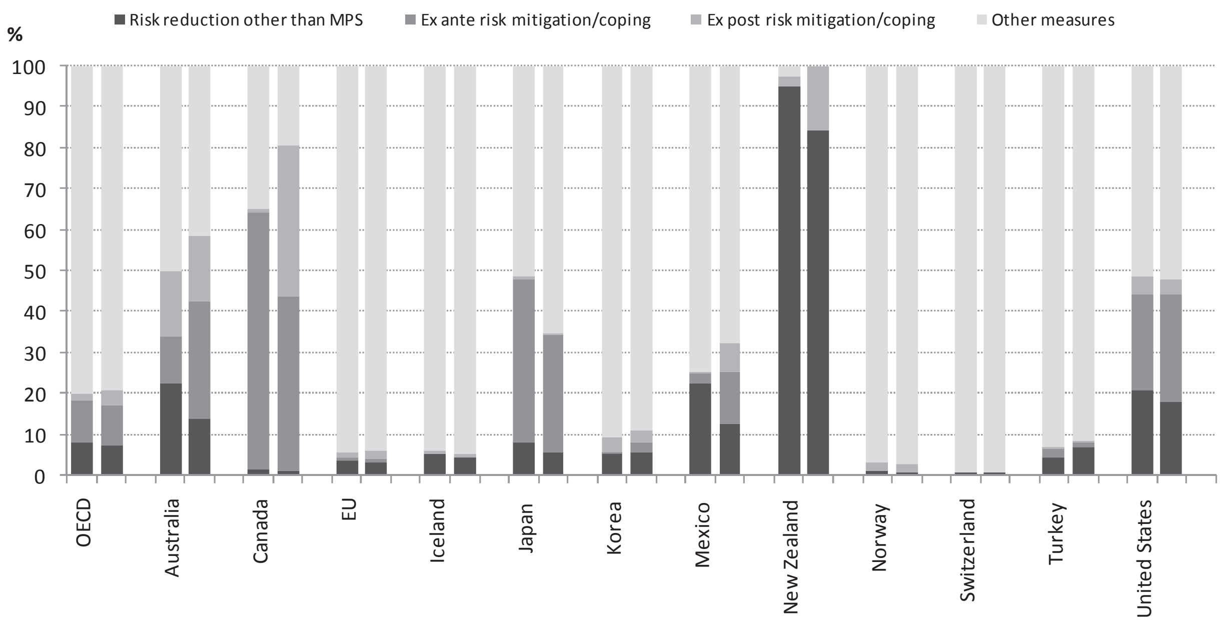
Figure 3.4. Share of risk-related policies in the PSE of OECD countries 1992-07 and 2002-07



The left bar is the average of 1992-97, the right bar is the average of 2002-07.

Source: OECD, PSE database 2008.

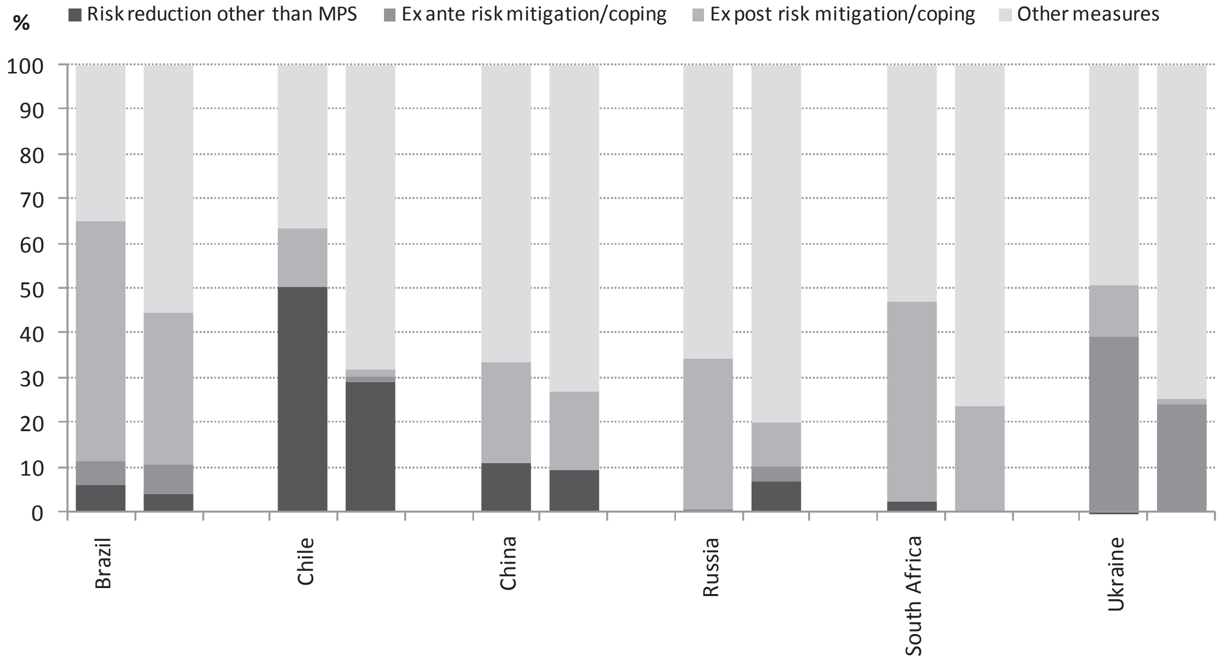
Figure 3.5. Share of risk-related policies in budgetary support to producers of OECD countries 1992-07 and 2002-07



The left bar is the average of 1992-97, the right bar is the average of 2002-07.

Source: OECD, PSE database 2008.

Figure 3.6. Share of risk-related policies in budgetary support to producers in selected emerging economies, 1992-97 and 2002-05



The left bar is the average of 1992-97 in Chile, Russia and Ukraine, 1993-97 in China, 1994-97 in South Africa and 1995-97 in Brazil; the right bar is the average of 2002-05 in all countries except Chile, where it is the average of 2002-06.

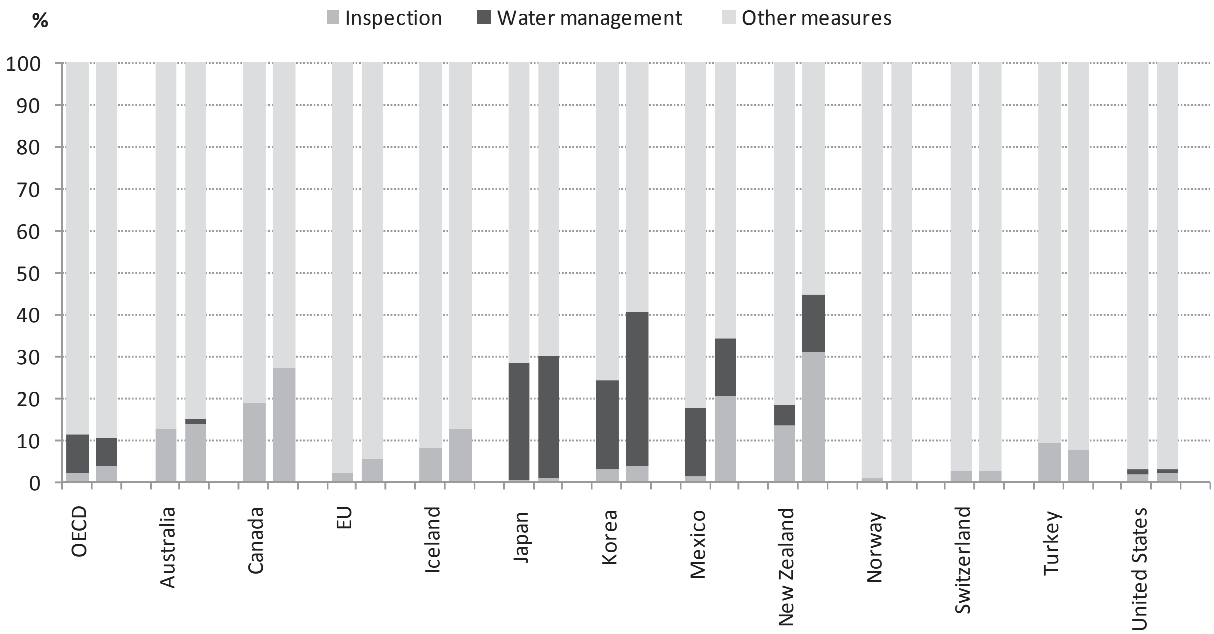
Source: OECD, PSE database 2006.

Some risk reduction measures are included in general services to agriculture as they benefit farmers collectively: this is the case of inspection services, some pest and disease control measures and water management infrastructure assistance (Figures 3.7 and 3.8).[14] The latter account for a notable share of GSSE in Chile, Japan, Korea and Mexico. In other countries, the aggregate for infrastructure assistance may include support for irrigation systems, but it is not possible to identify it separately. Inspection services account for a growing share of GSSE in many countries.

Support to *ex ante* risk mitigation systems includes payments with a variable rate, as identified in Figures 3.2 and 3.3, although some disaster payments with a variable rate are classified as *ex post* in Figures 3.4 and 3.5 and Tables 3.3 and 3.4. This is because disaster payments are granted after the disaster has occurred and damage has been estimated. However, the frontier between *ex ante* and *ex post* measures is not always clear. Insurance and futures options subsidies are also classified as *ex ante* risk mitigation measures. *Ex ante* risk mitigation support is particularly significant in Canada and the United States, and to a lesser extent in Australia and Mexico.

Subsidies to purchase futures option contracts are only available in Mexico and have gained importance in recent years. Most risk mitigation payments are, however, *Ingreso Objetivo* payments, which are paid per tonne with a variable rate. Brazil also subsidises risk premium for private options contracts for co-operatives and agro-food industries so government expenditures on these subsidies is included in the consumer support estimate (CSE).

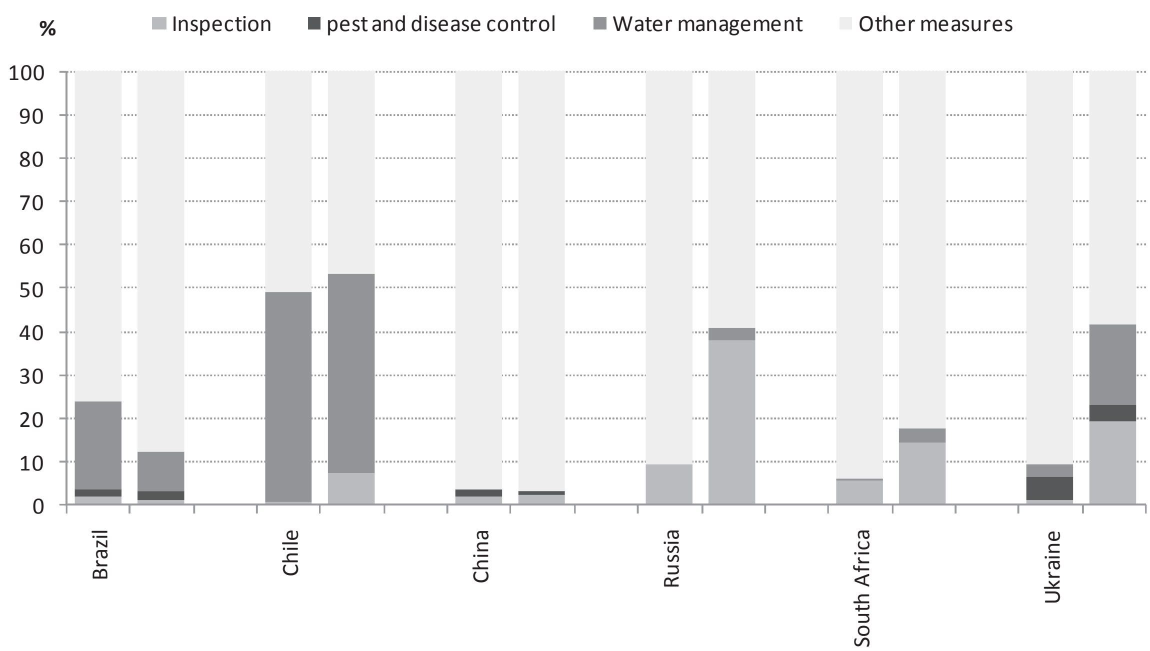
Figure 3.7. Share of risk-related policies in the GSSE of OECD countries 1992-97 and 2002-07



The left bar is the average of 1992-97, the right bar is the average of 2002-07.

Source: OECD, PSE database 2008.

Figure 3.8. Share of risk-related policies in the GSSE in selected emerging economies 1992-97 and 2002-05



The left bar is the average of 1992-97 in Chile, Russia and Ukraine, 1993-97 in China, 1994-97 in South Africa and 1995-97 in Brazil; the right bar is the average of 2002-05 in all countries except Chile, where it is the average of 2002-06.

Source: OECD, PSE database 2006.

Table 3.3. Transfers from risk-related policies in OECD countries, 1992-97 and 2002-07

Million EUR	Australia		Canada		European Union*		Iceland		Japan		Korea	
	1992-97	2002-07	1992-97	2002-07	1992-97	2002-07	1992-97	2002-07	1992-97	2002-07	1992-97	2002-07
Risk reduction measures in PSE	**772**	**298**	**1 876**	**2 513**	**58 005**	**51 308**	**67**	**85**	**44 592**	**32 484**	**16 734**	**16 498**
-- MPS	***633***	***145***	***1 852***	***2 485***	***56 773***	***49 454***	***64***	***81***	***44 228***	***32 224***	***16 681***	***16 405***
-- Other risk reduction measures	***139***	***152***	***25***	***28***	***1 232***	***1 854***	***3***	***4***	***364***	***261***	***53***	***93***
Private storage/non marketing	0	0	0	0	0	0	0	0	0	0	0	0
Water management[1]	0	34	0	0	205	187	0	0	206	118	48	65
Certified seeds/breeds	0	0	0	0	0	77	0	0	0	0	0	0
Technical assistance/extension	81	57	22	3	163	401	1	3	134	104	5	27
Pest and disease control	57	61	3	26	863	1 189	2	1	24	39	0	0.5
Risk reduction measures in GSSE	**33**	**83**	**239**	**483**	**164**	**605**	**1**	**2**	**4 106**	**2 671**	**569**	**1 073**
Water management[2]	0	6	0	0	0	0	0	0	4 033	2 604	504	969
Inspection (GSSE)	33	78	239	483	164	605	1	2	73	66	64	104
***Ex ante* risk mitigation/coping measures in PSE**	**70**	**319**	**930**	**1 191**	**359**	**465**	**0**	**0**	**1 790**	**1 263**	**0**	**39**
Variable rate payments based on output[3,4]	0	0	135	0	210	157	0	0	1 176	751	0	0
Variable rate payments based on current A/An/R/I[3,5]	0	0	587	1 011	0	0	0	0	0	24	0	0
Variable rate payments based on non-current A/An/R/I, production required[3,6]	0	0	0	87	0	0	0	0	0	0	0	0
Variable rate payments based on non-current A/An/R/I, prod. not required[3,7]	0	138	207	94	0	0	0	0	0	0	0	0
Insurance subsidies[8]	0	0	0	0	149	308	0	0	615	488	0	39
Futures markets subsidies	0	0	0	0	0	0	0	0	0	0	0	0
Income tax smoothing schemes	70	181	0	0	0	0	0	0	0	0	0	0
***Ex post* risk mitigation/coping measures in PSE**	**97**	**181**	**11**	**1 012**	**418**	**1 131**	**1**	**1**	**40**	**23**	**35**	**41**
Disaster relief payments	96	177	4	536	337	940	1	1	40	23	35	41
Ad hoc assistance[9]	0	0	7	475	0	0	0	0	0	0	0	0
Social assistance/labour replacement	0	3	0	0	80	191	0	0	0	0	0	0
Debt rescheduling/write-off	0	0	0	1	0	0	0	0	0	0	0	0
Total PSE	**1 246**	**1 256**	**3 337**	**5 255**	**91 397**	**104 094**	**117**	**167**	**48 736**	**36 644**	**17 611**	**17 973**
Total risk-related measures in PSE	**939**	**797**	**2 817**	**4 717**	**58 782**	**52 904**	**68**	**85**	**46 422**	**33 770**	**16 769**	**16 578**
% share of risk-related measures in PSE	*75*	*64*	*84*	*90*	*64*	*51*	*58*	*51*	*95*	*92*	*95*	*92*
% share of risk-related measures other than MPS in PSE	*25*	*52*	*29*	*42*	*2*	*3*	*3*	*3*	*5*	*4*	*0*	*1*
% share of MPS in PSE	*51*	*12*	*55*	*47*	*62*	*48*	*55*	*48*	*91*	*88*	*95*	*91*
% share of MPS in risk-related measures	*67*	*18*	*66*	*53*	*97*	*93*	*95*	*95*	*95*	*95*	*99*	*99*
Total GSSE expenditures	**272**	**561**	**1 271**	**1 775**	**8 484**	**11 348**	**12**	**16**	**14 519**	**8 876**	**2 352**	**2 662**
Risk related measures in GSSE	**33**	**83**	**239**	**483**	**164**	**605**	**1**	**2**	**4 106**	**2 671**	**569**	**1 073**
% share in GSSE	*12*	*15*	*19*	*27*	*2*	*5*	*8*	*13*	*28*	*30*	*24*	*40*

A/An/R/I: Area/Animal number/Receipts/Income

* EU12 for 1992-94; EU15 for 1995-2003, EU25 for 2004-06 and EU27 in 2007.

1. Subsidies to water use and investment assistance in irrigation and drainage systems on the farm.

2. Infrastructure assistance for water management off the farm.

3. Payments of this PSE category that have a variable rate label, except those included in the disaster relief payments or insurance subsidies items in this table.

4. Includes for example the EU production aid for banana; and the Farming Income Stabilization Programme (JRIS) and the Sugar Cane Farm Income Stabilization Programme in Japan.

5. Includes the Canadian Agricultural Income Stabilisation (CAIS) programme, The Ontario Risk Management programme, the *Assurance-Stabilization des revenus agricoles* (ASRA), NISA and crop insurance payments in Canada; and the Rice Farmers Management Support in Japan.

6. Includes the AgriInvest Kickstart Program and the Canadian Farm Families Options Program in Canada.

7. Includes the Australian Dairy Industry Restructure Package; and the Western Grain Transition Program in Canada.

8. Includes subsidies to national insurance schemes in the EU; and insurance subsidies in Japan. In Canada, payments from insurance programmes are considered under variable rate payments.

9. Includes the Alberta Farm income Assistance Program, the agricultural Policy Framework Transition Funding, the Cost of Production Payment, the Farm Income Payment, the Grains and Oilseeds Payment Program, and Provincial CAIS enhancements.

Table 3.3. Transfers from risk-related policies in OECD countries 1992-97 and 2002-07 (*cont.*)

	Mexico		New Zealand		Norway		Switzerland		Turkey		United States	
	1992-97	2002-07	1992-97	2002-07	1992-97	2002-07	1992-97	2002-07	1992-97	2002-07	1992-97	2002-07
Risk reduction measures in PSE	**2 861**	**2 862**	**52**	**62**	**1 107**	**1 111**	**3 252**	**2 231**	**3 607**	**6 674**	**14 109**	**13 352**
-- MPS	**2 506**	**2 496**	**27**	**33**	**1 088**	**1 101**	**3 238**	**2 217**	**3 531**	**6 501**	**11 476**	**9 240**
-- Other risk reduction measures	***355***	***366***	***25***	***29***	***18***	***10***	***14***	***14***	***76***	***173***	***2 633***	***4 113***
Private storage/non marketing	0	0	0	0	9	0	0	0	0	0	0	3
Water management[1]	224	62	0	0	0	0	0	0	48	38	334	238
Certified seeds/breeds	5	6	0	0	0	0	0	0	24	128	0	0
Technical assistance/extension	97	97	0	0	0	0	12	6	0	0	1 902	3 005
Pest and disease control	29	201	25	29	9	10	1	9	4	6	397	866
Risk reduction measures in GSSE	**121**	**234**	**14**	**54**	**1**	**0**	**9**	**8**	**121**	**87**	**713**	**928**
Water management[2]	113	93	4	17	0	0	0	0	0	0	267	237
Inspection (GSSE)	8	140	10	38	1	0	9	8	121	87	446	691
***Ex ante* risk mitigation/coping measures in PSE**	**35**	**378**	**0**	**0**	**0**	**0**	**0**	**0**	**40**	**28**	**2 948**	**5 879**
Variable rate payments based on output[3,4]	6	291	0	0	0	0	0	0	0	0	211	2 650
Variable rate payments based on current A/An/R/I[3,5]	0	0	0	0	0	0	0	0	40	26	2 325	0
Variable rate payments based on non-current A/An/R/I, production required[3,6]	0	0	0	0	0	0	0	0	0	0	0	0
Variable rate payments based on non-current A/An/R/I, prod. not required[3,7]	0	0	0	0	0	0	0	0	0	0	0	1 930
Insurance subsidies[8]	29	37	0	0	0	0	0	0	0	3	412	1 298
Futures markets subsidies	0	51	0	0	0	0	0	0	0	0	0	0
Income tax smoothing schemes	0	0	0	0	0	0	0	0	0	0	0	0
***Ex post* risk mitigation/coping measures in PSE**	**9**	**204**	**1**	**5**	**26**	**31**	**0**	**0**	**0**	**10**	**553**	**856**
Disaster relief payments	3	94	1	5	21	12	0	0	0	10	553	856
Ad hoc assistance	0	0	0	0	0	0	0	0	0	0	0	0
Social assistance/labour replacement	6	13	0	0	5	19	0	0	0	0	0	0
Debt rescheduling/write-off	0	97	0	0	0	0	0	0	0	0	0	0
Total PSE	**4 080**	**5 421**	**53**	**67**	**2 476**	**2 487**	**4 594**	**4 336**	**5 145**	**8 932**	**24 089**	**31 860**
Total risk-related measures in PSE	**2 905**	**3 444**	**52**	**67**	**1 132**	**1 142**	**3 252**	**2 231**	**3 647**	**6 712**	**17 610**	**20 087**
% share of risk-related measures in PSE	*71*	*64*	*99*	*100*	*46*	*46*	*71*	*51*	*71*	*75*	*73*	*63*
% share of risk-related measures other than MPS in PSE	*10*	*17*	*48*	*51*	*2*	*2*	*0*	*0*	*2*	*2*	*25*	*34*
% share of MPS in PSE	*61*	*46*	*50*	*49*	*44*	*44*	*70*	*51*	*69*	*73*	*48*	*29*
% share of MPS in risk-related measures	*86*	*72*	*51*	*49*	*96*	*96*	*100*	*99*	*97*	*97*	*65*	*46*
Total GSSE expenditures	**688**	**683**	**75**	**122**	**131**	**194**	**377**	**327**	**1 313**	**1 139**	**24 317**	**31 411**
Risk related measures in GSSE	**121**	**234**	**14**	**54**	**1**	**0**	**9**	**8**	**121**	**87**	**713**	**928**
% share in GSSE	*18*	*34*	*18*	*44*	*1*	*0*	*2*	*2*	*9*	*8*	*3*	*3*

A/An/R/I: Area/Animal number/Receipts/Income

1. Subsidies to water use and investment assistance in irrigation and drainage systems on the farm.

2. Infrastructure assistance for water management off the farm.

3. Payments of this PSE category that have a variable rate label, except those included in the disaster relief payments or insurance subsidies items in this table.

4. Includes for example *Ingreso objetivo* payments in Mexico and various payments in the United States such as loan deficiency and market loss payments.

5. Includes potato, sugar and tobacco compensation payments in Turkey; and former deficiency payments in the United States.

6. No measures in this category in the countries above.

7. Includes Countercyclical payments introduced in the 2002 Farm Bill in the United States.

8. Includes ANAGSA/AGROASEMEX insurance subsidies in Mexico; and Crop insurance and Adjusted gross revenue insurance payments in the United States.

Source: OECD, PSE database 2008.

Table 3.4. Transfers from risk-related policies in selected emerging economies 1992-97 and 2002-05

Millions EUR	Brazil		Chile		China		Russia		South Africa		Ukraine	
	1995-97	2002-05	1992-97	2002-06	1993-97	2002-05	1992-97	2002-05	1992-97	2002-05	1994-97	2002-05
Risk reduction measures in PSE	**-3 911**	**603**	**325**	**201**	**-2 702**	**12 488**	**-4 652**	**4 433**	**892**	**577**	**-3 021**	**-667**
-- MPS	**-4 019**	**526**	**308**	**164**	**-3 073**	**11 147**	**-4 680**	**4 333**	**891**	**577**	**-3 021**	**-667**
-- Other risk reduction measures	***108***	***77***	***17***	***37***	***371***	***1 341***	***28***	***101***	***1***	***0***	***0***	***0***
Private storage/non marketing	0	1	0	0	0	0	0	0	0	0	0	0
Water management[1]	0	0	2	7	0	0	0	0	1	0	0	0
Certified seeds/breeds	0	0	0	0	0	0	15	33	0	0	0	0
Technical assistance/extension	108	76	15	22	275	1 218	0	0	0	0	0	0
Pest and disease control	0	0	0	8	96	122	13	68	0	0	0	0
Risk reduction measures in GSSE	**565**	**131**	**19**	**49**	**202**	**454**	**100**	**324**	**28**	**78**	**29**	**147**
Water management[2]	477	96	19	42	0	0	0	22	1	14	9	66
Pest and disease control	44	22	0	0	96	122	0	0	0	0	16	13
Inspection (GSSE)	44	13	0	7	106	331	100	302	26	64	3	69
Ex ante risk mitigation/coping measures in PSE	**93**	**117**	**0**	**1**	**0**	**0**	**7**	**44**	**0**	**0**	**623**	**204**
Variable rate payments based on output[3,4]	61	42	0	0	0	0	0	0	0	0	623	204
Variable rate payments based on current A/An/R/I[3]	0	0	0	0	0	0	0	0	0	0	0	0
Variable rate payments based on non-current A/An/R/I, production required[3]	0	0	0	0	0	0	0	0	0	0	0	0
Variable rate payments based on non-current A/An/R/I, prod. not required[3]	0	0	0	0	0	0	0	0	0	0	0	0
Insurance subsidies[5]	33	75	0	1	0	0	7	44	0	0	0	0
Futures markets subsidies	0	0	0	0	0	0	0	0	0	0	0	0
Income tax smoothing schemes	0	0	0	0	0	0	0	0	0	0	0	0
Ex post risk mitigation/coping measures in PSE	**926**	**635**	**4**	**2**	**772**	**2 559**	**1 660**	**139**	**15**	**26**	**186**	**12**
Disaster relief payments	0	0	4	2	329	871	11	4	15	26	0	0
Ad hoc assistance	0	0	0	0	0	0	2	0	0	0	0	0
Social assistance/labour replacement	0	0	0	0	443	1 688	0	0	0	0	0	0
Debt rescheduling/write-off	926	635	0	0	0	0	1 648	135	0	0	186	12
Total PSE	-2 284	2 377	341	291	311	25 535	235	5 759	924	687	-1 435	178
Total risk-related measures in PSE	**-2 892**	**1 355**	**329**	**204**	**-1 930**	**15 047**	**-2 984**	**4 617**	**907**	**603**	**-2 212**	**-452**
% share of risk-related measures in PSE	*n.a.*	*57*	*96*	*70*	*n.a.*	*59*	*n.a.*	*80*	*98*	*88*	*n.a.*	*n.a.*
% share of risk-related measures other than MPS in PSE	*n.a.*	*35*	*6*	*14*	*n.a.*	*15*	*n.a.*	*5*	*2*	*4*	*n.a.*	*n.a.*
%share of MPS in PSE	*n.a.*	*22*	*90*	*56*	*n.a.*	*44*	*n.a.*	*75*	*96*	*84*	*n.a.*	*n.a.*
%share of MPS in risk-related measures	*n.a.*	*39*	*94*	*80*	*n.a.*	*74*	*n.a.*	*94*	*98*	*96*	*n.a.*	*n.a.*
Total GSSE expenditures	2 364	1 050	39	92	5 713	13 794	1 065	794	453	441	300	353
Risk related measures in GSSE	**565**	**131**	**19**	**49**	**202**	**454**	**100**	**324**	**28**	**78**	**29**	**147**
% share in total GSSE	*24*	*12*	*49*	*53*	*4*	*3*	*9*	*41*	*6*	*18*	*10*	*42*

n.a.: not applicable because of negative numbers; A/An/R/I: Area/Animal number/Receipts/Income

1. Subsidies to water use and investment assistance in irrigation and drainage systems on the farm.

2. Infrastructure assistance for water management off the farm.

3. Payments of this PSE category that have a variable rate label, except those included in the disaster relief payments or insurance subsidies items in this table.

4. Includes Marketing loans subsidy from preferential interest in Brazil; and deficiency payments for crop and livestock products in Ukraine.

5. Includes PROAGRO insurance payments, Rural insurance premium and Insurance payments Garantia Safra in Brazil; Agricultural Insurance Programme COMSA, CORFO, MINAGRI in Chile; and Compensation of insurance payments and Crop insurance subsidies in Russia.

Source: OECD, PSE database 2006.

Insurance subsidies are relatively common in the countries examined. They exist in 17 EU member states, five non-EU OECD countries (out of 11) and five emerging economies out of the 8 examined (Tables 3.1 and 3.2). However, the level of subsidies varies greatly by country, depending on the development of insurance schemes. In most countries, subsidies to insurance schemes are included in the PSE as payments based on variable input use, insurance being considered as a variable input. In these cases, government expenditures transferred every year to insurance companies operating insurance schemes are considered. However, in several countries (Brazil, Canada, Turkey and the United States), insurance subsidies are reported as a share of the payment received by farmers from insurance schemes in the year the payment is granted, and are thus considered as payments with a variable rate. Insurance payments are paid per hectare in the case of crop insurance, or based on receipts or net income in the case of revenue/income insurance.

In Australia, government transfers to income tax smoothing schemes[15] are included in the PSE. The tax system of other countries also allows for spreading taxable income over several years, but the transfers they may generate are not included in the PSE, either because the system is not specific to farmers (Netherlands) or because, while the option is only available to farmers, the value of the tax concession is not estimated. Payments with a variable rate other than insurance payments and disaster relief payments include various deficiency and stabilisation payments paid per tonne, per hectare, per animal head or based on receipts or income. When based on current parameters (*e.g.* current area), they meet the difference between current receipts/income (per hectare) and a reference, often historical, level.

Payments based on output with a variable rate are found mainly in Japan (*e.g.* price stabilisation for fruits and vegetables, payments for rice, manufacturing milk, sugar cane), Mexico (*Ingreso objetivo* payments), Ukraine and the United States (loan deficiency payments, marketing loan gains, storage payments). Most payments based on current area, animal numbers, receipts or income with a variable rate are in Canada, where they include crop insurance payments (based on area) as well as various federal and provincial revenue insurance payments such as the Net Income Stabilisation account (NISA) and the Canadian Agricultural Income Stabilization (CAIS), the "*assurance stabilisation du revenu agricole*" (ASRA) in Quebec and the Ontario Risk Management Program. They are operated by the federal government and/or by provincial governments, with contributions from farmers. As such, they are considered as government programmes and payments are not identified as insurance subsidies in Table 3.3. Canada and the United States also make variable rate payments based on non current parameters for which production is not required (respectively the CAIS Inventory Transition Initiative in Canada, and the Countercyclical payments introduced in the 2002 Farm Bill and Crop market loss assistance in the United States).

Support to *ex post* risk mitigation systems considered here includes disaster relief payments, *ad hoc* assistance, social assistance specific to farmers and debt management measures. While *ad hoc* assistance payments are mainly found in Canada, disaster relief payments are more widespread. Disaster relief payments are negligible in countries with high support levels, as well as in New Zealand and Turkey. Conversely, they account for a significant share of support in Australia, where support levels are relatively low at around 5% of farm receipts. In recent years, disaster relief mainly came from the "Exceptional circumstances" programme, which provides short-term assistance to long-term viable farm businesses to cope with rare circumstances that are beyond the scope of normal risk management practices.[16] In the EU, disaster relief payments are funded at the national or regional level and many member states have granted such payments over the period (Table 3.2). Among emerging economies considered, China is the only one with significant levels of disaster relief assistance (Table 3.4).

In countries which use disaster relief assistance to a larger extent, the level of these payments has increased in the 2000s compared to the previous decade.

Social assistance includes short term relief assistance to help farm households cope with emergency situations and poverty alleviation measures. In Australia, the Farm Family Restart Scheme (or Farm Help) provides short term financial assistance in the form of income support and investment grants to re-establish outside agriculture (as well as training and advice) to help farmers with financial problems, either by improving the financial performance of their farm enterprise, finding alternative sources of off-farm income or re-establishing outside farming. In Mexico, agricultural producers or workers are paid the minimum wage to participate in community work in extremely poor areas during the period of low agricultural activity. This could be considered as a measure to diversify income sources rather than a safety-net in case of temporary problems as in the Australian case.

Labour replacement assistance provides subsidies to replace the farmer in case of illness or accident. Such assistance has been available over the period considered (1986-2007) in a number of EU member states, in Iceland and in Norway. Debt rescheduling or write-off has generated significant levels of support during the two periods considered in Brazil and Russia and to a lesser extent in Mexico and Ukraine (Tables 3.3 and 3.4).

Risk-related policies in WTO notifications on domestic support commitments

Since the Uruguay Round Agreement on Agriculture in 1995, member countries notify their domestic support to the WTO. These notifications report annual levels of agricultural domestic support, whether subject to reduction commitments or not. Support under measures subject to the reduction commitment is reported as the current total Aggregate Measurement of Support (AMS), often referred to as Amber Box. Measures exempt from the reduction commitment include:

- measures exempted because they qualify under the criteria set out in Annex 2 to the Agreement (often referred to as Green Box measures);
- measures respecting conditions for exemption set for direct payments under production-limiting programmes (often referred to as Blue Box measures); and
- for countries with developing country status, measures notified under “development programmes” as part of Special and Differential Treatment (often referred to as Development Box measures).

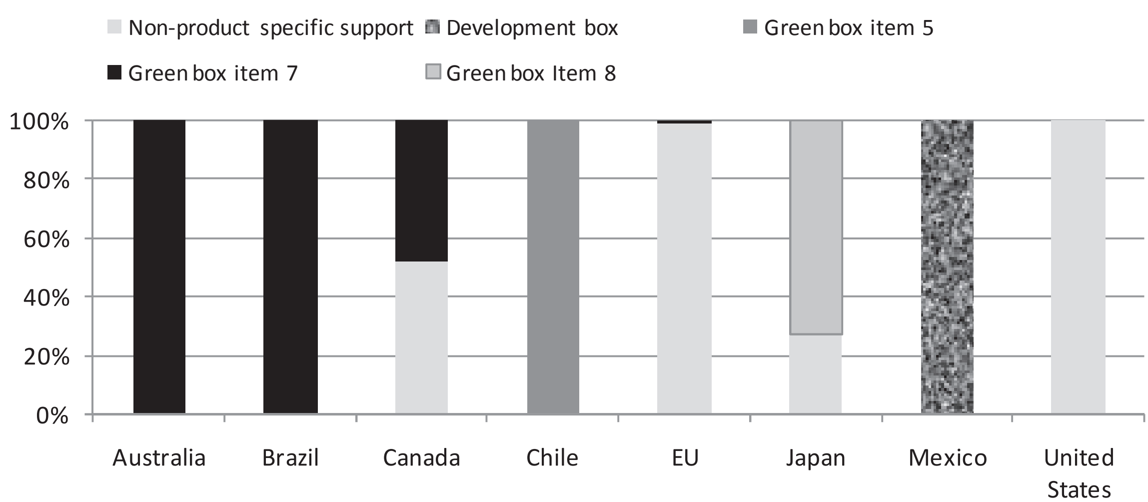
Moreover, product-specific and non-product specific AMS support that accounts for less than 5% of the value of production (referred to here as *de minimis* support) is exempted from the current total AMS.

As OECD indicators of support, WTO notifications on domestic support commitments include information on transfers associated with risk-related measures. These measures can be found in all categories of support (referred to here as boxes). Price support is reported as AMS support, while support to general services, including government expenditures on inspection services, pest and disease control, or training, extension and advisory services, is notified in the Green Box. The Green Box includes two categories of measures specifically designed to include insurance subsidies, income safety-nets and disaster relief payments with strictly defined implementation criteria (Annex 2, paragraphs 7 and 8 of the Agreement on agriculture).[17] However, as these categories are defined by strict implementation criteria to ensure they are minimally distorting, many insurance subsidies do not qualify.

Depending on implementation criteria, stabilisation and insurance payments can be either in the AMS support, the Blue Box or the Green Box. Deficiency payments or stabilisation payments based on output are generally notified in the Amber Box. Some payments such as crop insurance subsidies are notified as non-product specific AMS support. For many countries, non-product specific AMS support is exempted under the *de minimis* provisions and is therefore not counted towards the ceiling commitment. In Mexico, subsidies on insurance premiums, available to all producers, including AGROSEMEX, are notified in the Development Box. In Japan, the rice farming income stabilisation programme is notified in the Blue Box. Payments made in case of financial hardship such as the AAA Farm help programme in Australia[18] or agricultural social programmes in Argentina and Korea are notified in the Green Box as decoupled income support (Annex 2, paragraph 6 of the Agreement on agriculture).

Table 3.5 identifies the share of some risk-related measures in different WTO categories of support. In Japan, the rice farming income stabilisation programme is the only programme included in the Blue Box. Most crop and revenue insurance subsidies are notified as non product specific support in Canada, the EU and the United States, where they account respectively for 36%, 58% and 29% of support in this category. Other stabilisation or compensation payments such as NISA and CAIS payments in Canada, and 2002 Farm Bill countercyclical payments in the United States, are also in this category. Canada and Australia are the only countries, where support from income insurance and income safety-net programmes accounts for a significant share of the Green Box, while payments for relief from natural disaster are significant in more countries. The diversity of situations regarding the classification of insurance subsidies is illustrated by Figure 3.9, which shows the share of each WTO box and specific items within the Green Box in the total of insurance subsidies.

Figure 3.9. Distribution of insurance subsidies in WTO boxes



Average of period 2000/1-2006/7 in Australia, 2000-04 in Brazil, 2000-04 in Canada, 2000-06 in Chile, 2000-05 in the EU, 2000-06 in Japan, 2001-04 in Mexico, and 2000-05 in the United States.

Within Green Box measures, defined in Annex 2 of the Uruguay Round Agreement on Agriculture, Item 5 includes direct payments to producers; Item 7 includes government participation in income insurance and income safety-net programmes; and Item 8 includes payments (made either directly or by way of government financial participation in crop insurance schemes) for relief from natural disasters.

Source: WTO notifications on domestic support commitments.

Table 3.5. Share of risk-related support in WTO notifications

	Argentina	Australia	Chile	Canada	EU	Japan	Korea	Mexico	Norway	United States
	2000/1-2003/4	2000/1-06/7	2000-06	2000-04	2000-05	2000-06	2000-04	2001-04	2000-04	2000-05
% share in current total AMS of:										
- MPS[1]	0	0	--	47	88	64	100	0	95	49
- Deficiency or stabilisation payments[2]	0	0	--	52	1	22	0	64	--	51
% share in product-specific *de minimis* of:										
- Deficiency or stabilisation payments[3]	0	0	--	82	0	87	4	80	0	79
% share in non product-specific AMS[4] of:										
- Deficiency or stabilisation payments[5]	--	0	0	26	0	0	0	0	0	64
- Insurance subsidies[6]	--	0	0	36	58	100	0	0	0	29
% share in the Blue box of:										
- Deficiency or stabilisation[7]	--	--	--	--	--	100	--	--	--	--
% share in the Development box of:										
- Insurance subsidies	--	--	0	--	--	--	0	4	--	--
% share in the Green box of:										
- income insurance and income safety-net programmes	0	8	1	22	0	0	0	0	0	0
- Payments for relief from natural disasters	1	17	0	0	2	2	8	0	1	3
- General services	81	54	97	55	21	79	58	28	21	17
. Pest and disease control	41	9	0	2	6	1	2	7	6	n.a.
. Training services	0	2	22	3	1	0	1	0	1	n.a.
. Extension and advisory services	4	7	4	8	1	11	1	0	2	n.a.
. Inspection services	1	4	19	20	1	0	2	0	0	n.a.

n.a.: not available separately

-- no support notified in this category or not applicable.

1. MPS (and equivalent measurement of support in the EU).

2. Market Revenue Program, *ASRA*, Ontario Grain Stabilization Payments and Provincial Direct Payments in Canada; Direct aid for banana in the EU; price-related payments and deficiency payments in Japan; *Ingreso Objetivo* payments in Mexico; ; and loan deficiency payments, marketing loan gains, trade adjustment assistance, certificate exchange gains, commodity loan forfeit in the United States.

3. Same as above, for different commodities depending on the year; beef deficiency payments in Korea.

4. Non-product specific support is often excluded from reduction commitments on *de minimis* grounds.

5. NISA and CAIS in Canada; Crop market loss assistance before 2002 and from 2002 countercyclical payments in the United States.

6. Crop insurance and production insurance in Canada; National insurance subsidies in the EU; Agricultural Insurance Scheme in Japan; Crop and revenue insurance subsidized by the Federal Crop Insurance Program in the United States.

7. Rice farming income stabilisation programme in Japan.

Source: WTO notifications on domestic support commitments.

Support to general services forms the main part of the Green Box in many countries. The highest shares for pest and disease control and/or inspection services are found in Argentina, Australia, Canada and Mexico. Research, which is only an important component of expenditures in the Green Box, might also include a risk-related dimension.

WTO notifications on domestic support are a rich source of information on risk-related measures, and the support they generate, as they contain details on the various programmes and their implementation criteria. However, exploiting this information is time-consuming as it is not in a readily available database format.

Other risk-related policies

In addition to policies considered in previous sections as generating transfers specific to the agricultural sector, various other measures contribute to farmers' risk management strategies, without being specific to the agricultural sector (*e.g.* health insurance) or without generating any direct transfers (*e.g.* regulations).

Competitive markets and clear regulations

As stressed in OECD (2001), "a primary role for the government in risk management is to provide a sound business environment with competitive markets and clear regulations." This involves ensuring macro-economic stability and basic general services such as health, education and legal systems, as well as well-functioning and competitive markets for agricultural inputs and outputs.

Contingency markets, such as futures, insurance, bonds and stock markets, are essential for risk management. It is thus particularly important to ensure those markets are developed and competitive. Government has a crucial role in designing clear and efficient regulations to that effect, enforcing them and monitoring the functioning of those markets. The role of government subsidies in agricultural insurance systems has been mentioned earlier. Regulations affecting general insurance systems (*e.g.* for health, housing, non-agricultural damage) also enter into risk management strategies by farm households.

As credit is a basic component of risk management strategies, any measure or regulation that facilitates access to credit for farm households contributes to risk management. This includes encouraging the development of off-farm income sources, or implementing any regulation that clarifies farmers' property rights over land and other assets. Clarifying individual land ownership has been an important issue in transition economies and is still a challenge in some emerging economies. Establishing longer term rental contracts also helps stabilise the situation of farm operators, who rent some or all of the land they farm, and give them better access to credit.

Regulations that provide a clear legal status for the farm enterprise and for family workers also reduce risk levels for the farm household. The status of family labour with regard to labour rules and social protection may be ambiguous in some countries. In recent years, efforts have been made in France to clarify the situation of spouse and other family members working on the farm and improve their inclusion in the social system. Developing legal forms of associations for farm businesses can also contribute to improving the social coverage of farm partners, limiting individual responsibility in case of bankruptcy and facilitating farm transmission. This explains why the share of farms with the legal status of a company has been increasing, notably in France where they accounted for one third of all main occupation farms in 2005 (Agreste, 2008). Labour regulations governing hired farm workers also affect the risk environment of the farm enterprise.

Another area where government play an important role in reducing risk for farmers is in defining the general (contracting) rules that govern the relationships between the farm holder, its input suppliers and output purchasers, and ensuring they are enforced. There are various degrees of integration along the food chain, with possible transfer of risk.[19] OECD (2001) found that while vertical coordination may reduce price risk, it may increase marketing risk. Moreover, risk transfer is influenced by the distribution of market power along the chain.

Information

Governments play an important role in providing the information farmers need to implement risk management strategies or in facilitating access to information. In addition to basic statistics on agricultural markets, this information includes weather forecast and alert systems; alerts on pest and disease outbreaks and spreads; price and market forecasts, as well as information on risk management techniques and programmes available in the country. Increasingly, ministries' web sites are a major channel for the transmission of this kind of information.

Knowledge

Risk management strategies combine a mix of basic, well-known techniques as well as increasingly sophisticated ones. Exposure to various types of risks and ways to deal with them evolve rapidly. It is a challenge for farmers to maintain, develop and transmit their expertise in traditional techniques as well as acquire new innovative techniques. Responding to demand from farmers, extension covers capacity-building in risk management. In many countries governments support extension activities but farmers' organisations and the agri-food industry often play a major role, both in funding and implementation.

Pest, disease and food safety regulations

Pest and disease control is primarily the responsibility of individual farmers, as it affects marketing risk and farm income. However, there are regulations for pests and contagious diseases that can easily spread. Examples are obligatory vaccination or import bans. Other regulations regarding pest and disease control are in areas where human health is threatened through direct contagion (tuberculosis) or through food (Bovine Spongiform Encephalopathy). Food safety regulations affect marketing risk, and indirectly income risk. Inspection systems are in place in every country to monitor the enforcement of food safety regulations and control the safety of marketed products. Governments usually play an important role in those systems.

Social and health policies

In most countries, farm families are covered by the general welfare system for health insurance and pension schemes, and for other social programmes that may exist in the country like child allowance, education grants, minimum income support, etc. In other countries like Austria, Finland, France, Germany, Italy, Japan, Norway, Poland and Switzerland, farm families are not part of the general system but subscribe to specific schemes (Table 3.6 in OECD, 2005). Finally, in a few countries, farmers belong to the general system but can benefit from additional support in case of low income.

The income support component of the Farm Family Restart Scheme in Australia can be considered as a social programme specific to farm families. The Farm Assist Programme in Ireland is a social programme specific to farmers in terms of the qualifying criteria, but which grants the same level of assistance as to households in the rest of society. It provides a minimum income level equivalent to the social welfare payment rate per week used by the Department of Social and Family Affairs (DSFA, 2005) to farm households, who satisfy a means test taking account of all sources of household income and assets. In Switzerland, a special supplementary payment system for child allowances applies to low-income farmers.

It is often difficult to estimate whether farm families are well covered by existing social systems and whether they are treated favourably or unfavourably relative to other families. The fact that they have high farm assets may disqualify them from some types of social support. In some countries with specific agricultural system, farm families pay lower social contributions, but also receive lower benefits. As self-employed workers, farmers may pay higher contributions than salaried workers. When asked about their motivation for diversifying income sources, farm households in the United States often cite social coverage as an incentive to engage in salaried off-farm work.

Notes

1. The risk effects of various measures have been estimated in a series of studies on decoupling (notably OECD, 2002 and 2004); the main results are summarised in OECD (2006).
2. Table 2 of OECD (2009a) classifies the main groups of tools and strategies available to farmers for risk management according to these principles. Table 4 classifies policy measures illustrating the potential roles of government in risk management in agriculture along these lines.
3. The most recent analysis of agricultural policy developments in OECD countries, which are evaluated annually on the basis of changes in PSE levels and composition, is published in OECD (2008).
4. Deficiency payments are considered as a risk mitigation measure, typically as payments based on output with a variable rate. While they stabilise prices faced by producers in much the same way as MPS, this occurs in reaction to a change in market prices.
5. In the special case of New Zealand any price stabilising support is the indirect consequence of sanitary measures designed to protect local poultry and native birds from exotic diseases.
6. PC: Payments based on current area, animal number, receipts and income; PHR: Payments based on non-current area, animal number, receipts and income, production required; PHNR: Payments based on non-current area, animal number, receipts and income, production not required.
7. The only countercyclical payment in the Common Agricultural Policy is the POSEI payment for bananas in remote islands
8. Motivations for diversification of activities by farm households are explored in OECD (2009b).
9. In comparing the annual variability of farm household income and farm income in a number of OECD countries, OECD (2003) shows the stabilising effect of off-farm income.
10. Exceptional Circumstances assistance in Australia is presented as part of an overview of income risk management practice and policies in Australia contained in OECD (2001, Section D.2 in Part II). OECD (2007) explains the process for identifying and assessing the specific circumstances triggering support.
13. Tables 3.1 and 3.2 indicate in which PSE categories the various types of risk-related measures are most often classified.
14. Support to water management can take several forms: reduced price for irrigation water used (classified as a variable input subsidy in the Producer Support Estimate (PSE), assistance (interest concessions or grant) for investment in irrigation or drainage systems on the farm (classified as support for fixed capital formation in the PSE) or general services in the form of large scale water management projects that provide irrigation water and prevent floods (infrastructure in the General Services Support Estimate, GSSE).

15. These are the Income Equalisation Deposits Scheme, replaced in 1999 by the Farm Management Deposit Scheme, as well as the Income Tax Averaging Scheme for primary producers (Box 3.2).

16. To qualify as exceptional circumstances, "the event must be rare (it must not have occurred more than once on average in every 20 to 25 years; it must result in a rare and severe downturn in farm income over a prolonged period of time (*e.g.* greater than 12 months); it cannot be planned for or managed as part of farmers' normal risk management strategies; and must be a discrete event that is not part of long-term structural adjustment processes or normal fluctuations in commodity prices" (DAFF, 2005). OECD (2007) summarises the process for defining exceptional circumstances and the conditions for receiving support.

17. These are "Government financial participation in income insurance and income-safety-net programmes" (Annex 2, paragraph 7 of the Agreement on agriculture) and "Payments for relief from natural disaster" (Annex 2, paragraph 8 of the Agreement on agriculture).

18. This programme provides a short-term welfare safety net for low-income farmers experiencing financial hardship and who cannot borrow further against their assets. The support is provided while they decide whether to improve their farms' financial position, obtain off-farm income or exit.

19. Strategies of risk transfer along the food chain are analysed in OECD (2001), Part II.A.

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