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**Working Paper**

## Food policy volatility and EU policies

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## WIDER Working Paper No. 2013/032

### **Food price volatility and EU policies**

Johan Swinnen<sup>1</sup>, Louise Knops<sup>2</sup>, and Kristine Van Herck<sup>1</sup>

March 2013

#### **Abstract**

Changes in global food prices have affected EU producers and consumers and have triggered policy reactions through the EU's political process. In particular, the EU and member states responded by social policies to protect their consumers, attempts to regulate 'speculation' on agricultural commodities, revisions of sustainability requirements for biofuels, international development and food aid, and changes in the EU's Common Agricultural Policy (CAP). With the exception of biofuel regulations, policy changes have been relatively limited and the effects on global food markets minor. The reasons are that the impact of global price volatility on EU consumers has been limited and the link between the CAP and the world market is much smaller than it was twenty years ago.

Keywords: food prices, EU policies, biofuels, Common Agricultural Policy, political economy

JEL classification: H2, Q1

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## Acronyms

CAP	Common Agricultural Policy
GHGE	greenhouse gas emissions
EC	European Commission
EU	European Union
FAO	Food and Agricultural Organization
GDP	gross domestic product
ILUC	indirect land use change
MiFID 1	Markets in Financial Instruments Directive
MUV	manufactures unit value index
NRA	nominal rates of assistance to agriculture
PSE	producer support estimate

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## **1 Introduction**

The period 2007–11 was characterized by high volatility in global food prices. In many countries of the world this triggered important policy reactions with food exporters imposing export taxes or outright bans and food importers lowering their import tariffs.

In this paper we discuss the impact of the changes in world food prices on EU policies. We analyse how the changes in global prices have affected producers and consumers in the EU, and how this has resulted in policy reactions through the political process. We also discuss how EU policy changes, in turn, have influenced global food prices.

To provide the basis for our political economy analysis, we start in Section 2 by briefly outlining the stakeholders involved and the different decision-making levels and institutions in the EU that have influenced policy reactions. In Section 3 we analyse how the price changes have affected producers and consumers and how these have differed among producers and consumers both across and within member states.<sup>1</sup> In section 4 we document key policy responses by the EU and its member states to the food price changes. We focus on changes in social policies, on regulations of biofuels and financial investments in food commodity markets, and on food and development aid both within and outside the EU. In Section 5 we focus on the interaction of the EU's Common Agricultural Policy (CAP) with the global food prices. Section 6 analyses some key political economy elements in the policy responses that we documented. Section 7 discusses the impact of the EU policy reactions on global food markets. Section 8 concludes.

## **2 Stakeholders and institutional framework**

Traditional economic and political models of agriculture and food policies often focus on the impact of prices and policies on three types of agents: producers, consumers and taxpayers (see e.g., Gardner 1987; Swinnen 1994). Price changes directly affect producer and consumer welfare and may trigger demands by these groups for policy interventions. Because of expenditures on social policies and agricultural/food subsidies, taxpayers have always been an important actor in food policy discussions. In the EU their role in the policy debate has even increased in recent years. With the shift from price and trade interventions to direct payments (in the 1990s), most of the support to farmers now comes through budget expenditures. In addition, the financial and economic crisis has had a major impact on member states' budgets and on their fiscal policy. This affects their willingness to allocate funds to EU policies (including the CAP and food aid) and to spend on domestic social policies.

Such a traditional political economy framework is useful when thinking about the economic and political relationship between food prices and EU policies. However, to get a more realistic perspective it is necessary to disaggregate the concept of 'producers' and 'consumers' and to include the impact on and influence of other types of agents—such as trading partners, landowners, environmental groups, the energy and financial sectors, etc. Landowners have lobbied intensively on EU farm policies in recent years as farm subsidies have been shifted from price and trade interventions to land-linked subsidies, directly

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<sup>1</sup> Throughout the paper we document the changes at the EU level with a series of figures and provide in Appendix a series of complementary figures with data and indicators for the 27 EU member states.

affecting land prices (Swinnen and Vranken 2009; Ciaian, Kancs and Swinnen 2010). Environmental groups have been increasingly vocal in agri-food policy debates and played a significant role in the 2003 reform (Swinnen 2008). As recent price spikes have been related to energy investments ('biofuels') and financial transactions ('speculation'), policy initiatives to regulate these have drawn energy and finance interest groups into the food policy debate as well. Further, the relationship between EU policies and global food prices is influenced by pressure from trading partners (Josling 2008; Moehler 2008).

Finally, it is important to take in consideration that decision-making in the EU is affected by various institutional factors. For example, some policies are set at the member state level (such as social policies), others at the EU level (such as agricultural policies). Some policies can be changed on a short-term basis (e.g., management of food policies within existing policy frameworks), others are fixed in multi-annual agreements (such as the EU budget allocations and major CAP decisions). For some policies the EU Parliament has co-decision power, for others not, and some policies are constrained by international agreements, such as the GATT/WTO agreements.

Given the constraints of the length of this study it is impossible to integrate all these different policies, actors and institutional constraints into a single, integrated model. We will therefore take a rather pragmatic approach, referring to key agents and institutions, which influenced policy decisions on specific policies.

### **3 Impacts of changes in global food prices in the EU**

The period 2007–11 was characterized by high volatility in global food prices (Figure 1). World market prices for major commodities, such as cereals, have risen sharply in 2007–08 and in 2010–11. Figure 1 illustrates how the FAO food price index increased by 50 per cent in 2007–08 compared to the 2005 level. This rise coincided with a general rise in commodity prices, in particular of energy and metals. In the second half of 2008 food prices decreased sharply as one of the consequences of the global financial crisis. By 2009, the food price index had returned to much lower levels albeit still significantly higher than in 2005. In 2010 and 2011, food prices increased again.

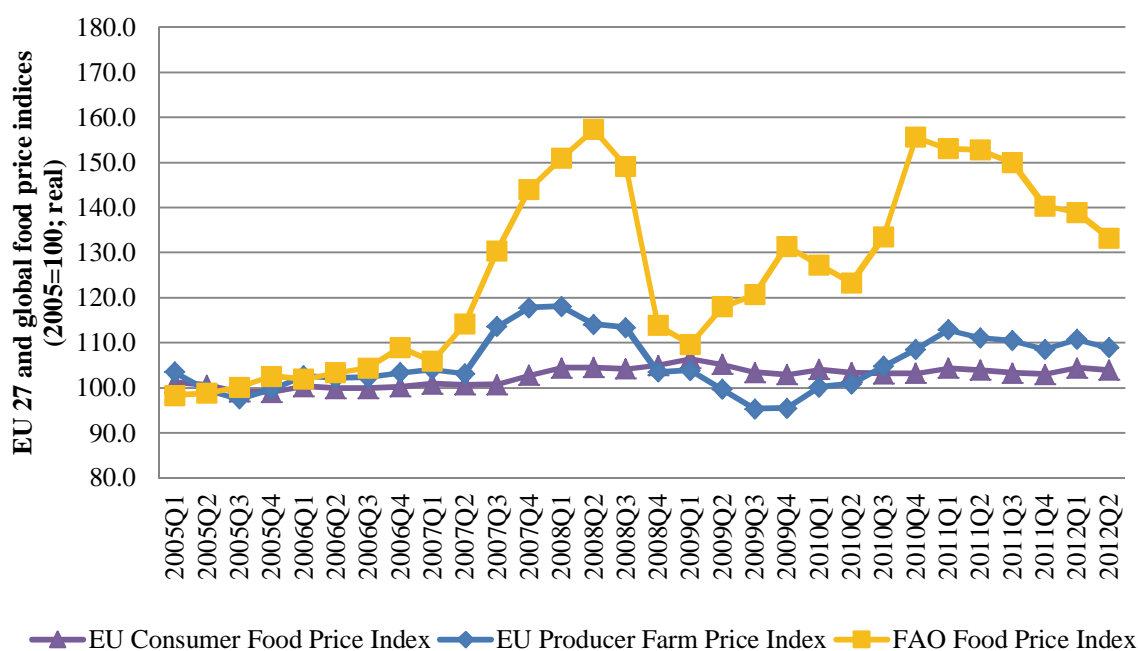
Figure 1 also illustrates how average producer prices in the EU followed a similar trend to global food prices, although the scale of these changes was much smaller than those of the FAO food price index. Compared to the 2005 prices, average prices for producers increased by less than 20 per cent in real terms in the first price spike and even less during the second price spike.

However, the average price change hides important differences between agricultural commodities. Figure 2 illustrates how in the EU cereal prices increased by 113 per cent, five times more than milk prices which increased by only 22 per cent between the first quarter of 2005 and the first quarter of 2008.<sup>2</sup> Figure 3 further illustrates the large differences in volatility between different price indicators, with EU price volatility typically lower than global price volatility indicators.

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<sup>2</sup> Note that in addition to differences between commodities, there are also large differences between member states in terms of producer price inflation and especially in some of the new member states, such as Romania, Poland and Hungary, producer prices substantially increased in the period 2005–11 (See Appendix Figure A1).

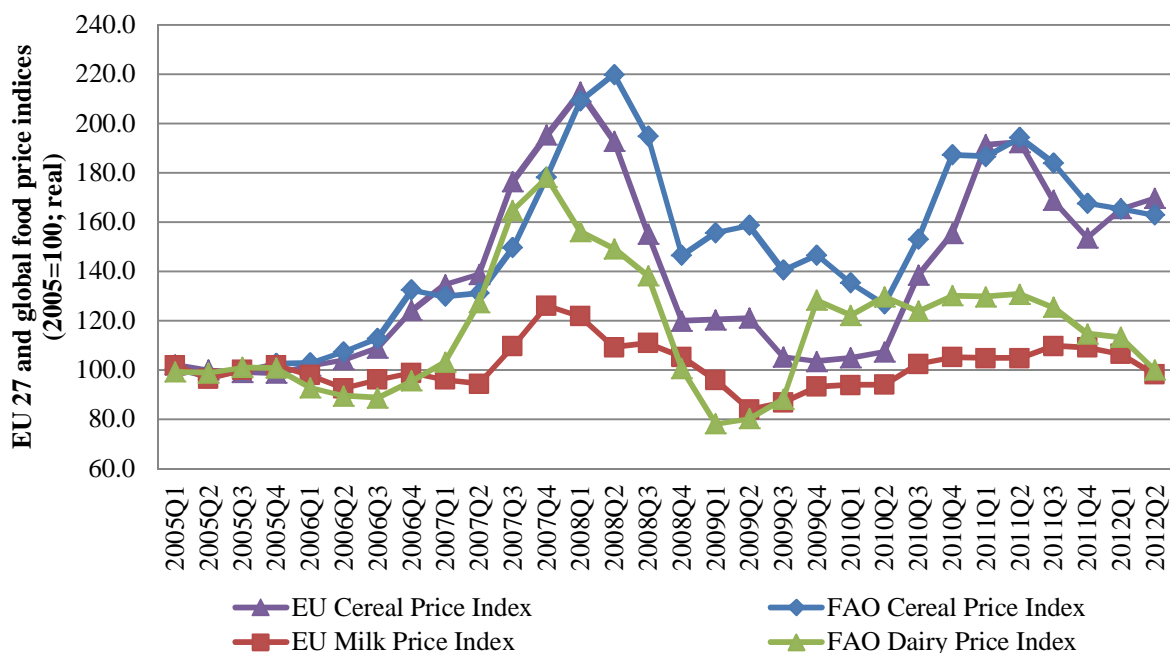
Figure 1: Evolution of EU 27 and global price indices (2005=100; real prices)



Note: All prices are real prices. The FAO Food Price Index has been deflated using the World Bank manufactures unit value index (MUV). The EU Price Indices have been deflated using the harmonized index of consumer prices for the EU27.

Source: FAO and EUROSTAT.

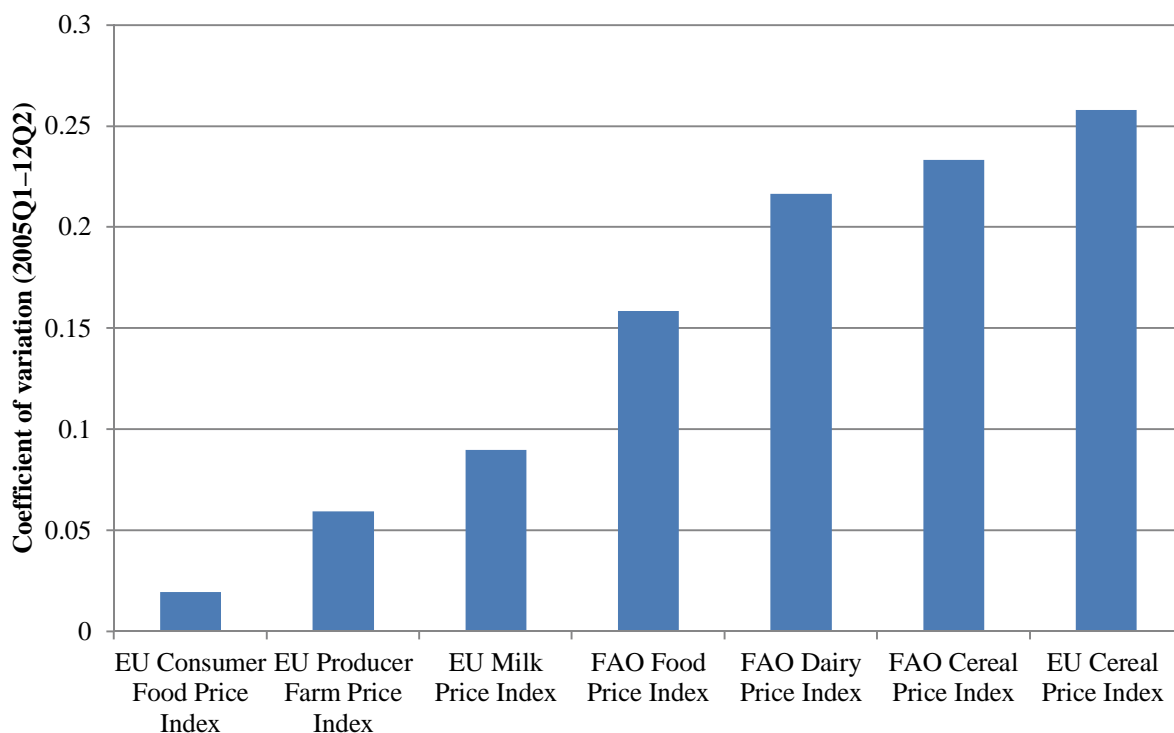
Figure 2: Evolution of EU 27 and global price indices for specific commodities (2005=100; real prices)



Note: All prices are real prices. The FAO Cereal Price Index has been deflated using the World Bank MUV. The EU Cereal Price Index has been deflated using the harmonized index of consumer prices for the EU27. The EU Milk Price Index consists of milk. The FAO Dairy Price Index consists of butter, SMP, WMP, cheese, casein price quotations and is weighted by world average export trade shares.

Source: FAO and EUROSTAT.

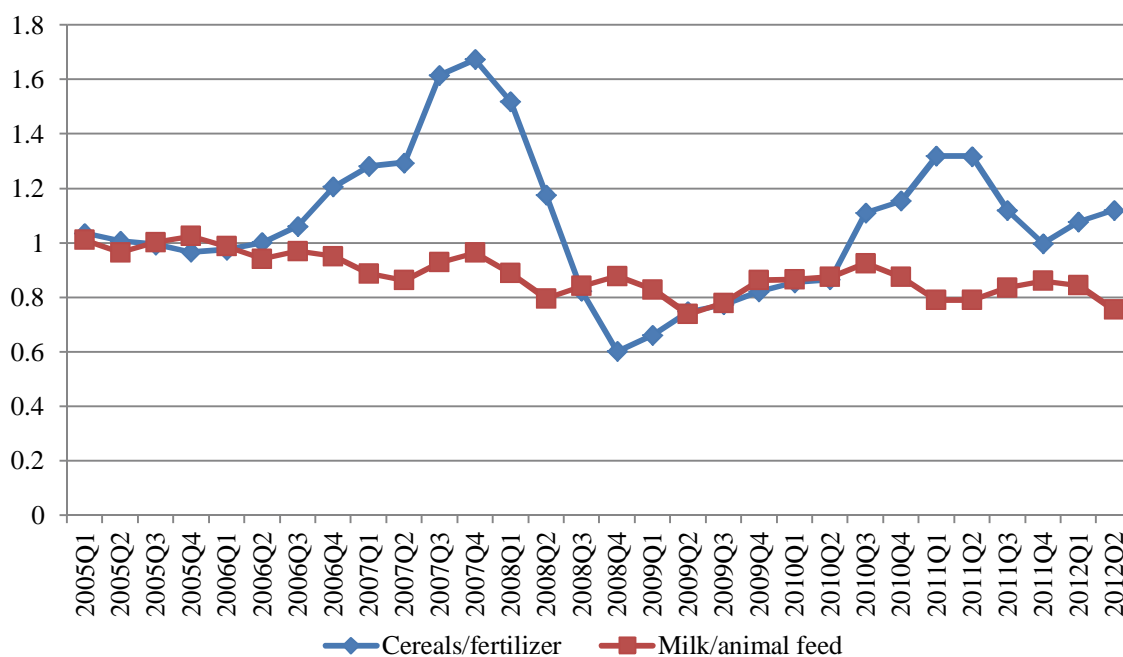
Figure 3: Coefficient of variation for global and EU food prices



Note: The coefficient of variation is defined as the ratio of the standard deviation to the mean. All prices used in the calculations are real prices. The FAO Food Price Indices have been deflated using the World Bank MUV. EU Price Indices have been deflated using the harmonized index of consumer prices for the EU27.

Source: FAO and EUROSTAT.

Figure 4: Evolution of the ratio of cereal over fertilizer prices and the ratio of milk over animal feed prices in the EU27



Source: FAO and EUROSTAT.

Moreover, these price changes are imperfect indicators of changes in producer welfare since they only capture part of the effects, even if they are in real terms. Grain prices are output prices for grain producers, but are input prices for livestock producers. In addition, there were significant changes in energy prices over the same period, which affected production costs for agricultural producers. Figure 4 shows how indicators of output/ input costs have evolved very differently for grain and dairy producers since 2005. The grain/fertilizer price ratio in the EU has evolved similarly to global grain/fertilizer prices, with a rapid increase in 2006 and 2007, a strong decline in 2008 and significant growth in 2010. However, the decline in 2011 meant that the price ratio in 2012 was only slightly higher than in 2005. Hence, the grain/fertilizer price ratio has been very volatile over the 2005–12 period, with an average positive (15 per cent) effect. In contrast, the milk/animal feed price ratio has been less volatile and has shown a consistent decline since 2005, with the 2012 ratio being 25 per cent lower than in 2005: increases in dairy prices have been consistently offset by increases in animal feed prices. These observations indicate that the impact of the global price change on EU farmers was quite mixed—and quite heterogeneous—depending on the type of farmer.

Figure 1 also shows how average food prices for consumers in the EU have evolved quite differently from the FAO food price index. They have increased slightly over the 2005–12 period, with real food prices barely 5 per cent higher in 2012 than in 2005. There was very little volatility in the food consumer price index, as illustrated in Figure 3 which shows that the price volatility was lowest for average food prices in the EU.<sup>3</sup>

An important reason is that the cost of raw material (i.e., the farmers' price) is only a small share of the total cost in the price of the final food products. The share of raw agricultural material in the total food production costs tends to decrease with the degree of manufacturing (for which the most decisive costs are labour, capital and energy). For example, the share of agricultural raw materials in the cost of bread is merely 5 per cent and on average 20 per cent for meat and livestock products in the EU (EC 2007a).

The impact of these price changes on consumer welfare also depends on how much consumers spend on food. European consumers spend on average 15 per cent of their household budget on food. Changes of food prices therefore had a limited impact on the average EU households' welfare.

However, there are significant differences between and within member states because of differences in consumer expenditures, in food prices, and in incomes. Poorer families spend more on food. The share of the household budget spent on food varies from 10 per cent in the UK to more than 40 per cent in Romania (see Figure A2 in Appendix for details).

When considering the effect of price changes on consumers, it is important to realize that other factors had a significant effect on EU consumer incomes over the same period. One factor was the simultaneous increase in energy prices, causing an increase in costs for transport, heating etc. The other was the economic and financial crisis which hit many EU consumers through falling employment and wages. Overall, in the EU27, gross domestic product (GDP) fluctuated strongly over the 2007–12 period with zero growth on average

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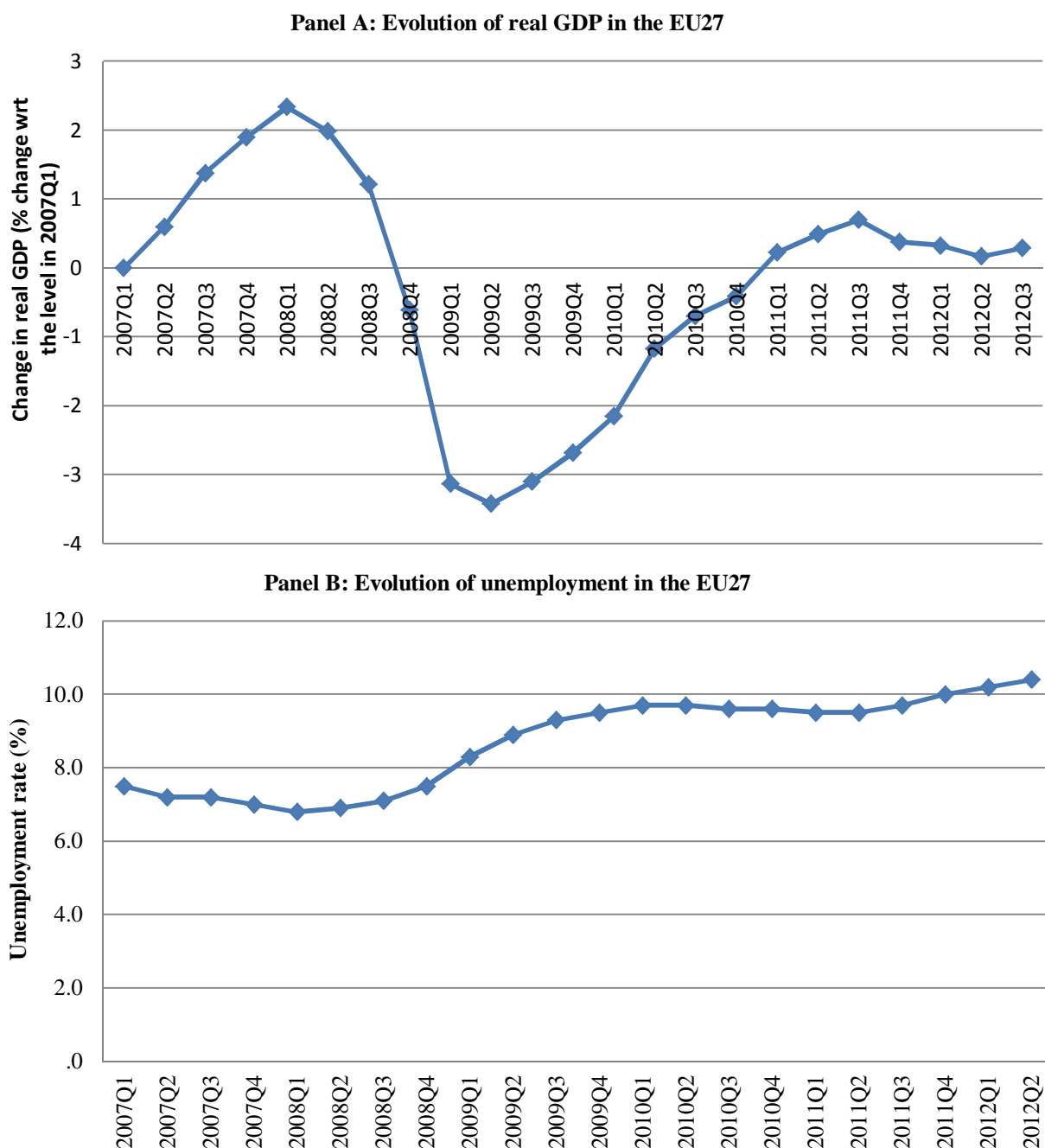
<sup>3</sup> It is important to note that similar to producer prices changes, there is large heterogeneity between member states with respect to the change in consumer prices (see Appendix Figure A1). The highest figures on consumer price inflation can be found in the new member states, while the effects were much more limited in the Western European countries.



(Figure 5). Unemployment increased by more than 2 percentage points between 2007 and 2012.

Interestingly, these macroeconomic changes seem to have impacted domestic food prices. Average food prices fell over the 2005–11 period in the countries most hit by the economic crisis such as Portugal, Greece, Spain and Ireland (see Appendix Figures A1 and A3 for details).

Figure 5: Evolution of real gross domestic product (GDP) and unemployment in the EU27



Source: EUROSTAT.

## 4 EU policy responses

The official EU response to the price spikes in 2007-08 was detailed in three communications published by the EC in 2008 and 2009 (EC 2008a; 2008b; 2009a), which structured the EU response to price volatility around three sets of actions: (i) actions to mitigate short- and medium-term effects of the food price shock (e.g., aid programmes for EU citizens, tackling speculation on food commodities); (ii) actions to increase agricultural supply and ensure food security in the longer term (e.g., sustainability of EU biofuel policy, investment in agricultural research, etc.); and (iii) actions to tackle the global effects of the price rises on the poor (e.g., promoting open trade policy, development aid). At the same time, several initiatives were taken at the member state level. Because of space limitations we cannot analyse all these actions. We focus on what we consider the most important policy responses: (i) policies to protect EU consumers, (ii) regulating ‘speculation’ on agricultural commodities, (iii) tightening of sustainability requirements in the EU biofuel policy (iv) international development and food aid; and (v) changes in the EU’s CAP.

In the rest of this section, we discuss these policy reactions in more detail. Because of the (historical) importance of the relationship between the CAP and global food prices, we also discuss the CAP policy reform and its relationship with global food prices in a separate section (Section 5).

### 4.1 Protecting EU consumers through social policy and food aid

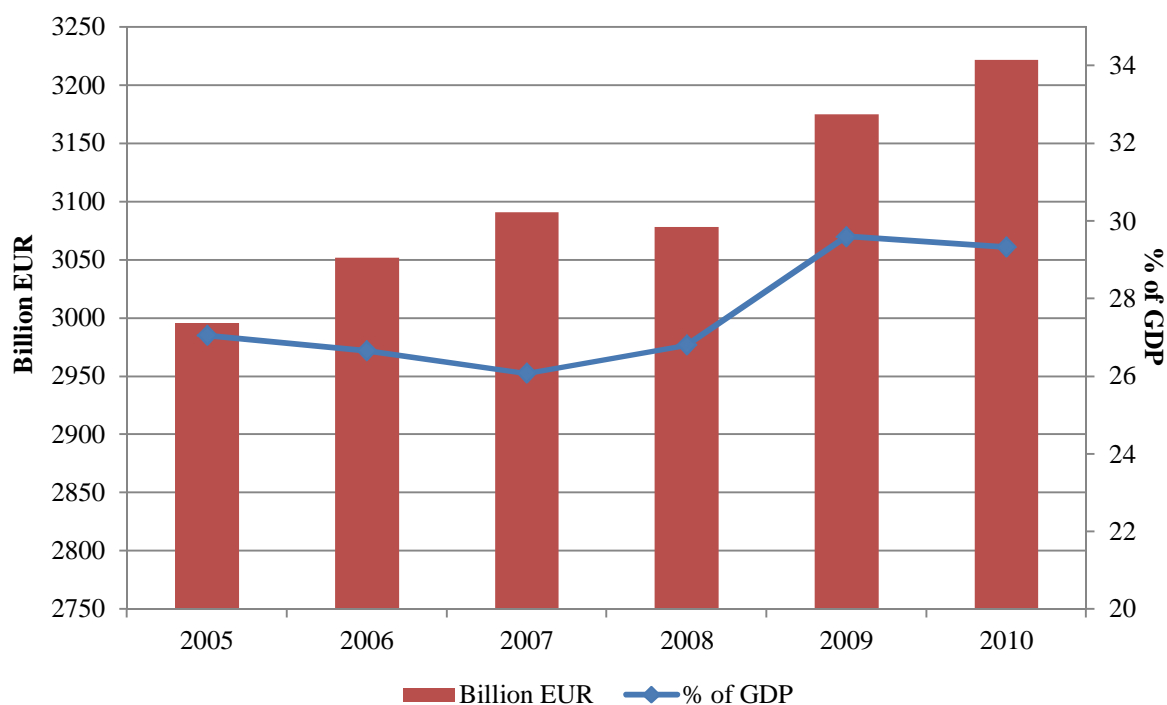
#### *Social policy*

The large majority of the social protection benefits, such as unemployment benefits, pensions and disability payments are still the responsibility of the member states. The increase in food prices induced pressures from consumers, in particular the poorest, to increase social spending. Increases in other prices, such as those for energy and transport, reinforced this pressure. At the same time social security systems have been affected by the financial and economic crisis. The financial and economic crisis had two (opposite) effects on social spending. On the one hand, the negative impact on government budgets increased pressure to cut down expenditures. On the other hand, with higher unemployment, expenditures on this type of social benefits are expected to increase.

The net effect has been an increase in social expenditures. Figure 6 illustrates how social expenditures in the EU increased by approximately 7 per cent between 2005 and 2010. Not surprisingly, also here there are large disparities among member states. While in richer countries, such as France, the Netherlands, Denmark or Finland, per capita expenditures on social protection benefits are higher than 10.000 euro per capita, they are only about one-tenth in the poorer countries, such as Bulgaria, Romania and Poland (see Appendix Figure A4). However, spending on social security benefits increased in almost all member states.

Appendix Figure A5 illustrates the correlation between changes in food prices and the change in spending on social security benefits and Appendix Figure A6 the correlation between changes in GDP and the change in spending on social security benefits. The figures indicate that there is no clear correlation between these variables across member states.

Figure 6: Evolution of social expenditures in the EU27



Note: Expenditures are in real terms, using the harmonized index of consumer prices.

Source: EUROSTAT.

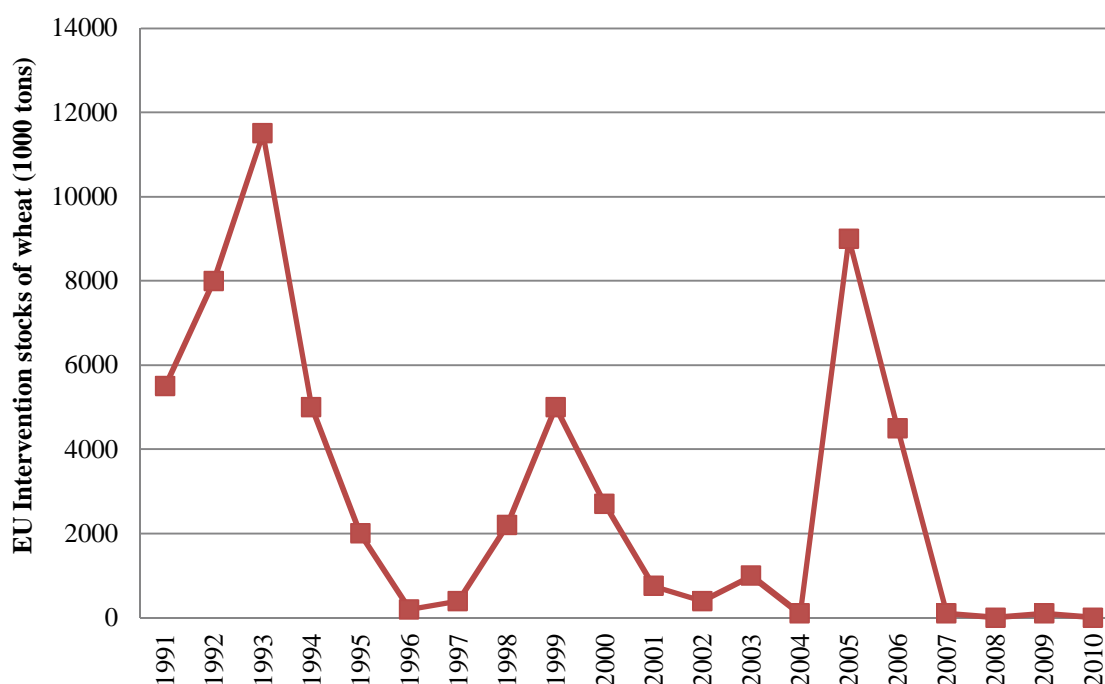
### *EU food aid in an austerity context*

Since 1987, the EU has developed a food aid programme to support the poor and the needy of Europe. The first version of this scheme consisted of the distribution of stocks of surplus food. However, reforms of the CAP towards a more market-oriented policy in the 1990s and 2000s reduced the amount of surpluses in the EU. This led to lower intervention stocks as is illustrated in Figure 7 for wheat stocks. CAP intervention which was originally designed to support internal market prices and public purchasing of several agricultural commodities—including grains—without limits, resulted in large food intervention stocks. After 1992, CAP reforms reduced public intervention purchases of grains, for example, and over time intervention stocks decreased substantially. In 2005 intervention purchases were exceptionally high due to a combination of a large harvest and low prices.

As food surpluses decreased substantially over the years, the food aid scheme was revised in 2008 by the EC to make it easier to access products from the open-market. In 2010, the EC revised its 2008 proposal to provide stable and more favourable rates of national co-financing and put a ceiling of €500 million per year on the EU's contribution to the scheme. In 2011, in the midst of financial and economic turmoil, the EC proposed a drastic cut in the scheme's budget: from €500 million to €12 million (EC 2011a). However, aid organizations (e.g., French Federation of Food Banks) argued that it is precisely in periods of rising food prices that such programmes are most needed. A series of intense negotiations took place to make sure sufficient EU resources were allocated to food aid, and to try to remove the (member

states’) co-financing requirements to the scheme, to make it exclusively EU financed. This

Figure 7: Public intervention stocks of wheat by the EU (thousand tons of wheat)



Source: European Commission - DG Agriculture and Rural Development.

was opposed by several members states (Germany, the Netherlands, Denmark, Sweden, the UK and Czech Republic), who argued that ‘social policy’ is a national competence. After months of deadlock, an agreement was finally reached and a regulation adopted which maintained the level of funding for the scheme (€500 million) for 2013 only. Most recently the EC decided to shift this consumer support programme from the CAP to the EU social and poverty reduction policy, marking the end of the scheme as part of the agricultural policy domain.

This episode is an illustration of the sometimes cumbersome decision-making process of the EU—and the difficult coordination between the European and the national levels—even when urgent action is needed.

## 4.2 MiFID 2: fighting speculation on food commodities

The first version of the Markets in Financial Instruments Directive (MiFID 1) entered into force in 2007, just before the financial and food price crises. At that time, the EC thought this new piece of legislation would play a crucial role in ‘creating a robust, common regulatory framework for Europe’s securities markets’ (EC 2007b). Overall, MiFID 1 and its implementation were seen as successful, except for the increase of ‘over-the-counter’ operations (OTCs)<sup>4</sup> which were criticized for their opacity. Recent changes in trading

<sup>4</sup> An over-the-counter market is a market in which trading takes place directly between licensed dealers (on a bilateral basis), rather than through an auction system as used in most organized exchanges (World Development Movement 2012). Because of the lack of oversight and supervision, over-the-counter operations are argued to be less transparent as the trading

techniques (e.g., computer-based high-frequency trading), coupled with the financial crisis, induced the EC to review MiFID to evaluate whether more regulation was needed.<sup>5</sup>

Whilst the commodity and commodity derivatives markets were ‘exempted’ from MiFID 1, they now represent a focus-area of MiFID 2, in response to claims of speculation on food commodities. The commodity-trading industry, which previously enjoyed very little regulatory oversight, may be particularly impacted by the new focus on market transparency.

After the first food price spike, many international observers (e.g., De Schutter 2010; UNCTAD 2011; World Development Movement 2012) argued that increasing volumes of financial investments in commodity derivatives since 2004 and the related increase in speculative behaviour was one of the main factors explaining the food price spikes.

While there is increasing evidence that speculation did not play a major role in the food price developments of recent years (Irwin 2012), the EC launched a public consultation for more regulation in 2010. This revealed a clear division between the stakeholders in the debate. Unsurprisingly the financial actors made a plea for more ‘flexibility’ and argued that over-regulation of financial markets would be detrimental for the entire EU economy. On the opposite side of the spectrum, a group of NGOs recommended that commodity markets should be further regulated to increase transparency and that positions and prices needed to be regulated in order to discourage speculation (European Parliament 2012).

Imposing position limits on commodity markets, i.e., the limit in the number of contracts that can be held by one trader or group of traders, has been an important area of dispute since the beginning of the process. It is unclear at this stage whether the outcome of MiFID 2 will effectively introduce position limits on commodity markets in the EU, as the EC proposal leaves latitude for different national implementations. This could allow strict position limits in some countries and a more flexible regime in others (with the UK clearly being in favour of a light regulation on this aspect). The recent European Parliament’s response, amending the EC proposal, aims at removing loopholes and reinforcing the European regulatory oversight on food speculation, by effectively introducing position limits on commodity markets. A final agreement on a joint version of the directive has yet to be reached between the European Parliament and the member states.

### **4.3 Strengthening sustainability requirements for biofuel production**

The expansion of first generation biofuels has competed with arable land and biomass which could have been otherwise used for food and feed. While there is disagreement on the share of the price increase for which the expansion of biofuel production is responsible, it is clear that biofuels have been an important driver of increasing food prices (Rausser and de Gorter 2012). Whilst biofuels were originally thought as environmentally-friendly fuels, increasing scientific evidence suggests that they may also cause significant environmental damage, with indirect effects of land use change (e.g., deforestation) leading to an increase—rather than a decrease—in greenhouse gas emissions (GHGE). These effects have been conceptualized under ‘indirect land use change’ (ILUC).

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operations which take place on regulated exchanges (like the stock exchange) where all traders can see what is being traded and the price of the deals (ibid.).

<sup>5</sup> The negotiations on MiFID 2 are currently unfolding at EU level.

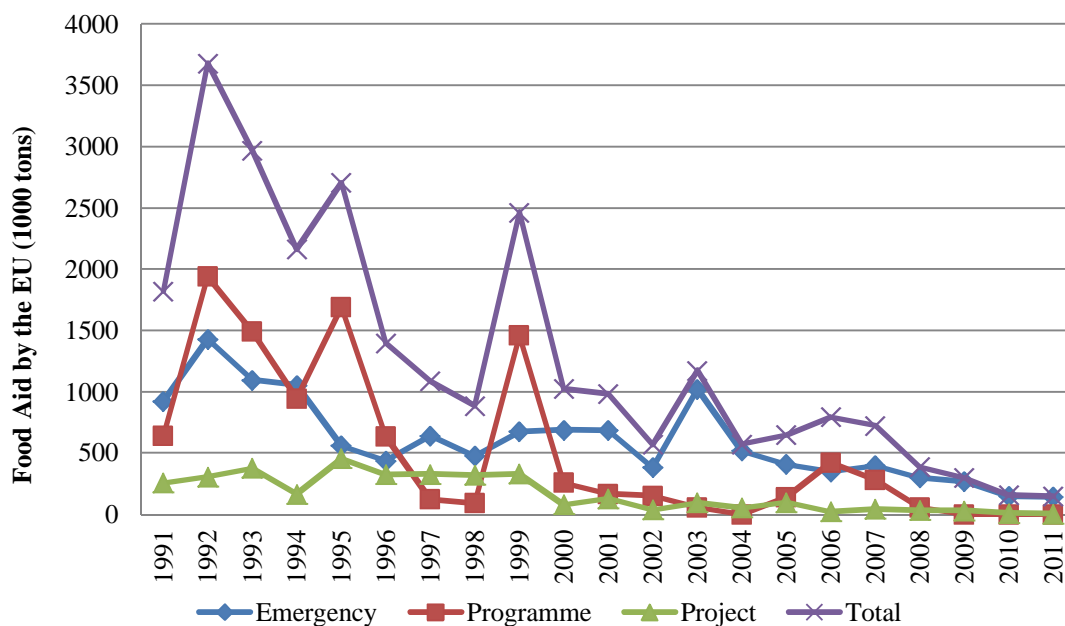
Under pressure of different stakeholders (e.g., environmentalists), the EU first opted to tie its target of 10 per cent of biofuel for transport by 2020 to sustainability criteria. The EC presented the biofuel sustainability requirements of the 2009 Renewable Energy Directive as a way to limit the role of biofuel production in rising food prices (e.g., through the promotion of second-generation biofuels (EC 2009b). The EU biofuel sustainability scheme includes the following criteria: (i) the greenhouse GHGE saving from the use of biofuels and bioliquids shall be at least 35 per cent; (ii) biofuels and bioliquids shall not be made from raw material obtained from land with high biodiversity value; (iii) biofuels and bioliquids shall not be made from raw material obtained from land with high carbon stock; (iv) biofuels and bioliquids shall not be made from raw material obtained from peatland, unless the cultivation and harvesting of that raw material does not involve drainage of previously undrained soil; and (v) agricultural raw materials cultivated in the EU and used for the production of biofuels and bioliquids shall be obtained in accordance with the environmental requirements under the CAP

More recently, with growing critique towards the EU biofuel policy, the EC proposed what the press and the industry have qualified as a policy U-turn on biofuels. From strongly encouraging this sector through binding targets and blending mandates, the EC is now backtracking on this policy option and seeks to minimize the use of food crop-based biofuels. On 17 October 2012, the EC published a proposal limiting the use of food-crop based biofuels at 5 per cent (EC 2012b).

#### 4.4 International food and development aid

The EU response to price volatility on world markets consisted of, among other initiatives, a rapid humanitarian fund (the ‘food facility’) and an ‘action plan on food price volatility and agriculture’ agreed by the G20. Somewhat paradoxically, in the recent years of high food prices the EU has not provided more (in-kind) food aid to poor countries. In fact, as Figure 8 illustrates, food aid continuously declined over the past two decades, and was never lower

Figure 8: International food aid by the EU (thousand tons of wheat)



Source: World Food Programme FAIS database.

than in the recent years of high food prices. It declined from peaks of more than 3.5 million tons per year in the early 1990s to close to zero tons in recent years. There are two main reasons for this. First, studies showing that food aid could have detrimental effects on the local economies caused a shift from food aid towards development aid (OECD 2012a). Second, EU food aid was especially distributed when public food stocks were high in the EU. In the past two decades public intervention stocks substantially decreased as a result of the CAP reform (see Section 5.1 and 4 and Figure 7). This factor was a very important element in the drop in EU food aid allocation.

In 2008 instead the EU adopted a regulation establishing €1 billion ‘food facility’ which financed measures officially aimed at supporting a rapid and direct response to the volatile food prices in the period between emergency aid and medium- to long-term development cooperation in developing countries. These measures included measures to improve access to agricultural inputs and services, safety net measures to maintain or increase agricultural production capacity and help meet the basic food needs of the most vulnerable populations, and other small-scale production-boosting measures based on countries’ individual needs (microcredit, investment, equipment, infrastructure and storage, vocational training and support for agricultural professionals). Whilst the EC presented the Food Facility as its ‘highest profile instrument’ in development aid (EC 2010a), a number of observers, including the European Parliament, questioned the automatic extension of this instrument in times of crises, as its ability to tackle the structural roots of food insecurity, had been rather difficult to assess (European Parliament 2011).

Second, the EU called for an EU policy framework to assist developing countries in addressing food security challenges by (i) increasing availability of food; (ii) improving access to food; (iii) improving nutritional adequacy of food intake; (iv) enhancing crisis prevention and management (EC 2010a). In September 2011, the European Parliament adopted a resolution emphasizing the need to go beyond an EU approach and adopt a global and comprehensive response, to overcome the proliferation of separate actions since 2008 (European Parliament 2011).<sup>6</sup>

Already in 2008, the French President Nicolas Sarkozy proposed to make price volatility a G20 priority. In Paris, the G20 Agricultural Ministers adopted an ‘Action Plan on Food Price Volatility and Agriculture’, which aimed, amongst other objectives, to improve and develop risk management tools for governments, firms and farmers in order to build capacity to manage and mitigate the risks associated with food price volatility, in particular in the poorest countries.<sup>7</sup> In 2011, the G20 in Cannes—still under the French presidency—emphasized improving the regulation and supervision of commodity derivatives markets, and in general on reinforcing transparency on agricultural markets (G20, 2011).

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<sup>6</sup> Recently, the EU responded to the food crisis in the Sahel region by increasing its humanitarian aid from €45 million at the beginning of 2012 to €37 million since the beginning of 2012.

<sup>7</sup> One of the key instruments of this action plan is the Agricultural Market Information System (AMIS), as a response to the market transparency calls and the need to ‘improve the quality, accuracy, timeliness and comparability of data on agricultural markets’. AMIS should encourage major players on the agri-food markets to share data, enhance existing information systems, promote greater understanding of food price developments, and further policy dialogue and cooperation (G20, 2011).

## 5 The CAP and global food prices

### 5.1 A (very) brief historical perspective

The relationship between food price volatility and the EU's CAP is arguably the most interesting from a (global) food policy perspective. For several decades the CAP had substantive effects on global food prices as the EU imposed high tariffs on imports and exported its subsidized food surplus production to international markets, pushing down global food prices. This system was particularly important for key commodities such as cereals, beef, sugar and dairy products.

Surplus production resulted from a CAP system which provided strong protection to EU farmers through guaranteed prices, high import tariffs, and export subsidies.<sup>8</sup> While this created much stability on the EU market it created much instability on world markets, and considerable distortions throughout the economy. In addition, the high import tariffs and growing surplus stocks which were exported with subsidies caused already low prices on global food markets to decline even further.

As a result, pressure increased on EU policymakers to reduce the CAP distortions both from inside the EU and from outside—most importantly from the EU's trading partners and exporting nations (such as the US, Australia, etc.) and from developing countries and international organizations which argued that these policies were hurting the poor by contributing to low agricultural and food prices.

In response to these internal and external pressures, the EU introduced a series of reforms, spanning three decades, to reduce the impact of its CAP on international markets i.e., a shift towards a policy system that maintains support to farmers, while creating less distortions on international markets (Josling 2008; Moehler 2008; Swinnen 2008). Reforms in the 1980s introduced supply constraints (quotas) in the sugar and dairy sectors. Reforms in the 1990s reduced price supports, tariffs and export subsidies and replaced these by direct payments for land and animals in other sectors, including cereals. These reforms were part of the Uruguay Round Agreement on Agriculture (URAA) of the GATT/WTO. After 2000, partly in anticipation of a Doha Round agreement, the 'single farm payment' (SFP)—a decoupled payment from production—was introduced (Swinbank and Daugbjerg 2006).<sup>9</sup>

Overall, these subsequent reforms resulted in a steady decline in agricultural support in the EU since the mid-1980s, and in particular in a strong decline of the use of the most distortionary instruments (Figure 9). Agricultural support, measured by the OECD's %PSE, declined from approximately 36 per cent in the period 1991–93 to approximately 20 per cent in 2009–11, and the %PSE for the coupled support fell below 10 per cent (OECD 2012b).<sup>10</sup>

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<sup>8</sup> Political economists have explained this growth in protection by the decline in farm incomes compared to rapidly growing incomes in the rest of the society as well as the declining opposition of consumers and industry with a declining share of worker expenditures on food and the increased organization of agribusinesses and food companies (Swinnen 1994; 2009).

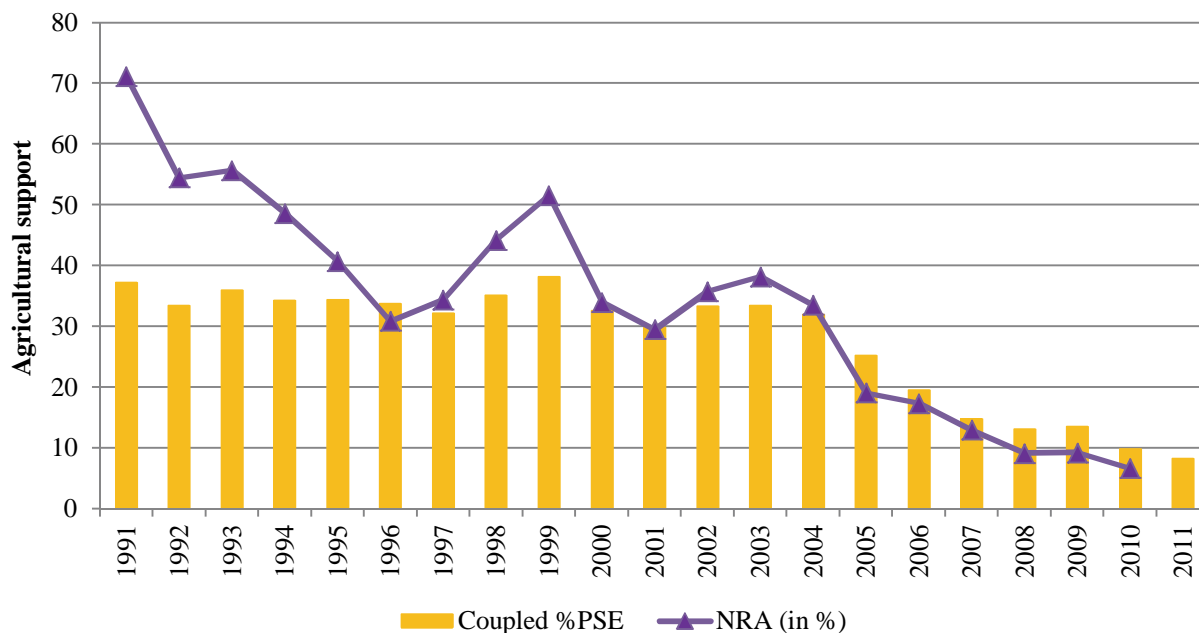
<sup>9</sup> The political economy factors which made these radical reforms possible are discussed in Swinnen (2008). The impact of the GATT/ WTO on the shift towards less distorting policy instruments is shown in Swinnen, Olper and Vandemoortele (2012).

<sup>10</sup> The %PSE is the ratio of the annual monetary value of gross transfers from consumers and taxpayers to support agricultural producers (at the farm-gate level) to the value of total gross farm receipts, measured by the



Similarly, another measure of protection, the nominal rates of assistance to agriculture (NRA) estimates by Kym Anderson show that the EU's NRA fell from 54 per cent in 1991–95 to 11 per cent in 2005–10 (Anderson, Ivanic and Martin 2012).

Figure 9: Agricultural support in the EU (%PSE and NRA in %)



Note: The percentage PSE is used by the OECD and defined the ratio of the producer support estimate (PSE), which is the annual monetary value of gross transfers from consumers and taxpayers to support agricultural producers, to the value of total gross farm receipts, measured by the value of total farm production (at farm-gate prices), plus budgetary support. The NRA is used by the World Bank and defined as the percentage by which government policies have raised gross returns to farmers above what they would be without the government's intervention.

Source: OECD, World Bank.

## 5.2 Reactions to recent price changes

Paradoxically, after the EU had gone through decades of reforms to reduce the CAP's (negative) impact on global food prices, the world became concerned with the implications of high food prices. After the price spikes of 2007–08, international organizations, NGOs and many experts pointed at the hunger and poverty effects of high food prices. A key argument was that not only were urban consumers suffering from high food prices but also rural households were mostly not benefiting since there was imperfect price transmission of international prices and because many were net food buying households—arguments suspiciously absent from the pre-2008 discussions.<sup>11</sup>

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value of total farm production (at farm-gate prices), plus budgetary support. An average %PSE of 20 per cent indicates that a fifth of gross farm receipts was due to agricultural support.

<sup>11</sup> See Swinnen (2011) for a review of the change in arguments and Swinnen, Squicciarini and Vandemoortele (2011) for a political economy explanation.

The timing of the recent food price changes coincided with important discussions in the EU on the future of the CAP and with important institutional reforms in the CAP decision-making process itself. The first increase coincided with the conclusion of the so-called ‘health check’ reforms, with Commissioner Mariann Fischer Boel (commissioner for agriculture and rural development from 2004 until 2009) leading the policy proposals. The second price spike occurred when a new round of CAP reform discussions had been launched, under the regime of Commissioner Dacian Cioloș (commissioner since February 2010).

Global price volatility induced a series of minor policy adjustments that could be taken within the existing policy framework and discussions on changes in the longer term CAP framework itself. Food price volatility has influenced the discourse of interest groups and policymakers, however generally without fundamentally altering their policy proposals. For example, COPA-COGECA (2011), the main EU farmers’ organization, now argues that, despite high prices, farmers are losers because of volatility, high input prices and ‘food chain imbalances’. They and other interest groups asked for a more interventionist reaction, moving away from the long-term liberalization strategy for the CAP. So far, however, the EU has only taken a number of short-term measures and has not changed its fundamental long-term strategy. Instead, within the framework of the CAP, the EC used the recent period of price volatility as a motivation for its overall reform strategy.

First, as part of the EU strategy to address short- and medium-term effects of the food price shock, the EC undertook some quick changes to the market management measures inside the CAP. These measures reduced several restrictions to increase the supply of food: intervention stocks were sold, the 10 per cent obligatory set-aside for farmers was suspended in 2008, most import duties on cereals were lifted following a decision of the Council on 20 December 2007, and milk quotas were increased by 2 per cent as from 2008 (EC 2008a).

Second, in 2008 the so-called ‘health check’ reform of the CAP included several minor measures which were linked to the price changes such as the abolition of set-aside and the gradual increase in the milk quotas before their abolition in 2015. At the same time the EC confirmed the agenda to stay on course to a more market-based CAP. The reforms further decoupled support and reduced intervention in markets for pig meat, cereals (barley, sorghum, wheat) and for dairy products (butter and skimmed milk powder). This, according to the EC, aimed to ‘modernize, simplify and streamline the CAP and remove restrictions on farmers, thus helping them to respond better to signals from the market and to face new challenges’ (EC 2008c).

Third, in response to the crisis in the dairy sector, where farmers saw their income decreasing with increasing costs (see Section 2), a so-called ‘milk package’ was introduced in 2010 (and entered into force in October 2012). Despite considerable pressure of dairy organizations, the ‘milk package’ does not include measures which directly intervene in the markets. Instead the policy initiatives focus on improving the functioning of the dairy supply chain, in particular to strengthen the position of farmers in the supply chain (by improving contracts between farmers and dairies and strengthening farmers’ collective bargaining power) (EC 2010b).

In summary, in actual policy decisions so far the EU has (i) reaffirmed the engagement of the EU towards an open trade policy—also by underlining the harm done by the restrictive export policies implemented by some countries in response to price volatility—and (ii) stayed on course with its reform proposals in specific sectors such as dairy and sugar (phasing out the quota regime), despite a slight change in argumentation, i.e., by also linking the motivation to price volatility (EC 2008c).

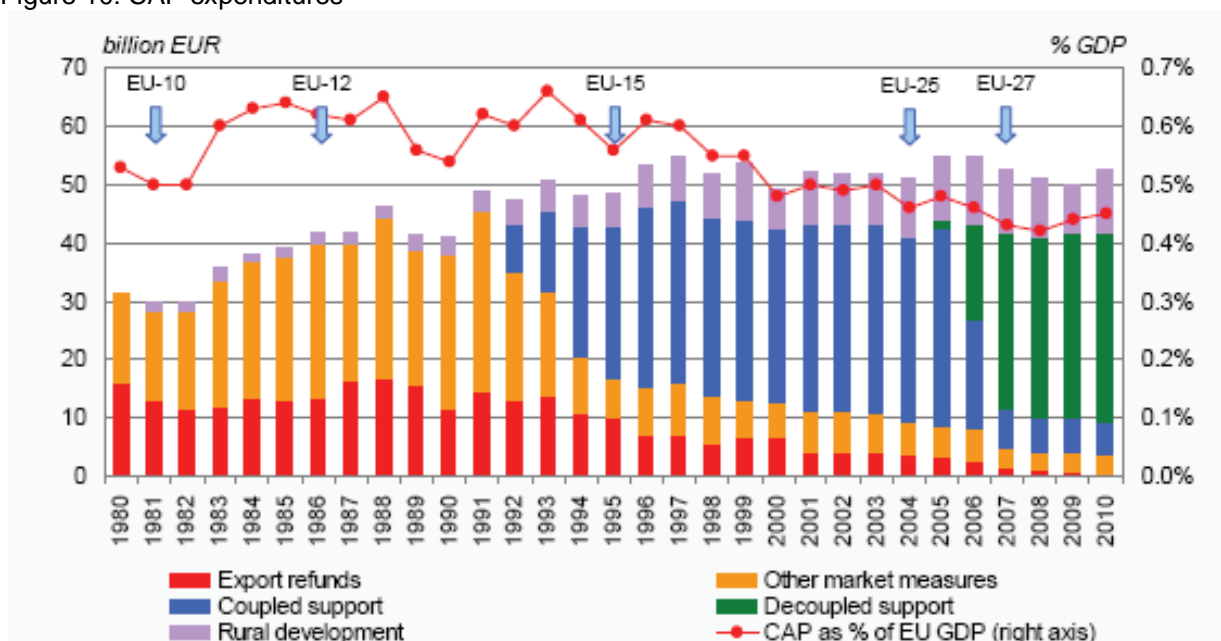
### 5.3 Negotiations on the future CAP: A return to intervention or not?

There is uncertainty whether this course will be continued in the future, as the European Parliament, which now enjoys full legislative influence in the CAP reform process (Roederer-Rynning 2003) seems to be leaning towards a more interventionist approach, possibly because interest groups which favour more regulation, such as some of the farmers associations, appear to be more influential in the European Parliament than with the EC. The composition of the Agricultural Committee of the European Parliament, in charge of amending the EC proposals on CAP reform, still largely reflects traditional agricultural interests (Crombez, Knops and Swinnen 2012; Roederer-Rynning 2010).

Discussions on the future of the CAP (for the 2013–20 period) have been on-going since 2009, but the decision-making process is slow because of the institutional framework and because of the simultaneous negotiations on the EU budget. In fact, a key driver—or constraint—of the CAP reform discussions has been the coinciding debate on the EU budget for the 2014–20 period.

Historically, the relationship between the CAP and the EU budget has always been important (Garzon 2006) as the CAP made up a large share of expenditures in the 1970s and 1980s. The reforms of the 1980s have not reduced this since the major cost of the CAP was shifted from consumers (with price support policy) to taxpayers (with budgetary payments), see Figure 10. Today, the CAP still accounts for a large share of EU expenditures (around 40 per cent). In 2011, the CAP budget amounted to €58.7 billion out of a total EU budget of €141.9 billion (EC 2011b). This effectively implies that the final CAP decision will not take place before there is agreement on the budget (foreseen in early 2013) after which it still has to go through a complex co-decision procedure.

Figure 10: CAP expenditures



Note: Expenditures are in real terms, using the GDP deflator.

Source: EC-DG Agriculture and Rural Development.

The EC published its legislative proposal on the future CAP in October 2011. The Commission essentially proposed to maintain the key elements of the CAP as they exist with some changes in the nature, structure and distribution of the payments but without a return to market interventions. The changes in the payments can be summarized in three key words: convergence, greening and capping. Generally speaking, the reform proposals follow the argument that, in order to be justifiable, support needs to be more equally distributed ('convergence'), better linked to environmental objectives ('greening') and better targeted, and with a maximum ceiling ('capping'). In addition, there are some measures to 'enforce the position of farmers in the supply chain'.

From a discursive point of view, the EU Commissioner for Agriculture and Rural Development, Dacian Cioloș, used price volatility as a justification to maintain the CAP payments (as 'safety net') to protect farmers against price volatility: 'Farming is more and more exposed to high market volatility. (...) Therefore I will propose in the new CAP reform to maintain direct payments in order to give basic financial security to our farmers, without distorting international markets' (EC 2011b).

The proposal includes some measures that directly concern food price volatility, such as a new 'crisis reserve fund' of €3.5 billion and the introduction of a 'crisis management toolkit' which would include funds for crop and weather insurance, and an income stabilization option (which would allow a pay-out (up to 70 per cent of losses) from a mutual fund if income drops by 30 per cent). The official aim of these instruments is to respond rapidly to an extreme event of price volatility (EC 2011c). Bureau (2012) concludes that various conditionalities such as maximum quantities on intervention, limits on compensation and co-financing requirements, make these measures consistent with WTO disciplines and limited in practice.

In addition, the EC proposes to allocate a €4.5 billion envelope for research and innovation on food security, the bio-economy and sustainable agriculture but the impact is likely modest since a large share is a reallocation within the EU Budget (Bureau 2012).

These proposals are currently being reviewed by the European Parliament. Over the past decade, the CAP reform process was fundamentally transformed by the Treaty of Nice (2001) which introduced (qualified) majority voting in the decision-making on the CAP, while before these decisions were made by anonymity, effectively giving member states veto power (Pokrivcak, Crombez and Swinnen 2006). Since then, new treaty changes (the Lisbon Treaty, 2007) have given the European Parliament 'co-decision powers' on CAP and budgetary issues.<sup>12</sup> These co-decision powers are predicted to transfer power from the EC (which proposes policy reforms to be voted on by the Council of Ministers) (Crombez 2000) to the European Parliament (which so far was only consulted with very little effective influence) (Crombez, Knops and Swinnen 2012). As foreseen by these recent changes in decision-making rules which extend the co-decision procedure to agricultural policy, the proposals are now being amended by the European Parliament and the Council (where qualified majority)<sup>13</sup>

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<sup>12</sup> Following the entry into force of the Treaty of Lisbon, the co-decision procedure becomes the ordinary legislative procedure of the EU. This procedure gives the European Parliament, representing the Union's citizens, the power to adopt instruments jointly with the Council. It becomes co-legislator, on an equal footing with the Council. The procedure comprises one, two or three readings. It has the effect of increasing contacts between the Parliament and the Council, the co-legislators, and with the EC.

<sup>13</sup> The Treaty of Nice introduced a qualified majority system based on a new weighting of votes and a 'demographic verification' clause (so that the legitimacy of the Council's decisions can be safeguarded in terms

applies), who have to come to a final agreement on a joint version of the proposals. At this stage, considerable uncertainty remains on the way the European Parliament will handle this first co-decision experience, and how this will influence the content of the new CAP.

However, there are clear signals that the European Parliament prefers a more interventionist approach and favours more market regulation. This was evident from the European Parliament's reactions to the EC proposals on MiFID2, the EC communication on 'A Better Functioning Food Supply Chain in Europe' and regarding relationships between the CAP and competition policy rules. For example, with respect to the competition policy, the European Parliament seems to be in favour of allowing more far-reaching exceptions from the general competition rules than the EC proposes. These exceptions could potentially allow producer organizations to manage their supplies by fixing prices or setting quotas for a relatively large share of the agricultural production.

The difference in approach and discourse between the EC and European Parliament is also revealed in the debate on the end of sugar quotas. The EC has several times confirmed the ending of the sugar quota regime by 2015. However, key members of the European Parliament, e.g., Michel Dantin (French Member of the European Parliament and key figure of the Agricultural Committee), have argued that the extension of the sugar quota regime is crucial to stabilize markets at a time of increasing price volatility, a position backed by the major sugar producing countries. Interestingly, those against the extension of sugar quotas put forward the opposite argument, saying that, considering rising demand, maintaining sugar quotas would be completely counterproductive in the context of price volatility (Matthews 2012). Hence, both groups argue that their solution would improve the competitiveness of the sugar sector. Finally, most recent evidence, i.e., the compromise amendments adopted by the Agricultural Committee on CAP reform, indicates that the Parliament is indeed trying to reinforce public intervention mechanisms.<sup>14</sup>

However, despite this preliminary evidence suggesting that the Parliament is taking a more interventionist approach, its formal position on the CAP reform remains unclear and due to the difficult budget negotiations, voting has been postponed to January 2013. Moreover, it is not clear how influential these positions will be, as constraints may offset the newly acquired powers of the European Parliament (Crombez, Knops and Swinnen 2012). Finally, we do not know either what the ultimate outcome of the proposal will be or how much of the Parliament's positions will still be left after negotiating on a common text with the Council.

In conclusion, the food price spikes have influenced the debate on the future CAP reform and its outcome is still uncertain. So far the effect has been minimal, mostly affecting arguments, much less the main policies, as the current CAP proposals do not fundamentally alter the trend followed by the EC before 2008. The EC has used price volatility as a justification to move towards more market liberalization in the agricultural sector and reduce intervention mechanisms, and as a justification to maintain existing CAP payment (as 'safety net') to

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of their demographic representativeness). After 1 January 2007 and following enlargement of the Union, the qualified majority increased to 255 votes out of a total of 345, representing a majority of the member states. A member state may request verification that the qualified majority represents at least 62 per cent of the total population of the EU.

<sup>14</sup> The compromise amendments on CAP reform are available on the website of the European Parliament. However, the content of these amendments is indicative at this stage, as the Agricultural Committee has not yet formally adopted them.

protect farmers against price volatility. However, the European Parliament which now has a much larger policy influence in the policy field appears to favour a return to a more interventionist approach.

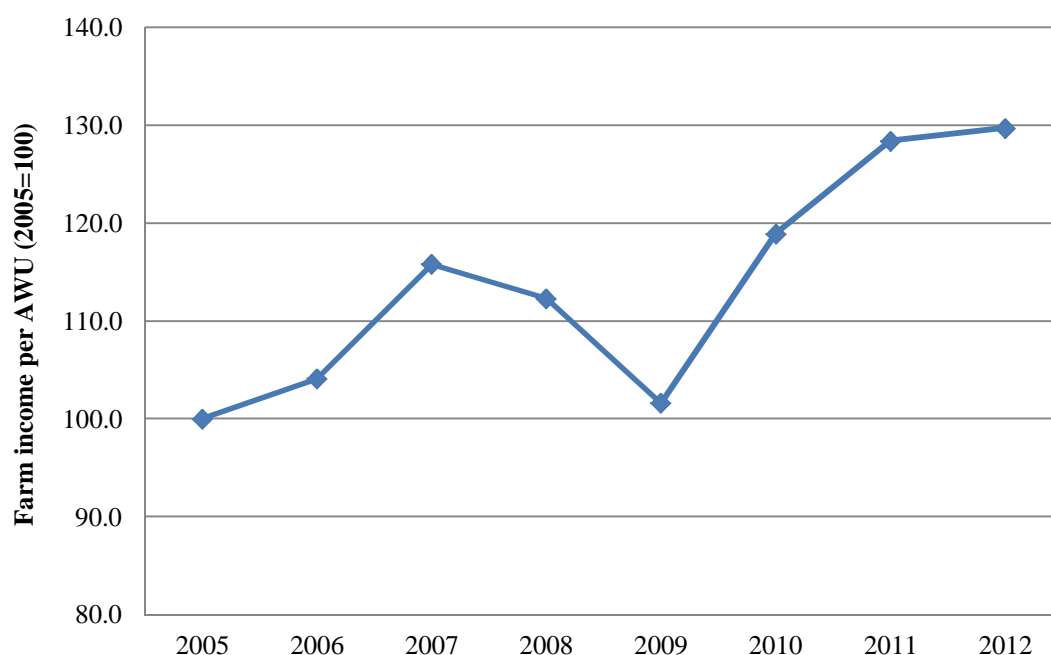
## 6 Political economy considerations

From a political economy perspective it is interesting to observe how EU policies have (not) responded to price volatility and the impact of the institutional organization of the decision-making. It is well-known that there are important political incentives for decision-makers to adjust policies to changing market conditions. The so-called anticyclical policy pattern is well-documented as interest groups turn to governments to assist them when market conditions turn against them (Swinnen and de Gorter 1993; Swinnen 1994; Olper 1998) and there is considerable empirical evidence on this in agri-food markets, both in Europe (e.g., Swinnen, Banerjee and de Gorter 2001; Swinnen 2009) and elsewhere (Anderson and Hayami 1986; Gardner 1987; Anderson, Rausser and Swinnen 2013). It is therefore logical to expect that policies in the EU, as elsewhere, may have been adjusted in response to the dramatic changes on the world food markets.

First, the lack of major interventions is consistent with the fact that incomes of EU farmers have increased on average over the 2005–11 period. Figure 11 shows how real farm incomes have been higher than their 2005 level since then. They have benefited from higher prices while receiving constant levels of payments from the EU.

However, in Section 2 we explained that there were major differences among farmers. In particular the dairy sector has seen an income decline (see also Figure 4). The introduction of the milk package to assist the dairy sector is a response to this.

Figure 11: Index of real farm income per annual working unit (2005=100)



Note: Farm incomes are in real terms, using the GDP deflator.

Source: EC-DG DG Agriculture and Rural Development.

Second, compensation for higher food prices to consumers has occurred mostly through increased social spending, not through food market regulations. Several factors play a role here: social spending is a more efficient and more targeted instrument than limiting the price of food, in particular in a large and heterogeneous EU27. This heterogeneity is also reflected in large variations in the share of food in consumer expenditures in the EU27, which should have triggered very different consumer reactions. Social spending is also more efficient because farm prices make up a small share in consumer food prices.

Third, most policy discussions on the CAP in the past years have focused on how to reform the farm payments, as increased pressure from taxpayers and demands from environmental groups challenge the need to continue the type of payments as they currently exist. Farm organizations have concentrated more on lobbying to secure the payments rather than on a major shift towards more regulation. They have been supported in these political pressures by landowners who are benefiting from spillover effects of the land-based payments (Ciaian, Kancs and Swinnen 2010).

Fourth, an interesting issue is the different position of the EC and the European Parliament, with the latter taking a more interventionist stance. It is difficult to draw strong conclusions on this since the policy is still debated and the issue has not been resolved yet. Still it appears that the differences can be related to (at least) two factors. The EC has played a leadership role in steering the CAP reforms in the 1990s and 2000s and, as a bureaucracy that had the right to table the policy proposals combined with strong leadership and a strong capacity in analysis and policy preparation, has been able to steer the reforms through the political process, carefully arranging a qualified majority of votes in the European Council, and largely ignoring the European Parliament (Swinnen 2008). Another factor is that the EC is very well aware of the international dimensions, in particular the WTO constraints and ongoing negotiations, since they have been intensely involved in these negotiations where the agricultural commissioner has collaborated with the trade commissioner. It appears that the EC wants to stay on course in moving the CAP towards more market orientation, continuing its 20-year strategy, and legacy.

In contrast, the European Parliament does not have such legacy as it is just now being involved in the actual decision-making. Moreover, the Agricultural Committee of the European Parliament, where the key positions are prepared, is filled with members who are linked to traditional agricultural interests, such as farming organizations, former ministers of agriculture, etc. This contrasts with the EC's approach in the past decade to broaden the support base for the CAP by reaching out to environmental groups, consumers, etc. Farm organizations have started to target the Agricultural Committee as their key area for lobbying activities. However, obviously, also here the WTO agreements do impose real constraints on policy reactions.

Finally, the limited response in important EU policies to price volatility has also to do with the fact that policies such as the CAP and any policy relying on EU budgetary expenditures is regulated within a multi-annual agreement, and can only be changed after long negotiations. Hence, policy reactions from 2007 to now have been constrained by the CAP and budget agreements covering the 2006–13 period.

## 7 Impact of EU policies on global food prices

As explained in the previous section, the impact of the current CAP on global prices is much smaller than in the past. This is also reflected in the availability of studies on this. There are several studies estimating the impact of EU policies on global food markets during the 1980s and 1990s (e.g., Van Meijl and van Tongeren 2002). However, there are hardly any studies explicitly measuring this impact in relation to recent EU policies.

Two recent studies measure the impact of policy interventions on global price volatility of major food commodities (rice, wheat, maize and oils) (Anderson and Nelgen 2012 and Anderson, Ivanic and Martin 2012). They show that EU policies had no impact on volatility in the wheat market, and very little in the rice and oils market. There is some impact in the maize market because the global maize price increases triggered some policy adjustments (reduction in import constraints) which contributed to higher world market prices. Hence, even here it is the reduction in import constraints which contributed to higher prices—which in the pre-2008 world would have been considered a positive development.

As we explained in this paper, there have not been major changes in EU agricultural and food policies when prices started to fluctuate strongly. Unlike other countries, the EU has neither introduced export constraints for food nor has (or had) its policies caused a major use of agricultural products for biofuels so far. The new proposal to change the EU biofuel targets may have a significant impact in the future (compared to the situation if this would not be the case).

Increased social policies and development aid may have had some indirect effects by compensating consumers in the EU and in developing countries for higher food prices and thus stimulating more consumption and thus higher prices, but there are no estimates on the impact of these spending increases.

The CAP of the 1970s and 1980s would have had a much stronger effect in countering high food prices than the current CAP as the surplus production and the large food stocks in the EU could have been used to export food (including cereals) and thus to reduce prices when they were rising, both as commercial exports and as food aid. However, as we documented above, these surpluses and the stocks had largely disappeared by the time food prices started rising in 2007. As a consequence, the policy reforms over the past two decades which have reduced the distortionary effects of EU policies on world food markets have also reduced its capacity to quickly increase food exports during price spikes.<sup>15</sup> This is illustrated by the fact that EU food aid to developing countries was at its lowest during the past five years, when food prices spiked (see Figure 8).

## 8 Conclusions

The period 2007–11 was characterized by high volatility in global food prices. World food prices have risen sharply in 2007–08 and in 2010–11. Producer prices in the EU followed a similar trend to global food prices, although the scale of the changes was much smaller than those of the FAO food price index. Average prices for producers increased by less than 20 per cent in real terms in the first price spike and even less during the second price spike.

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<sup>15</sup> Note that this should not be interpreted as an argument to reverse the CAP reforms.



There are important differences between agricultural commodities. For example, cereal prices increased much more than dairy prices. Moreover, the terms of trade for dairy farmers decreased consistently over the past five years with input feed prices increasing more than output prices.

Food prices for EU consumers have increased only slightly over the 2005–12 period, with real food prices 5 per cent higher in 2012 than in 2005. There was very little volatility in the consumer food prices. Raw materials (i.e., farm prices) are only a small share of the total costs for final food products. The impact of these price changes on consumer welfare is also mitigated because the average European consumer only spends 15 per cent of the household budget on food. Changes of food prices therefore had a limited impact on the average EU households' welfare, but with significant heterogeneity within the EU. Poorer families spend more on food and the share of the household budget spent on food varies from 10 per cent in the UK to more than 40 per cent in Romania. Consumer incomes were also negatively affected by increased energy and transport costs and increased unemployment and the economic financial crisis.

The EU and member states responded to the price volatility by a series of actions to mitigate short- and medium-term effects of the food price shock, to increase agricultural supply and to tackle the global effects of the price rises on the poor. In this paper we focused on policies to protect EU consumers, attempts to regulate 'speculation' on agricultural commodities, revisions of sustainability requirements for biofuels, international development and food aid and changes in the EU's Common Agricultural Policy.

Despite (or because of) the financial and economic crisis, social expenditures by EU member states increased by approximately 7 per cent between 2005 and 2010. However, we find no correlation between changes in food prices and the change in spending on social security benefits across member states.

Since 1987, the EU had a food aid programme to support the poor. Initially this programme used surplus stocks of food. As surpluses fell in the 1990s and 2000s, the EU had to purchase food from the market. In 2011, a debate between those wanting to cut the scheme's budget with lower government revenues and those who wanted to use it with rising food prices resulted in an agreement to maintain a maximum level of funding for the scheme of €500 million.

Arguments that increasing volumes of financial investments in commodity derivatives led to speculative behaviour in food markets causing increased price volatility triggered EC initiatives to regulate this. The financial sector argued against 'over-regulation' of financial markets while other groups insisted on further regulation to increase transparency and to discourage speculation. A final agreement on a directive has yet to be reached.

The EC proposed large changes in its biofuel strategy when it became clear that biofuel production was an important factor in increased food prices and when arguments and evidence appeared on uncertain environmental benefits because of indirect effects of land use. From encouraging biofuels through binding targets and blending mandates, the EC now seeks to minimize the use of food crop-based biofuels.

Somewhat paradoxically, the EU has not provided more (in-kind) food aid to poor countries. Food aid declined over the past two decades, and was never lower than in the recent years of high food prices, due to a shift from food aid towards development aid and because of falling

intervention food stocks due to CAP reforms. Instead, the EU established a €1 billion ‘food facility’ and supported G20 initiatives to reduce price volatility and to reinforce transparency on agricultural markets.

The relationship between food price volatility and the EU’s CAP is arguably the most interesting from a (global) food policy perspective. For decades the CAP depressed global food prices as the EU imposed high tariffs on imports and exported its subsidized food surplus production. A series of reforms led to a policy system that maintains large government support to farmers, while creating less distortions on international markets, as reflected in various indicators.

Global price volatility induced a series of minor policy adjustments that could be taken within the existing policy framework and discussions on changes in the longer-term CAP framework itself. So far the EU has reaffirmed its engagement towards an open trade policy and stayed on course with its reform proposals in specific sectors, despite a change in argumentation, i.e., by linking the motivation to price volatility.

There is uncertainty whether this course will be continued in the future, as the European Parliament, which now enjoys full legislative influence in the CAP reform process, seems to be leaning towards a more interventionist approach. Discussions on the future of the CAP (for the 2013–20 period) have been on-going since 2009, but the decision-making process is slow because of the institutional framework and because of the simultaneous negotiations on the EU budget. Decisions are likely to be taken in 2013.

From a political economy perspective it is well-known that there are important political incentives for decision-makers to adjust policies to changing market conditions: interest groups turn to governments to assist them when market conditions turn against them. The lack of major interventions is consistent with the fact that incomes of EU farmers have increased on average over the 2005–11 period, except for sectors such as the dairy sector, where the EU has responded by supporting this sector through new initiatives. Farm organizations have concentrated more on lobbying to secure the existing CAP payments rather than on a major shift towards more regulation, as increased pressure from taxpayers and demands from environmental groups challenge the need to continue the type of payments as they currently exist. Farmers have been supported in these political pressures by landowners.

Compensation for consumers has occurred mostly through increased social spending, not through food market regulations because social spending is a more efficient and more targeted instrument than limiting the price of food, in particular in a large and heterogeneous EU27 and because farm prices make up a small share in consumer food prices.

The European Parliament has taken a more interventionist stance than the EC which wants to continue its 20-year strategy in moving the CAP towards more market orientation and broadening the support base for the CAP by reaching out to environmental groups, consumers, etc. In contrast, the European Parliament does not have such legacy as it is just now being involved in the actual decision-making. The Agricultural Committee of the European Parliament is controlled by members with links to more traditional agricultural interests.

The limited response in important EU policies to price volatility has also to do with WTO agreements on agricultural policies which do impose real constraints on policy reactions and

the fact that policies such as the CAP (and any policy relying on EU budgetary expenditures) are regulated within a multi-annual agreement. Policy reactions from 2007 to now have been constrained by the CAP and budget agreements covering the 2006–13 period.

Finally, in terms of impact of EU policies on global food prices, the impact of the current CAP on global prices is much smaller than in the past. Recent studies show that EU policies had no or very little impact on volatility in key food markets. Increased social policies and development aid may have had some indirect effects by compensating consumers in the EU and in developing countries for higher food prices and thus stimulating more consumption and thus higher prices, but there are no estimates on the impact of these spending increases.

Paradoxically, the CAP of the 1970s and 1980s would have had a much stronger effect in countering high food prices than the current CAP. Policy reforms over the past which have reduced the distortionary effects on world food markets have also reduced the EU's capacity to quickly increase food exports, either as commercial exports or as food aid.

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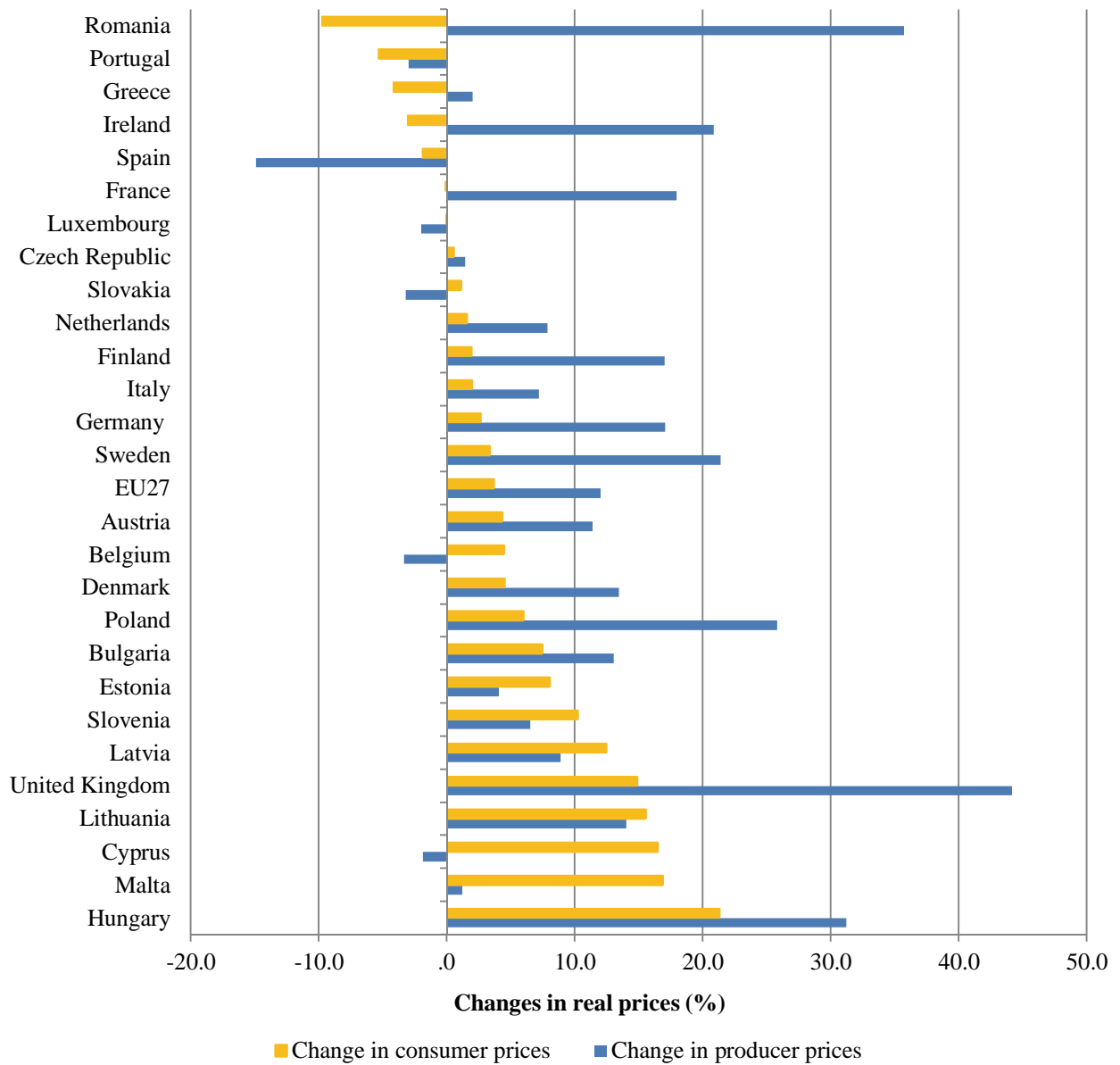
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## Appendix

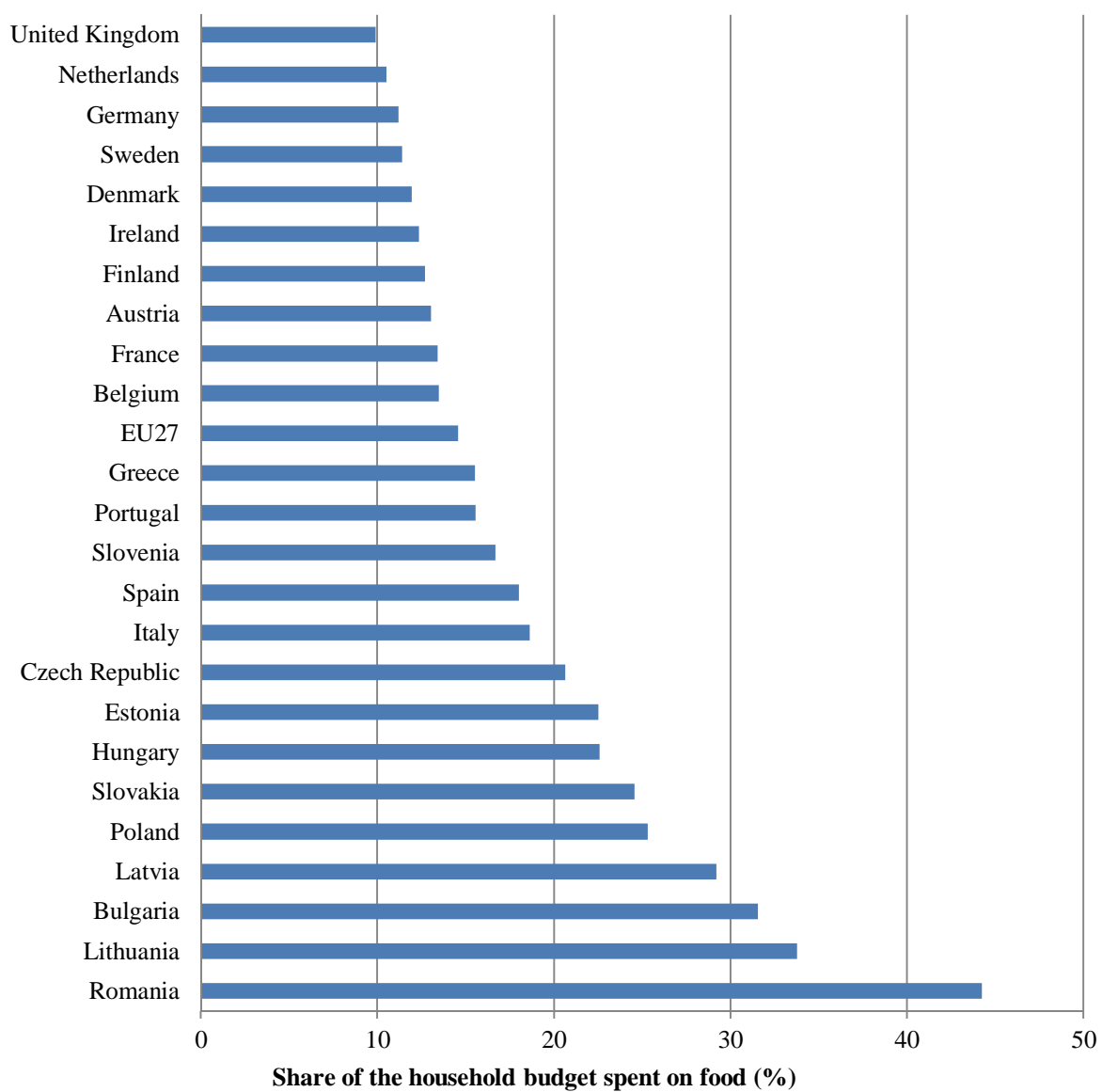
Appendix Figure A1: Consumer food price and producer price inflation (2005–11)



Note: All prices are real prices. EU Price Indices have been deflated using the harmonized index of consumer prices for the EU27.

Source: EUROSTAT.

Appendix Figure A2: Share of the household budget spent on food (%)

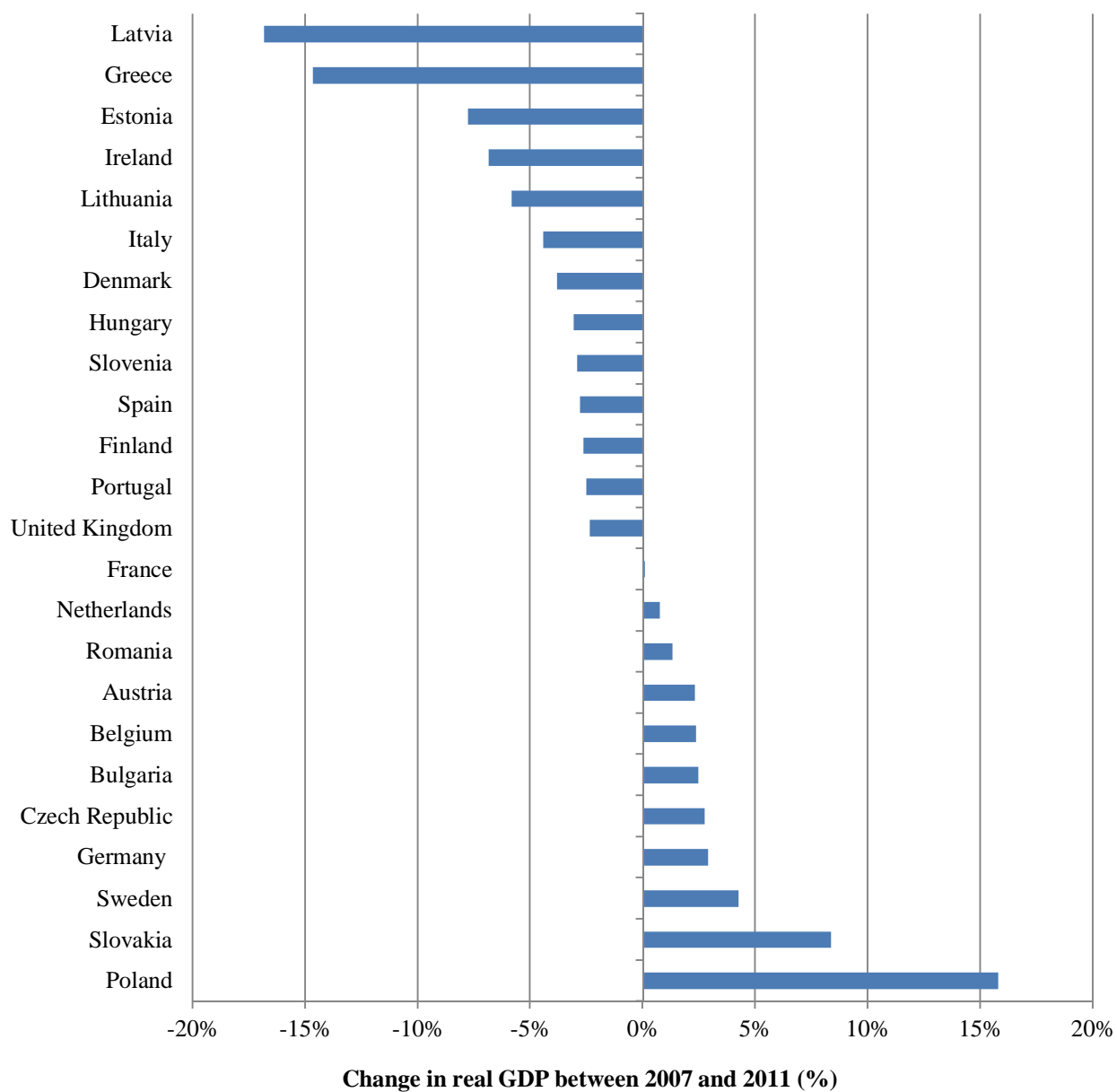


Source: EUROSTAT.



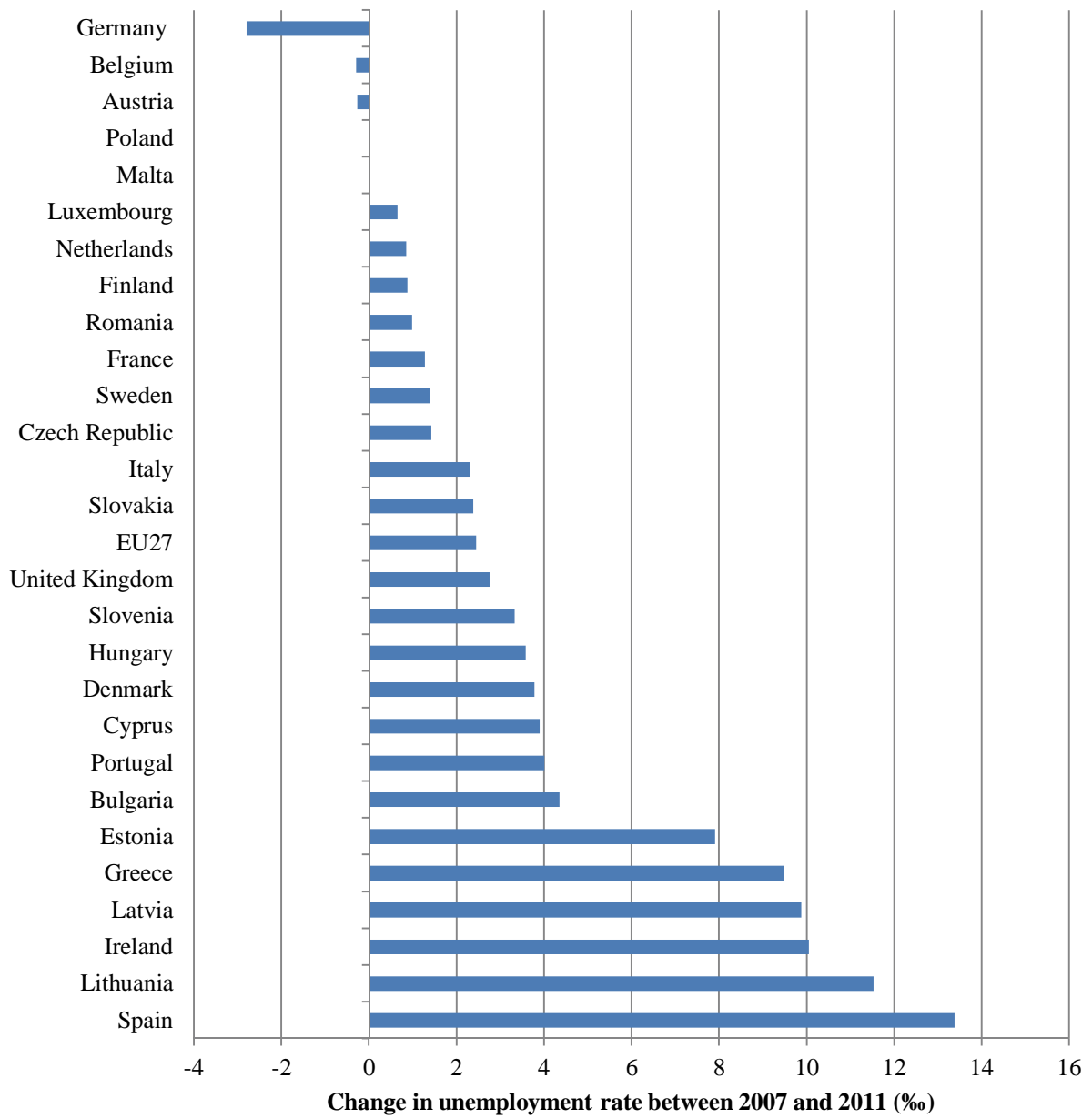
Appendix Figure A3: Evolution of real GDP and unemployment rate between 2007 and 2011 by member states

Panel A: Evolution of real GDP in the EU27



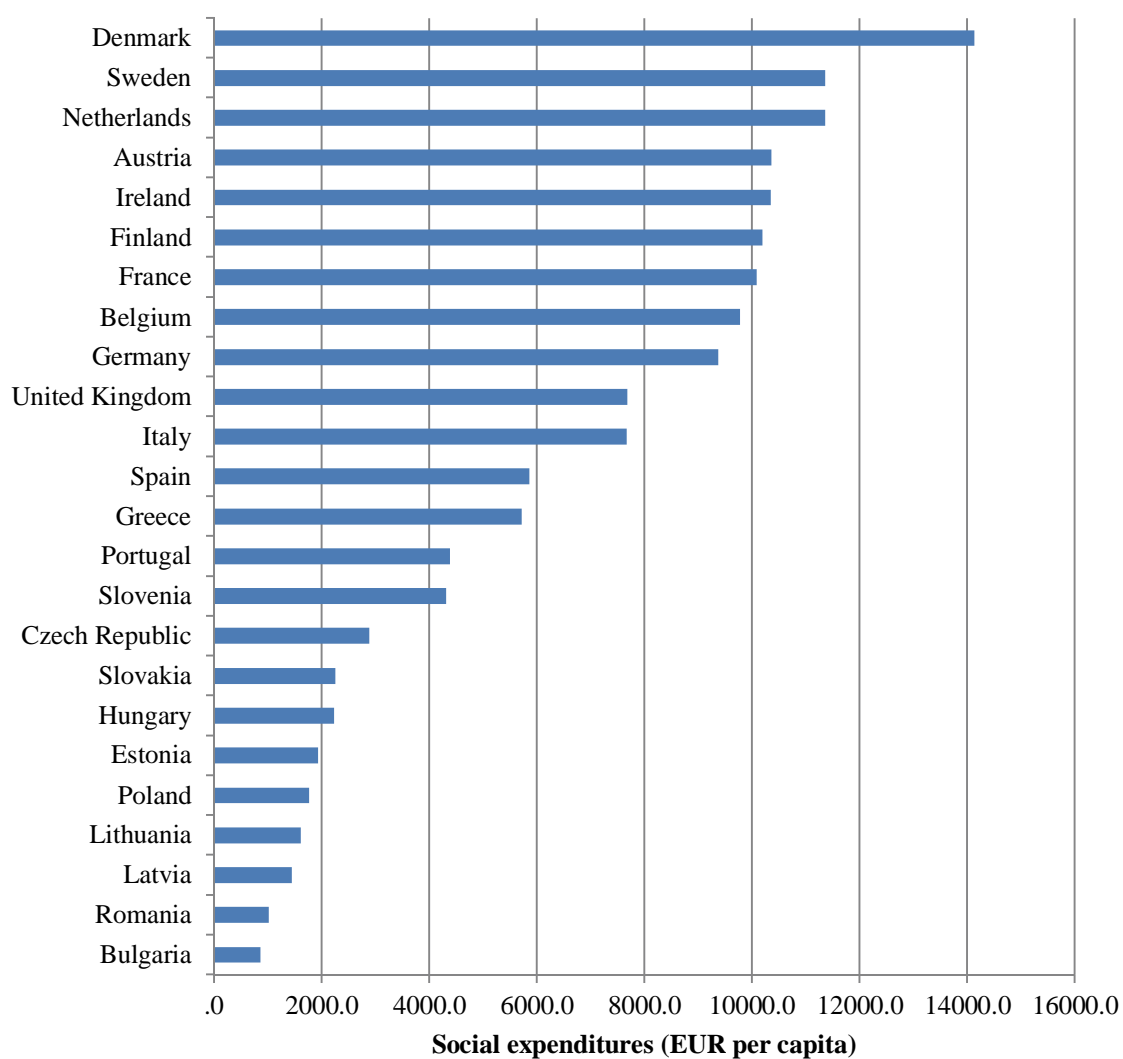
Source: EUROSTAT.

Panel B: Evolution of unemployment rate in the EU27



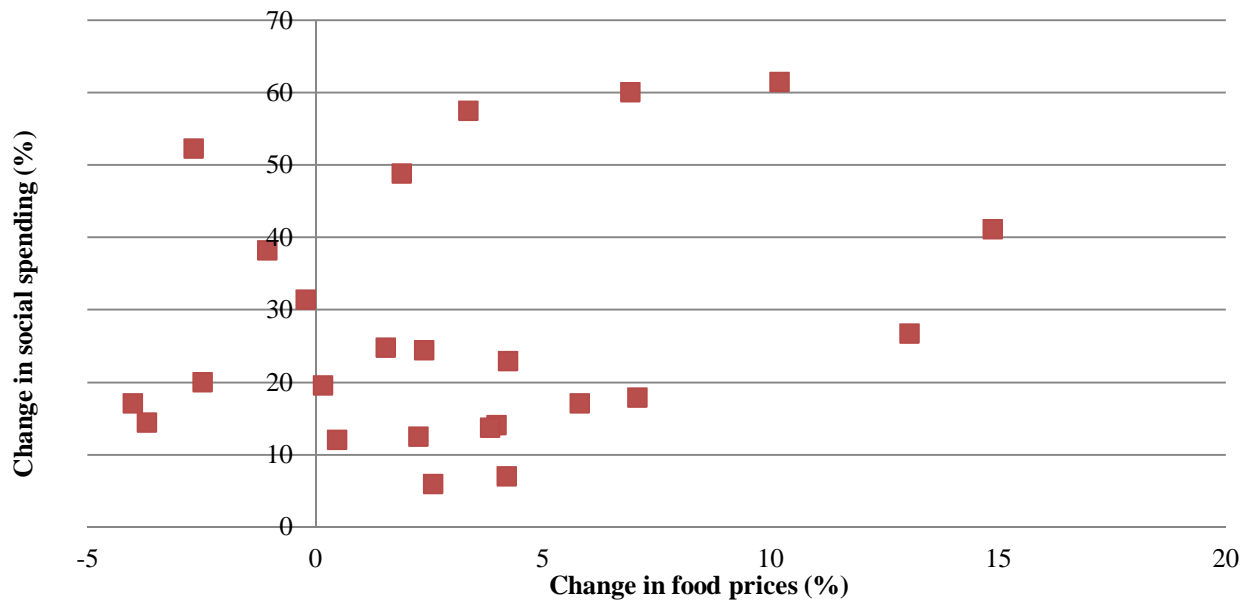
Source: EUROSTAT.

Appendix Figure A4: Social expenditures in 2010 by member state (euro per capita)



Source: EUROSTAT.

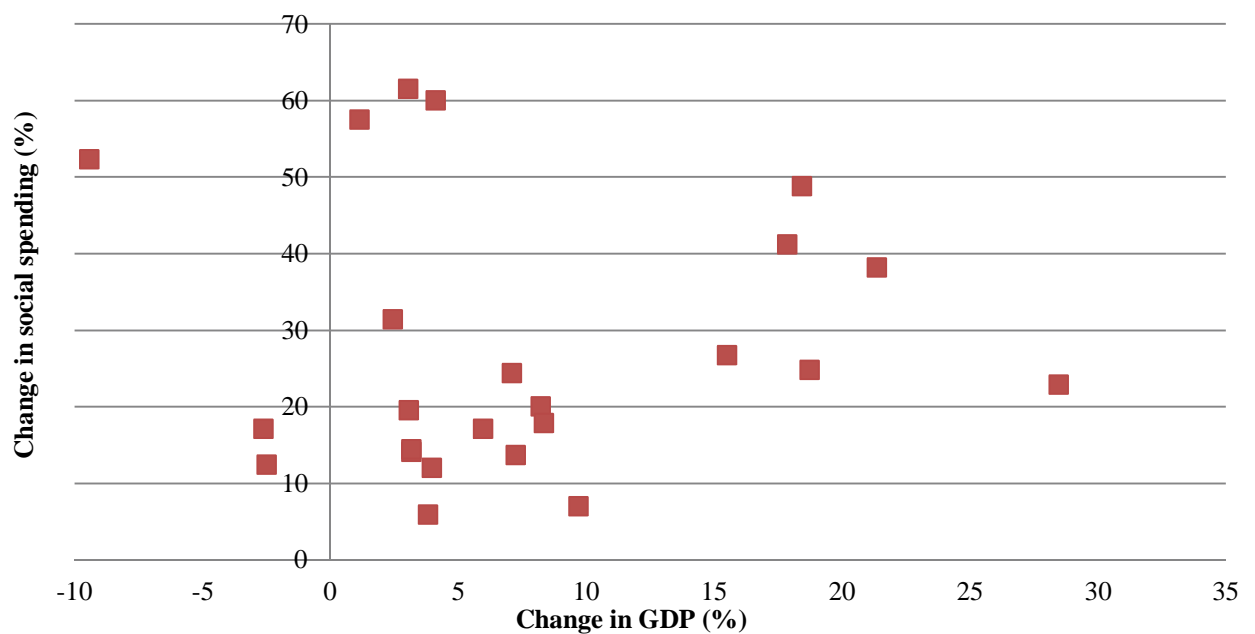
Appendix Figure A5: Correlation between changes in food prices and changes in expenditures on social policy in the different EU member states (2005–10)



Note: All changes are in real terms, using the harmonized index of consumer prices.

Source: EUROSTAT.

Appendix Figure A6: Correlation between changes in GDP and changes in expenditures on social policy in the different EU member states (2005–10)



Note: All changes are in real terms, using the Harmonized index of consumer prices.

Source: EUROSTAT.