EUROPEAN PARLIAMENT

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EU MEMBER STATES IN AGRI-FOOD WORLD MARKETS: CURRENT COMPETITIVE POSITION AND PERSPECTIVES

STUDY

EN

2014

This document was requested by the European Parliament's Committee on Agriculture and Rural Development.

AUTHORS[1][2]

CIHEAM-IAMM, Montpellier, Michel Petit
Czech University of Life Sciences, Prague, Zuzana Krístková
Institute for Food and Resource Economics, University of Bonn, Thomas Heckelei
Pellervo Economic Research PTT, Helsinki, Kyösti Ilmari Arovuori, Perttu Pyykkönen
Università degli Studi di Napoli - 'Federico II', Fabian Capitanio
Universitat Politècnica de València, José-María García Álvarez-Coque, Raúl Compés-López, Victor Martínez-Gómez

ADMINISTRATOR RESPONSIBLE

Albert Massot
Policy Department B: Structural and Cohesion Policies
European Parliament
B-1047 Brussels
E-mail: poldep-cohesion@europarl.europa.eu

EDITORIAL ASSISTANCE

Catherine Morvan

LINGUISTIC VERSIONS

Original: EN

ABOUT THE PUBLISHER

To contact the Policy Department or to subscribe to its monthly newsletter please write to: poldep-cohesion@europarl.europa.eu

Manuscript completed in April 2014.

This document is available on the Internet at:
http://www.europarl.europa.eu/studies

[1] Contact: Jose-María García-Álvarez-Coque, Email: jmgarcia@upvnet.upv.es, address: Economics and Social Science Department, Universitat Politècnica de València ETSIAMN Building 3B, Camino de Vera s/n 46022. Valencia, Spain.

[2] The authors are grateful to Ms Emma Santarremigia Casañ and Ms Lorena Tudela Marco (Universitat Politècnica de València) for their collaboration, to Ms Kelly Szorady for verifying the manuscript and to Dr Debra Westall (UPV) for carefully editing the final document.

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AGRICULTURE AND RURAL DEVELOPMENT

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STUDY

Abstract

This report assesses the competitive position of the European Union (EU) agri-food sector in the world market by examining the influence and scope of policies affecting competitiveness. Considering recent Common Agricultural Policy (CAP) changes, the method combines a value-chain approach with trade performance indicators, surveys of stakeholders, case studies and policy assessment. While the EU has recently evolved from being a net importer to a net exporter of agri-food products, the report explores the existing weaknesses in the EU's competitive position in agri-food international markets, focusing on internal and external policy actions aimed at creating value.

IP/B/AGRI/IC/2013_128 APRIL 2014

PE 514.006 EN

CONTENTS

LIST OF ABBREVIATIONS

ACP	African, Caribbean and Pacific States
AMIS	Agricultural Market Information System
APHIS	USDA's Animal and Plant Health and Inspection Service
ASEAN	Association of Southeast Asian Nations
BRIC	Brazil, Russia, India, China
BSE	Bovine Spongiform Encephalopathy
CAP	Common Agricultural Policy
CIHEAM	Centre International de Hautes Études Agronomiques Méditerranéennes/International Centre for Advanced Mediterranean Agronomic Studies
CMO	Common Market Organisation
COGECA	General Confederation of Agricultural Cooperatives in the European Union
COPA	Committee of Professional Agricultural Organisations
CTS	Consolidated and Tariff Schedule Database
EAFRD	European Agricultural Fund for Rural Development
EC	European Commission
EFA	Ecological Focus Area
EIP	European Innovation Partnership
EMA	European Model of Agriculture
EMS	Export Market Share
EMU	Economic and Monetary Union
EP	European Parliament
ERA-NET	Network that coordinates national and regional research programmes under the European Research Area
EU	European Union
F&V	Fruits and vegetables
FACCE-JPI	Joint Research Programming Initiative on Agriculture, Food Security and Climate Change

FAO	Food and Agriculture Organization of the United Nations
FAPRI	Food and Agricultural Policy Research Institute
FARM	Fondation pour l'Agriculture et la Ruralité dans le Monde/Foundation for World Agriculture and Rurality
FDI	Foreign Direct Investment
FTA	Free Trade Agreement
GCI	Global Competitiveness Index
GDP	Gross Domestic Product
GI	Geographical Indications
GMO	Genetically Modified Organisms
GPTAD	Global Preferential Trade Agreements Database
GTA	Global Trade Alert
HS	Harmonised System
IATRC	International Agricultural Trade Research Council
IDB	Integrated Database
IFCN	International Farm Comparison Network
IMTSS	International Merchandise Trade Statistics Section
IOC	International Olive Council
IOF	Investor-owned firms
IPC	International Food and Agricultural Trade Policy Council
IPR	Import Penetration Rate
ITC	International Trade Centre
LAG	Local Action Group
MADB	Market Access Database
MP	Member of Parliament
NAPC	National Agricultural Policy Center
NEI	Net Export Index
NSP	National Support Programmes
NTM	Non-Tariff Measures
OECD	Organisation for Economic Cooperation and Development
OIV	International Organisation of Vine and Wine

PDO	Protected Designation of Origin
PGI	Protected Geographical Indication
PO	Producer organisations
PTA	Preferential Trade Agreement
R&D	Research and Development
R&D&I	Research, Development and Innovation
RASFF	Rapid Alert System for Food and Feed
SFC	Support for Farmers' Cooperatives
SMC	Southern Mediterranean Countries
SME	Small and Medium-sized Enterprises
SPS	Sanitary and Phytosanitary Measures
SUSTAINMED	Sustainable agro-food systems and rural development in Mediterranean Partner Countries
TAB	Trade Analysis Branch
TAO	Tariff Analysis Online
TFP	Total Factor Productivity
TRAINS	Trade Analysis and Information System
TRQ	Tariff-Rate Quota
TSG	Traditional Speciality Guaranteed
TTIP	Transatlantic Trade and Investment Partnership
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNSD	United Nations Statistics Division
UPV	Universitat Politècnica de València/Polytechnic University of Valencia
US/USA	United States of America
USDA	United States Department of Agriculture
WB	World Bank
WHO	World Health Organization
WITS	World Integrated Trade Solution
WTO	World Trade Organization

LIST OF BOXES

LIST OF FIGURES

LIST OF TABLES

EXECUTIVE SUMMARY

Background

The European Union **(EU)** has been a leading world economic actor and the world's largest trading bloc of manufactured goods and services since 2007. In a context of economic recession, the EU has retained its capacity to negotiate and implement trade agreements. **The agri-food sector is one of the largest and most important economic activities in Europe,** and is vital to maintain employment, preserve rural public goods, supply quality food and facilitate the integration of small and medium-sized enterprises **(SMEs)** into the international food chain. **The EU has recently evolved from a net importer of agri-food products to a net exporter**, though the question emerges as to whether this process has a sound basis or if there are still **elements of fragility in its competitive position in international agri-food markets.** This report will assess the competitive position of the EU agri-food sector in the world market and examine the scope and influence of policies affecting competitiveness.

Competitiveness refers to the **ability of firms or nations to offer quality products at competitive prices and to provide adequate returns on the resources employed**. A great number of studies have made use of quantitative measures of competitiveness. Recently, however, new approaches have treated the subject by analysing the competitiveness of whole food chains, considering all types of drivers as well as strategies of firms, including SMEs and large corporations. Such approaches go beyond cost competitiveness as they consider innovation and differentiation strategies, based on an individual or collective approach, and rely on creating value.

In line with this general framework, this report combines four sets of information to investigate competitiveness: (1) **standard indicators** of trade performance; (2) a **prospective online survey** targeting a large group of stakeholders and complemented with in-depth interviews; (3) detailed case studies following a **food chain approach**; and (4) **other data** gathered from existing research and background documents from EU sources (e.g. European Parliament and European Commission).

One of the EU agri-food sector's strengths in the world market is its **orientation towards highly valued final products**, which represent two thirds of its total agricultural exports. In addition, **EU agri-food trade has recently moved towards a positive balance** and export specialisation in final products. However, while the EU continues to be the world's largest food and drink exporter, **the EU market share of global exports of food and drink products has been slowly declining over the last few years** (from 20.1 % in 2001 to 17.8 % in 2010). This has unveiled the absence of a single market, an imperfect functioning of the food supply chain, and **productivity gaps largely related to a fragmented structure, small and medium-sized enterprises' holdings being dominant** in both agricultural and food manufacturing sectors.

Trade performance

Three indicators were used to assess the trade competitiveness of the EU and its Member States. The export market share **(EMS)** relates the share of the exports originating in a given country to the world exports of the same good. The net export index **(NEI)**

compares exports to imports of the same good, in order to identify sectoral trade surpluses or deficits. The import penetration rate **(IPR)** assesses to what extent domestic consumption relies on foreign supplies. These indicators were calculated for the EU as a whole, as well as for each individual Member State from 2002 to 2012. Agri-food trade data have been gathered from official sources such as Eurostat and World Integrated Trade Solution **(WITS)**, considering only extra-EU trade. The information has been processed according to the harmonised system **(HS)** chapters, i.e. at two-digit level. Additional information is provided at four-digit level when the product deserves to be looked at in more detail, or to stress a distinctive evolution.

The **EU has moved from being a net importer of agri-food products to a net exporter** over the period analysed, as the value of exports matched the value of imports in 2010, and has exceeded it ever since. However, **the export performance of the EU-28 has worsened** over the same period, as an **overall loss of EMS** is clearly taking place while global markets grow in value. This loss of competitiveness has also been observed for the majority of the agri-food chapters.

The performance of the different Member States is quite diverse. In general, countries that have increased their EMS are among those with lower average values. This is the case of the three Baltic States, Luxembourg, Poland, Portugal and Romania. The greatest declines in EMS have taken place in Denmark, Hungary and Slovenia. In terms of NEI, the trend noticeably indicates that most of the biggest improvements have taken place in the Member States with smaller populations. Among the countries with a general agri-food deficit, the positions of Denmark and the Netherlands are clearly weaker.

Regarding the different agri-food trade chapters, **meat** is the only one for which the **EU-28 has increased its EMS**. In this chapter, a **very good competitive position** and evolution has been registered for **pork**, whereas the traditional dominant position of Denmark has declined. In **milk and dairy** produce, the **competitiveness of the EU-28 in world markets has been deteriorating** over time. In this chapter, the position of two world-leading products from the EU-28 – cheese and curd, and concentrated milk - has eroded over time, while the EU-28 has reinforced its net exporter pattern.

The competitiveness of EU-28 edible **vegetables** is **below average, but the evolution has shown a relatively good performance**, with minor losses of EMS. There has been a remarkable weight of imports, which accounts for over 8 % of domestic consumption, and the IPR has grown over time; in any case, there is a clear trade deficit. The competitiveness of **fruits** has been quite similar, but with a greater overall dependence on imports.

In **cereals**, the EU-28 has also **maintained its competitiveness**, judging from the evolution of its EMS. The value of exports has been balanced by the value of imports, the latter usually representing about 7 % of apparent consumption. Wheat is the fourth product in terms of value of EU-28 exports, with an average of EUR 2.5 billion annually and 4.3 % of the value of EU-28 agri-food exports. The EU-28 has maintained its competitiveness in this cereal, but with noteworthy peaks over time; moreover, its net export position is positive. In **milling industry products**, the EU-28's **international competitiveness has declined**, despite a very positive starting point. The EU-28 is mainly a net exporter of these products, with an average NEI close to 0.9.

In terms of **oilseeds**, the EU-28 is **clearly not competitive**. Overall, the EU-28 EMS has declined over time, reaching close to 4 % in 2012. The NEI is stable in negative high

values, while the IPR represents about one third of domestic consumption, with significant variations among countries. Nevertheless, there are differences in the competitive situation among oilseeds. In soya beans, the dependence on imports is enormous (an average IPR of 93 % in this period), and the EMS is irrelevant, while in sunflower the EMS is close to one quarter of world exports and the dependence on imports is minor. The **loss of competitiveness in fats and oils** is illustrated by declining EMS and NEI. In this chapter, the EU-28 has a clear dominant position in olive oil, although its competitiveness has eroded.

The competitiveness of the EU-28 has also deteriorated over time in sugar and sugar confectionery. The EMS has dropped substantially, from an average 2002-2003 value of 19.8 % to an average 2011-2012 value of 7.7 %. In addition, the EU-28 has shifted slightly from net exporter to net importer. In sugar, as such, the EU-28 is rapidly losing competitiveness with the plummeting positions of the three main exporters (France, Germany and Belgium). In **cereal preparations, the international competitiveness of the EU-28 has declined slightly,** but the EU-28 remains a strong net exporter. Similarly, **EU-28 competitiveness has experienced a moderate loss for vegetable preparations**, as the modest reduction in the EMS shows.

Undoubtedly, **beverages, spirits and vinegar** make up the **leading exporter chapter** in the EU-28 agri-food sector, both in terms of average EMS and contribution to the value of exports. Furthermore, the EU-28 is an absolute net exporter. However, this **dynamic view depicts a less optimistic situation**, as the EMS has declined slightly over time. Turning to the most relevant products within this chapter, of all EU-28 agri-food exports liqueurs rank first as regards average value; over 10 % of EU-28 exports and EUR 6.5 billion annually. The EMS for the EU-28 is 65.3 %, with most of this corresponding to the United Kingdom (28.6 %) and France (16.7 %), and the EMS of both gradually declining. Wine ranks second in average exports, totalling EUR 5.9 billion annually, or 9.8 % of the EU-28 agri-food exports. For wine, the EU-28 has managed to maintain its EMS, and the three leading countries are France, Italy and Spain. Spain's share seems to be growing gradually, unlike that of France and Italy. Another relevant product within this chapter is beer, the EU-28 being the world's top exporter. The average EMS is 44.4 %, and it has declined each year since 2002. The reason is that the Netherlands have sharply reduced their contribution. This decline has not been compensated by growth in other countries like Germany, Belgium or Portugal.

Prospective survey

An online survey was launched to interview experts from different sectors of the food supply chain. The sample of stakeholders included **158 respondents** that represent entry points to the analysis of food chains, from 19 Member States and various professional backgrounds. The two most highly represented groups were research (34 %) and farming organisations (28 %). The presence of public officers (18 %) and processors (15 %) was also significant, and some inter-professional organisations (5 %), retailers (4 %) and wholesalers (4 %) were included as well.

According to the survey results, the **experts consulted believe in sustainability, quality and the growth potential of the EU agri-food economy**, with 66 % considering it likely or very likely that the EU agri-food sector will become an engine for economic growth by 2020 (18 % believed that this is a very likely scenario). More pessimistic views were expressed regarding the ability of the EU agri-food sector to increase employment opportunities in rural areas and **the likelihood that fairer**

practices will spread within the European food chain. Around **69 % suggested that the trade balance will continue to be negative in significant sectors**, and less than one half (46 %) indicated that EU agri-food products will rely more on foreign demand, which means proper attention should be paid to the internal market.

Experts were asked whether the competitiveness of the EU sectors is expected to improve in the coming years. It is not surprising that the present situation is affecting the perception of the future, meaning that sectors that have been most affected by the crisis in the last few years could be seen as sensitive to potential improvements. This may be the case of the milk and dairy sector, which was considered as having good prospects by almost 49 % of the experts consulted. Export-oriented Mediterranean sectors were also expected to do well by 37 % of the sample for fruits and vegetables, 36 % for wine and 25 % for olive oil. Grain is another sector that was thought to have potential by 30 % of the experts consulted.

Competitiveness factors

Through a comprehensive approach to agri-food competitiveness, this report focuses on factors affecting the ability of EU-28 agri-food products to create value in international markets: a) agricultural productivity, b) coordination in the supply chain, c) innovation, d) domestic agricultural and rural policies, and e) trade policies. In addition to these factors, the notion of sustainability cannot be forgotten, including the dimensions of environmental, social and economic sustainability which tend to overlap in EU food chains.

A **labour productivity gap can be observed in the EU** with respect to international competitors. In the agricultural sector, this is the result of weak farm structures, with many rural areas at a relative disadvantage. It can also be argued that **the scope for crop yield increase is limited in the EU, as yields are already reaching the production possibility frontier**.

Nevertheless, the yields themselves are not enough to assess productivity, as they only refer to the productivity of an individual production factor. A better measure is the total factor productivity **(TFP)** index, as it captures a large set of productivity improvements, including those that save land and other agricultural resources. In the last two decades, the TFP of countries in **north-west and southern Europe has risen remarkably and now exceeds that of** the United States **(US)**. On the other hand, **productivity has increased very slowly in eastern European countries.**

Coordination in the supply chain is considered **an efficient way to cope with high transaction costs** and may contribute to **higher income stability**. Increasing the producers' market power is one of the most controversial elements when discussing how the food chain could function better. In this respect, the key factors that determine the success of producer organisations **(POs)** and cooperatives in food chains relate to (a) their position in the food supply chain, (b) internal governance, and (c) the institutional environment.

Related to the **position in the food supply chain**, empirical studies in the EU found that a large market share for cooperatives in one specific sector or country can help to increase the price level and reduce price volatility. In some sectors, cooperatives account for a large share of the farm product market, but not in others, with substantial differences between EU sectors and countries. Furthermore, in most sectors, **the**

bargaining power of cooperatives remains limited. In order to be competitive, cooperatives must also follow ongoing consolidation processes in all sectors of the food chain, including international mergers among cooperatives.

Regarding the **internal governance and organisation** of POs, there is room for **strengthening management and supervision capacities.** Elements proven to have a positive effect on cooperative performance are proportional voting rights, professional management and supervision by outsiders. Strengthening the capacities of supervisory boards also seems to be relevant. Considering the geographic organisation and scope of cooperatives, most prefer to internationalise by acquiring or setting up foreign investor-owned firms **(IOFs)**, and not by merging with other cooperatives or inviting foreign farmers to become members, thus avoiding dilution of ownership.

Taking into account the **institutional context** surrounding POs, one of the most challenging issues is the **possible conflict between competition rules and POs**. There is empirical evidence that a number of cooperatives and POs are having to deal with the legal uncertainty stemming from competition laws, and report high legal costs. In order to improve farmers' negotiating positions in the food chain, the **recent Common Agricultural Policy (CAP) reforms open up the possibility for farmers to collectively negotiate contracts** for the supply of olive oil, beef, cereals and certain other arable crops under specific conditions and safeguards. This would allow the extension of the milk package philosophy to other sectors.

With respect to innovation and research, certain characteristics **distinguish agricultural research from research in other sectors**, namely the long gestation payoff period, the high social returns, the prominent role of public institutions, and the slow speed of technological transfer from science to farming practice. Measures in the recent EU policy focus increasingly on the innovation potential of the agri-food sector. The main example is the European Innovation Partnership **(EIP)** in agriculture, a pilot initiative that highlights the importance of agriculture in the search for smart and sustainable development. Evidence shows that farmers have the most potential to improve added value to the supply chain if they are more oriented towards innovation. Therefore, the EIP might succeed in increasing farmers' competitiveness, as it should facilitate a faster exchange of knowledge from research to farming and provide feedback on practical needs to the scientific sector via operational groups. However, certain weaknesses are still evident in the new agricultural innovation policy of the EU. Ambiguities have been detected in research objectives and priorities, as well as the organisational fragmentation of policy responsibility.

Regarding the relationship between the CAP and competitiveness, **Pillar I has general, relatively non-targeted and indirect effects,** while **Pillar II has great potential to promote sustainability, competitiveness and innovation**.

Considering Pillar I, **the impact of direct payments on productivity, as a consequence of competitiveness, is ambiguous** and a lively debate persists. On the one hand, direct payments contribute significantly to farmers' income and thus enhance the economic viability of existing farms; this is a positive short-term impact on competitiveness. On the other hand, this effect slows down the process of farm concentration, most often associated with lower production costs, and is thus a negative long-term impact of direct payments on competitiveness. Greening seems to be detrimental to competitiveness as well. In conclusion, the **likely reduction in direct payments received for arable crops** and the growing environmental conditions

attached to these payments **will reduce the competitiveness of European crops in the short run.**

The reform of **Pillar II** must be seen as a **positive step towards adapting agricultural policy to the competitiveness needs of European agri-food chains**. For example, rural development programmes will include a toolbox of measures that are designed to help Member States address the differing competitiveness needs in accordance with the situation and the specific needs of their agricultural and forestry sectors. On the down side, the budget reduction for Pillar II has given rise to questions about the scope and effectiveness of the measures taken.

As for trade policies, many **countries look at bilateral trade negotiations as a more practical road-map for integrating into international markets**. The EU is actively engaged in a series of bilateral negotiations, the most visual example perhaps being the **Transatlantic Trade and Investment Partnership (TTIP) between the US and the EU**. In this respect, the stakeholders in the online survey considered it crucial to enhance the promotion of EU standards at international level, and to ensure a level playing field with third countries in order to enhance competitiveness. As a matter of fact, some researchers stated that there is a risk that the TTIP will shift standards towards the **'lowest common denominator'**, or will lead to a deregulatory approach being adopted.

Finally, the challenge is now to **consider tools promoting sustainability as opportunities rather than threats to competitiveness**. In this respect, there are substantial differences depending on the sectors affected and on the scope and type of organisations. Experts from EU-wide organisations seemed to support more organic farming and animal welfare regulations. Experts with backgrounds in Mediterranean crops also seemed keener to select organic farming measures and agro-environmental policies.

Case studies

This report includes six case studies to reflect the different competitiveness factors and the competitive position of trade, aimed at identifying the main drivers of future competitiveness in these sectors. In brief, the results were as follows:

For **cereals**, the key future elements are represented by the **rising demand for cereals in the future**, linked to other biofuels and dietary changes, **price volatility** and the **sustainability of intensive grain farming in western Europe**.

For **dairy products**, the **increasing demand** in the world market and a **strong intra-EU market** support the possibility of maintaining dairy production in Europe. However, coupled support, some kind of **safety net** and the strengthening of the **market power of producers** are still needed. **Environmental issues** also deserve more attention.

For **beef**, **liberalisation** will lead to open competition with external countries – mainly those in the Mercosur – which could seriously threaten the competitiveness of domestic beef. **Abolishing milk quotas** is expected to motivate beef producers to switch to milk production. It is therefore important to better **target direct payments** to beef producers, given the low profitability of EU production.

In **fruits and vegetables**, strengthening producer **market power** seems crucial. In this respect, **operational programmes** are essential to favour growth processes in the

sector. Improved mechanisms to **prevent crises** will surely benefit long-term competitiveness.

In the case of **olive oil**, current levels of competitiveness could be maintained if future drivers continue to promote the **healthy properties** of the product and to strengthen the incipient **demand in non-traditional countries**. In addition to this, efforts to improve **quality in production** and disseminating the **quality labels** are subsequent steps. Furthermore, an effort to internationally **harmonise standards** and controls could prevent unfair trading practices from occurring.

For **wine**, competition between **'old' and 'new' worlds** is the first driver of the international market. Additionally, **quality indicators and certain policy regulations** in the EU are sometimes seen as burdens to producers who **lack the flexibility** to adapt to the changing demand for wines. In any case, promotion in growing markets is also seen as a determinant driver for the EU wine sector.

Conclusions and recommendations

Seven main conclusions and recommendations are drawn from this report.

1. The EU maintains its general competitiveness in spite of growing pressure from third countries. However, the level of competitiveness **within the EU** is not balanced, and this undermines future prosperity in the countries affected.

2. **The share of EU agri-food exports in world** markets is decreasing in the medium term, with differences among products. However, the EU has been able to improve its external agri-food balance, thus making the final assessment of this report ambiguous.

3. The current agri-food competitiveness of the EU stems from its own social and economic vision, including a certain rural and agricultural model. Therefore, **preserving the limits of social and territorial cohesion and sustainability should contribute to defending agri-food competitiveness**.

4. **An adequate balance between effective and non-burdensome regulations** is needed to provide a competitive position for agri-food firms.

5. The CAP is adopting a more sustainable, competitiveness-oriented approach. However, **Pillar I is still too ambiguous and Pillar II is not effective enough**, mainly for economically weaker and less competitive countries and regions that face budgetary problems when transferring funds from direct support to rural development. Three kinds of incentives should be reinforced: (1) those addressing structural adjustment, consolidation and concentration in the EU food chain, (2) those related to quality differentiation, and (3) those aimed at transferring best competitiveness practices.

6. **Trade policy should be seen as part of the strategy to level the playing field** between the EU and global partners. This strategy should focus on quality and value-added products, and on pursuing social and environmental concerns without jeopardising global public goods and human development.

7. The 'Horizon 2020' and the European Innovation Partnership 'Agricultural Productivity and Sustainability' (**EIP**) create a strong framework for R&D&I policy in

the agri-food sector. More funds and **a new R&D&I partnership model could open up new opportunities for public and private stakeholders**. Given the interests and difficulties of implementing this complex and sophisticated approach, the European Commission and its Member States should give priority to this new framework with a fair and eclectic spirit.

1. GENERAL OVERVIEW

KEY FINDINGS

- The EU has remained open to world trade in spite of the economic downturn.
- The food and drink industry is the largest manufacturing sector in Europe.
- The EU agri-food sector is oriented towards high-value final products.
- The EU market share of world exports of agri-food products has been slowly declining over recent years (from 20.1 % in 2001 to 16.1 % in 2012).
- Productivity gaps are largely related to a fragmented structure dominated by SME holdings.
- Other weaknesses arise from a highly regulated business environment, the lack of a true single market and low technology intensities.
- Combining competitiveness in the world market with harmonisation and the strengthening of the EU single market remains a challenge.

1.1. Introduction

The EU is the world's leading economic bloc. Since 2007, it has been the leading world economic actor and the world's largest trading bloc of manufactured goods and services. It accounts for 15 % of trade in world goods (2012) and is the top importer and exporter. The EU is also the biggest player in global foreign direct investment (**FDI**), both inward and outward (it received EUR 241.7 billion in 2011). The EU has the world's largest single market, with an average gross domestic product (**GDP**) per head of EUR 25 000 for its 500 million consumers. The EU is the most openly accessible market for developing countries. **The EU has not reacted to the economic downturn by closing markets** and has retained its capacity to negotiate and implement trade agreements. Over the last two decades, EU Member States have increased their openness in terms of share of exports relative to GDP (European Commission, 2012f). After the US, the EU is the world's largest agricultural producer, consumer and trader.

The EU is characterised by serious institutional, social and economic weaknesses, particularly as a result of the major 2008 economic downturn and its effects on financial markets, and this includes fears of outright sovereign defaults, rising unemployment and social tensions in several European countries. Although EU countries such as Finland, Sweden, the Netherlands, Germany and the United Kingdom are among the top ten most competitive economies in the world, the EU, as a whole, is characterised by significant disparities in competitiveness, with several countries and regions lower in rankings (Annoni and Dijkstra, 2013). The EU also has a problem with its productivity, the most important determinant of economic growth, which is weak and declining across Europe (from around 3.5 % annually in the 1970s to barely 1 % in the 2000s), within the eurozone's core as well as its periphery.

The agri-food and drink industry is one of the largest and most important manufacturing sectors in Europe. It is the largest (after the metal industry) in the manufacturing industry, with 16 % of total manufacturing turnover (EUR 956.2 billion for the EU-27). Employment in the food industry represents about 14 % of total employment in the manufacturing sector, with some 310 000 companies and 4.1 million direct employees, making the industry the leading employer in the manufacturing industry in the EU (FoodDrinkEurope, 2014). Despite the number of companies (99.1 % of which are

small or medium-sized),[3] most are small in scale and few are able to compete in the global market.

The EU has recently evolved from net importer in agri-food products to net exporter (European Commission, 2013c), which can be observed as a success story in the process of market integration and the CAP reforms initiated during the mid-1990s. More importantly, studies indicate that EU agri-food competitiveness is weak in some subsectors (Wijnands, Meulen and Poppe, 2007). The CAP has been able to move away from price-support mechanisms and coupled direct payments and to improve the price competitiveness of EU agri-food products in the world market. This has also been accompanied by product differentiation policies, including promotion, quality standards and geographical indications. **The question arises as to whether this process has a sound basis or if there are still elements of fragility in the EU's competitive position in international agri-food markets**, due to the great, and not well explained, performance differences among agri-food sectors and even among EU countries. In particular, the improvement in the net exporter position of the EU has been linked, to a certain extent, to macroeconomic conditions such as the depreciation of the euro with respect to other major currencies, the continuous growth in emerging markets that boosts foreign demand and the domestic weakness of the EU economy, which meant a contraction of internal demand.

What this report intends to assess is the competitive position of the EU agri-food sector in the world market, examining the influence and scope of policies affecting competitiveness.

The assessment will focus on three areas:

- Performance and coordination within the **whole food supply chain**, from the farm to the food industry. We cannot consider competitiveness as the simple sum of competitiveness of each actor in the value chain. Interactions can be sources of synergies and efficiency. They may cause tension when shared awareness of interdependencies is absent or when strategies are non-cooperative (Courleux and Dedieu, 2012). The economic organisation of the supply chain is thus a major factor for its competitiveness.
- The **recent developments in EU policies** point to enhanced competitiveness. A prospective view must also consider the available tools provided by the EU, such as the introduction of key aspects in research and innovation. This is in line with the EU 2020 Strategy and with the objectives of the CAP confirmed in the political agreement reached in June 2013.[4]
- **Trends in globalisation**, namely issues covering the World Trade Organization (**WTO**) multilateral trade negotiations and the specific market access problems, have led to a greater interest in studying the traditional agenda of trade liberalisation, the new agenda, including standards and non-tariff measures, and the bilateral trade negotiations between economic regions such as the Mediterranean, Mercosur, North America and Asia. Moreover, the lack of progress in the Doha Round has increased the fear of new protectionist measures in the future.

The basic aim of this report is to provide helpful information and insight into supporting

[3] The food industry SMEs generate almost half of the industry turnover (48.7 %) and just under two thirds of the number of jobs.

[4] See the agreement at http://ec.europa.eu/agriculture/cap-post-2013/agreement/index_en.htm and the subsequent legislation at http://ec.europa.eu/agriculture/newsroom/155_en.htm.

policy formulation in favour of the '*EU 2020*'. In particular, the European Council recognises that '*a sustainable productive and competitive agricultural sector will make an important contribution to the new strategy, considering the growth and employment potential of rural areas while ensuring fair competition*'.[5]

1.2. Competitiveness in the agri-food value chain

'There are two basic types of competitive advantage: cost leadership and differentiation*'.*
Michael Porter, *Competitive Advantage*, 1985.

Competitiveness is defined as the *ability of a firm or a nation to offer products and services that meet the quality standards of the local and world markets at prices that are competitive and provide adequate returns on the resources employed or consumed in producing them.*[6] There are two great visions about competitiveness and its implications.

One view affirms that competitiveness **is based on success in international markets**, where nations compete with each other as companies do. Competitiveness can be measured as the country's share of world markets for its products, by the trade surplus, by its export performance in foreign markets and by comparative advantages indicators. This view allows competitiveness to be seen as a race in which every country and sector must try to increase its market share over the competitors. An economic agent is therefore deemed as competitive in comparison with other competitors offering the same type of goods or services.

The second view considers competitiveness as the end result of an economic and social model based on political and organisational choices. In this sense, competitiveness is not a zero-sum game because nations can improve their prosperity if they can improve their productivity without jeopardising others. Thus, microeconomic competitiveness should be essential to the economic policy agenda of all nations.

Our approach to the issue for this report is eclectic and recognises that every country's export performance and competitiveness level is distinct but also interrelated. In fact, there is a link between export performance and competitiveness. To a significant degree, international trade reveals competitiveness and export success tends to be the consequence of high levels of competitiveness. Exploring the competitiveness of the EU agri-food sector, however, requires covering a wide range of issues that go beyond the competitiveness of a farm or single commodity. Many studies have made use of quantitative measures of competitiveness, but new approaches have recently treated the subject by analysing the competitiveness of whole food chains, considering all types of drivers and strategies of firms, including SMEs and transnational firms (Courleux and Dedieu, 2012). **Coordination within the food chain is essential to add value to products in a world context. Competition in the international market is seen as competition not only between commodities but between value chains.**

Competitiveness is not as simple as the fine-tuning of mix strategies aimed at boosting 'cost competitiveness' and 'non-price competitiveness'. Strategies based on cutting costs may help improve competitiveness in the short term, but in the long term this may end up being highly destructive if these strategies affect the ability of companies and

[5] Conclusions of European Council, 17 June 2010 (in particular point 5). (http://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressData/en/ec/115346.pdf).
[6] http://www.businessdictionary.com/definition/competitiveness.html.

industries to invest and modernise their infrastructure.[7] When the agri-food industry can produce heterogeneous goods, other ways of competing in the national and international markets arise. Strategies and policies based on product differentiation and 'non-price competitiveness' allow farmers and businesses to actively market their products in order to meet the specific requirements of their customers or to go further. Innovation and differentiation strategies can be based on an individual or collective approach, and rely on creating and marketing brand names, geographical indications, quality standards and certification schemes that guarantee production processes. Finally, there is an increasingly clear distinction between a country's external competitiveness based exclusively on its short-term trade results or export market shares, and its long-term global competitiveness, mainly based on its relative levels of productivity, which determines growth, wages and well-being.

Following this general framework, this report combines four sets of information to determine competitiveness:

a) **Standard indicators** of trade performance are calculated in **Chapter 2** to consider trade success by measuring import-export performance (e.g. trade balances, market shares).

b) A **prospective online survey** was conducted with a large group of stakeholders selected to represent main sectors and institutions (see **Chapter 3**). The survey considered the progress achieved in the last decade in the key drivers of competitiveness, the assessment of existing tools, and the policy measures required to enhance competitiveness. The survey included an evaluation of the CAP reform and the impact of trade and innovation policies on the competitiveness of the EU agri-food economy.

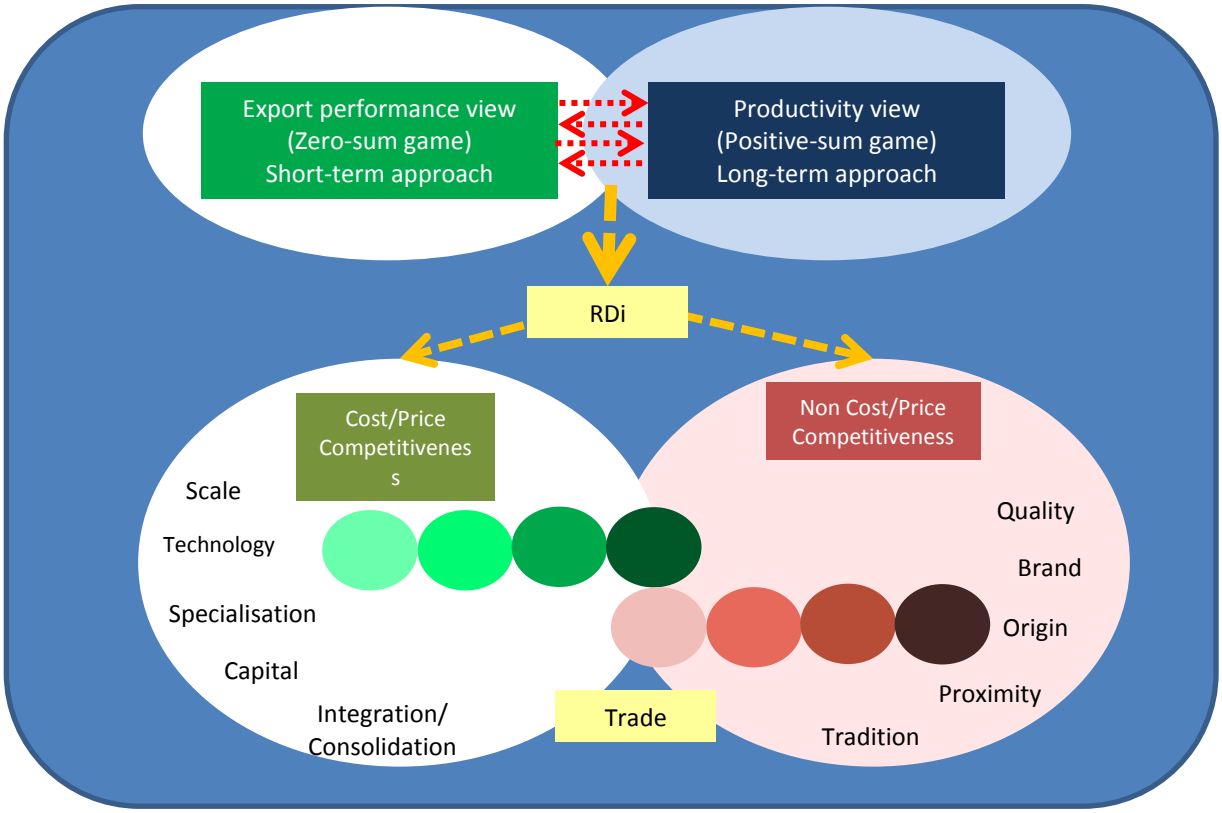
c) **Case studies** were drawn up by team members following a **food chain approach** (**see Chapter 4**) that considers, from a comprehensive perspective, all qualitative factors influencing competitiveness, including quality, innovation and coordination between all actors involved in the management of the supply chains.[8]

d) **Other sources** included existing studies and research by the network of experts on relevant issues for the agri-food supply chains, such as coordination in the value chain, innovation and trade. Other background sources include Parliament reports, the evaluations carried out by the Commission on specific policies, and numerous opinions expressed by stakeholders during in-depth interviews.

[7] The strategies aimed at increasing market shares through reduced wages, competitive deflation and devaluation encourage non-cooperative policies, which may be efficient in the short term, but eventually lead to the destruction of wealth and jobs on an aggregate level.

[8] This approach is consistent with the Communication from the European Commission on *'A better functioning food supply chain in Europe'* (European Commission, 2009a) and the forum on this matter set up by the Commission in 2012.

Figure 1. An eclectic framework for EU agri-food competitiveness



Source: Authors' elaboration.

1.3. A positive balance in the world market

Recent years have witnessed an improving EU agricultural trade balance in the world. In 2010, the EU-28 went from being a net importer to a net exporter, after a long history of negative trade balances, reaching a surplus of almost EUR 13 billion in 2012. It would be too risky to attribute this development solely to a recovered structural competitiveness of the EU agri-food sector. **There are many short-term factors that explain export increases and import decreases**.[9] For exports, depreciation of the euro has contributed to export growth in the last few years. For imports, lower prices for commodities, such as coffee, cotton and cocoa, coupled with the weakness of the EU economy, explains a significant part of the decrease in total imports. However, medium-term developments are also positive. Between 2002 and 2012, EU-28 agricultural exports grew at an average annual rate of 2.7 % per year while EU-28 import values grew 1.9 % per year in the same period (European Commission, 2013c).[10]

One of the strengths of the EU agri-food sector in the world market is its **orientation towards highly valued final products**, which represent two thirds of its total agricultural exports. Among the top ten exported products that account for half of EU-28 exports, only wheat is considered a commodity and not a final product, according to the European Commission's report which monitors agricultural trade (European Commission, 2013c). Although EU exports are mainly value-added products, they are still concentrated in very few sectors. Thus, wine and alcoholic beverages represent almost 30 % of total exported value, and cereal preparations almost 20 %. Other exported

[9] On the impact of the financial crisis on EU agricultural production and trade, see Choices (2013).
[10] See also European Commission (2013d) for future prospects on certain agricultural markets.

products include wheat and yeast, ice cream, chocolate and confectionery, pork, cheese and processed fruits and vegetables, among others. Most of the EU's exports are destined for the US, Switzerland, Japan and large emerging countries. The US is therefore the first-ranked destination for EU products, with the value of exports to that market reaching EUR 15.4 billion in 2013, followed by Russia, Switzerland, China and Japan (Table 1). Although final products account for the largest share of EU exports to the world, some commodities, such as wheat and barley, are also relevant EU exports in the Middle East, North African and Russian markets. In practice, EU agri-food exports may contribute to growth in economies whose markets can be further opened through trade negotiations and efforts in market access.

The EU-28 is the world's top importer of agri-food products, followed by the US and China, although the latter's imports have been growing fast in recent years. EU imports are generally products which are not widely produced in the EU, mainly because of agroclimate conditions. Thus, coffee and tea account for 10 % of the import value, followed by oilcakes (9 %), animal and vegetable oils (9 %), tropical fruits and spices (9 %) and soybeans (5 %). The main single EU supplier is Brazil, followed by the US, Argentina, China, Switzerland, Ukraine, Indonesia and Turkey (Table 1). The EU is the top importer of agri-food products from developing countries, which represent around 70 % of total EU agri-food imports.

The composition of EU-28 trade is represented in Table 2, reflecting the export specialisation in final products and a more diversified import specialisation, with slight changes between 2008 and 2012, but confirming the pattern of specialisation. In 2012 commodities accounted for nearly 19 % of all EU imports (20 % in 2008) and only 8 % of all EU exports (10 % in 2008).

To summarise, **the development of the EU agri-food trade has recently moved towards a positive balance** and export specialisation in final products. According to FoodDrinkEurope (2012), the EU food and drink industry '*maintains the characteristics of a stable, non-cyclical and robust manufacturing sector, in spite of the current economic downturn*'. The aim of current plans to improve the competitiveness of EU agri-food products rests, consequently, on the increase in value added.

Table 1. Top destinations and origins: 2013

Top destinations	Value	Share
	(million EUR)	%
United States	15 403	13
Russian Federation	11 864	10
China	7 267	6
Switzerland	7 097	6
Japan	5 088	4
Hong Kong	4 664	4
Norway	3 989	3
Saudi Arabia	3 882	3
Algeria	3 203	3
Brazil	13 315	13
United States	9 751	10
Argentina	5 356	5
China	4 604	5
Indonesia	4 419	4
Switzerland	4 347	4
Turkey	3 845	4
Ukraine	3 818	4
India	2 765	3

Source: Eurostat (2013) and authors' calculations

Table 2. EU-28 trade structure: 2008 and 2012 with extra-EU-28

	EXPORTS			
	2008		2013	
	Value	Share	Value	Share
	(million EUR)	%	*(million EUR)*	%
Commodities	7 961	10	9 222	8
Intermediate	15 371	19	23 590	20
Final products	51 525	64	76 677	67
Other (*)	5 123	7	5 671	5
Total	79 980	100	115 160	100
	IMPORTS			
	2008		2012	
	Value	Share	Value	Share
	(million EUR)	%	*(million EUR)*	%
Commodities	17 797	20	19 155	19
Intermediate	25 049	29	30 768	30
Final products	44 265	50	50 652	50
Other (*)	1 065	1	1 618	1
Total	88 176	100	102 193	100

Note: (*) Other products and confidential trade.

Source: Eurostat (2013) and authors' calculations.

1.4. Some weaknesses remain

While the EU continues to be the world's leading food and drink exporter, **the EU market share of global exports of food and drink products has slowly declined over the last few years** (from 20.1 % in 2001 to 17.8 % in 2010), mostly to the benefit of emerging economies: Brazil, China, Thailand and Argentina. **The food industry is characterised by fragmentation**. While there are a few European multinational companies competing worldwide with a wide variety of products, 99 % of all enterprises in the food sector are small and medium-sized enterprises (SMEs).[11] Productivity levels in the food industry vary among EU Member States, from the lowest labour productivity levels in Estonia and Bulgaria (EUR 20 900 and EUR 9 900 per employee, respectively) to the highest levels in Ireland (EUR 126 800 per employee) and the Netherlands (EUR 98 700 per employee).[12]

Following a path of large-scale policies to bolster its economy vis-à-vis main competitors through major projects, the EU is trying to improve the competitiveness of its economy with little success. In 2000, the EU launched the Lisbon Strategy, aimed at making Europe the most dynamic and competitive economy by 2010. **This deadline came and went without seeing any improvement in Europe's competitiveness**. Recognising that they had not met the competitiveness goals set out in the Lisbon Agenda, in 2010 Europe's leaders devised a new strategy, called the Europe 2020 Strategy.[13]

One of the policy objectives of the Europe 2020 Strategy is to reinforce EU competitiveness in the international arena, and many of the drivers needed for the recovery of industrial demand and employment are to be found outside Europe. However, even though trade plays a major role in recovery, **exports alone will not bring the EU out of the current crisis.** The opportunity to rely on foreign demand can be very important in the short term when domestic demand is particularly weak, but in the long term sustainable growth will be generated through technical progress and productivity growth (European Commission, 2012e).

Recent positive results of the EU agri-food sector can be considered in three ways. The first is that **foreign demand conditions affect the EU net exporting position** (for the top 15 EU export products, 56 % of the increase in export value in 2012 was quantity-driven). The second is the **high concentration of export growth in two sectors** that have shown an excellent performance: meat and alcoholic beverages. The third consideration is that **EU agri-food growth is highly dependent on the economic situation of EU households**, which have been severely affected by the economic crisis.

Moreover, there are other structural problems that must be considered by EU policies:

[11] However, the results for European agriculture depend on countries and chains (Latruffe, 2010).
[12] See European Commission (2013f), p. 136.
[13] The situation depends on the factor considered, as it is argued in World Economic Forum (2012). The EU fares better in building inclusive societies and social cohesion policies than the United States, but worse than Japan and Canada. In terms of sustainability, the EU's performance is relatively well above that of the United States and above Japan. Only Canada, among the comparable countries, outperforms Europe in this dimension. Europe is behind the United States, Japan and Canada in building a smarter economy that can help facilitate the transition to higher value-added, more productive activities. The gap is particularly wide vis-à-vis the United States.

One issue is the **labour productivity gap** of the EU in relation to that of its international competitors. In the agricultural sector, this is the result of weak farm structures, with many rural areas at a relative disadvantage. As the European Parliamentary Research Service recently published (European Parliament, 2014a), much variation and significant differences in farm structures can be seen across the EU-28: 6 million farms with less than 2 ha occupy 2.5 % of the total crop area and 300 000 farms with over 100 ha occupy 50 % of the land used. These figures reflect the weak farm structures in some parts of the EU-28, particularly in southern Europe and the newer Member States. Structural adjustment is taking place in the farming sector with the figures of small farms in the EU continuously decreasing. Productivity gains are also taking place. Between 2005 and 2013, EU-28 real agricultural income per worker was estimated to have increased by 29.2 % (Eurostat, 2014b). However, such **productivity improvements in the agricultural sector reflect the structural adjustment process**, with a fall in agricultural labour input of 20.8 %.[14]

In food and drink manufacturing, productivity gains in the EU are also evident. Between 2008 and 2011, during the period of the economic downturn, labour productivity (measured in terms of production value per employee) increased by 3 %, but this growth rate was below that of international competitors, such as the US, which increased labour productivity by 11 % in the same period. Again, developments are very different among EU Member States. Between 2006 and 2011, the highest relative increases took place in Bulgaria (13.6 %) and Lithuania (11.3 %), whereas the productivity of the food industry decreased in five Member States (Denmark, France, Italy, Hungary and the United Kingdom).[15]

The productivity gaps are largely related to a fragmented structure dominated by SMEs. SME holdings are dominant in both the agricultural and the food manufacturing sectors (European Commission, 2014a), with many micro businesses engaged in farming. A very large number of holdings sustain high costs in the EU compared to those of their international partners. For small and medium-sized enterprises, fragmentation involves low R&D intensities, lack of market integration, huge asymmetries and weak bargaining power in the food supply chain, leading to lower incomes. Food retailers are increasingly concentrated, with the shares of the three top retailers ranging between 30 % and 50 % in most EU Member States.

The reports provided by FoodDrinkEurope (FoodDrinkEurope, 2012; FoodDrinkEurope, 2014) explore the source of existing weaknesses in European food supply chains.[16] In particular, both reports indicate a **highly regulated business environment** and the **lack of a true single market** for food, which hinder the ability of firms to reduce uncertainties and to take adequate investment decisions. A key message is that the competitiveness of firms cannot be understood in terms of working for the export and import markets. In fact, the challenge is to encompass competitiveness in the world market with harmonisation and strengthening of the EU single market. This is consistent with the argument that the trade policy agenda '*will confront us increasingly with the*

[14] Parliament's plenary adopted a resolution on the future of small agricultural holdings drafted by MEP Czesław Siekierski (European Parliament, 2014b). The resolution calls for focus on tools such as public funds for small farmers who often cannot access EU rural development programmes, coupled with financial, advisory and technical support, and infrastructure development to promote local and regional markets.

[15] See European Commission (2013f), p. 137.

[16] See also the Commission's communication on 'A better functioning of the supply chain in Europe' (European Commission, 2009), and the conclusions from the high level forum established to identify the food industry's main initiatives.

interface between our internal rules and external liberalisation' (European Commission, 2010, 2012e).[17]

To strengthen the competitiveness of agri-food sectors, there are several conditions to be considered in the economic context. The first one is that small and medium-sized businesses can regain access to credit. An OECD study showed that more than 50 % of firms[18] needed external finance to maintain operations, with increasing figures in the last few years (OECD, 2012). The **lack of financial resources** limits the ability of firms to invest in R&D, which is compounded by the lack of public resources. This severely restricts the competitive prospects of firms operating in the agri-food sector. The agri-food sector has been classified as a **low R&D intensive sector,** and the scoping paper by Aslesen (2008) clearly indicated that the food industry was below the European manufacturing average with regard to most standard measurements of innovation activities. FoodDrinkEurope (2012) also emphasised the lack of qualified labour and the need for vocational training and education systems to meet the challenges of the EU food supply chain.

To summarise, the absence of a single market, the need for a better functioning food supply chain, access to financing, and a qualified labour force are challenges that must be addressed. Agricultural and rural policies are part of the solution, as will be discussed in Chapter 3 of this report. Across-the-board policies are needed to consolidate the single market, as well as trade policies that support internationalisation of SMEs.

[17] See also the European Council conclusions of 16 September 2010.
[18] Enterprises based in 20 countries taking part in the survey (OECD, 2012).

2. ANALYSIS OF EU-28 AND MEMBER STATE TRADE IN WORLD MARKETS

KEY FINDINGS

- An overall loss of world market share is seen in the medium term, while global markets grow in value. This indicates a loss of trade competitiveness in the EU-28.
- Since 2009, the decline has been less pronounced.
- These facts are true for most 2-digit level products.
- The higher world market shares appear mostly in processed products, especially beverages and spirits.
- The EU-28 maintains a net export position, which also improves the position of most goods.
- A certain rise for the EU-13 seems to have been consolidated, such as Poland, Romania and Lithuania's growth in certain products.
- Traditional export leaders such as Denmark, France, Italy and the Netherlands are experiencing a decline in their world market shares.

2.1. Introduction

In this chapter of the report, the competitiveness of the EU-28 and its Member States is addressed by using trade indicators, following one of the approaches outlined in Section 1.2, in order to measure competitiveness (Box 1). In this report we selected: the export market share (**EMS**), the net export index (**NEI**), and, when data were available, the import penetration rate (**IPR**). These indicators are ex post competitiveness measures and are useful for international comparisons, in particular when dealing with a relatively large number of countries, as is the case of the EU-28 Member States. Changes in the indicators reveal changes in competitiveness, mainly through the variations in the EMS; the other two indicators allow imports to be included in the competitiveness assessment (see Box 1 below for further details). This chapter of the report is descriptive in nature, whereas other chapters focus on the underlying factors of competitiveness.

Box 1. Trade indicators of competitiveness

TRADE INDICATORS OF COMPETITIVENESS

Export market share (EMS): The EMS index assesses the export share of a country as a percentage relative to the exports of a group of countries for a specific sector. The index has a value range of 0 to 100, with 0 indicating that the country has no exports for that sector, and 100 indicating that the country is the only exporter. Therefore, the EMS reflects the competitive position of a country in the international market for a sector.

$$EMS_{i,j} = 100 \times \frac{X_{i,j}}{X_{i,w}}$$

X represents the value of exports, *i* represents the sector, *j* represents the exporter country, and *w* represents the total world exports (not including intra-EU trade).

Net export index (NEI): The NEI is calculated by subtracting the imports of a country's product or sector from the exports, and dividing by the number of exports added to the number of imports. The values range from –1 for imports only, to 1 for exports only; if the index is 0 (zero), the exports and imports are equal. Thus, a negative value indicates the importance of imports

over exports, while a positive value indicates the importance of exports over imports.

$$NEI_{i,j} = \frac{X_{i,j} - M_{i,j}}{X_{i,j} + M_{i,j}}$$

X and *M* represent the values of exports and imports, *i* represents the sector, and *j* represents the country that exports or imports the product.

The **import penetration rate (IPR)** indicates the degree to which domestic demand is satisfied by imports. The IPR is calculated by dividing the value of imports by the value of apparent consumption. For a given good, apparent consumption is calculated by subtracting the exports from the domestic production, added to imports.

$$IPR_{i,j} = 100 \times \frac{M_{i,j}}{Prod_{i,j} - X_{i,j} + M_{i,j}}$$

X and *M* represent the values of exports and imports, *Prod* is the value of the domestic production, the subscript *i* represents the sector, and *j* represents the country that produces, exports or imports the product.

We have paid particular attention to the competitiveness in extra-EU28 markets for the EU-28 as a whole and for each individual Member State in the period 2002-2012.[19] We have also gathered agri-food trade data[20] from sources such as Eurostat (including the Comext and NewCronos databases) and WITS. The information is processed according to the HS chapters, i.e. at two-digit level. Additional information is provided at four-digit level when the importance of the product requires more detail, or to stress a distinctive evolution.[21]

2.2. Total agri-food trade in the EU-28 Member States

The agri-food exports from the EU-28 to the rest of the world are relatively concentrated in some products. At the four-digit level, the CR4 concentration ratio equals 30 % and the CR10 equals 51 %, with consistent values in the period studied.[22] Figure 2 illustrates the distribution of the value of EU-28 exports by chapter, indicating the most relevant products, and highlights the predominance of value-added products, mainly those belonging to the wine and liqueurs chapter (HS22).

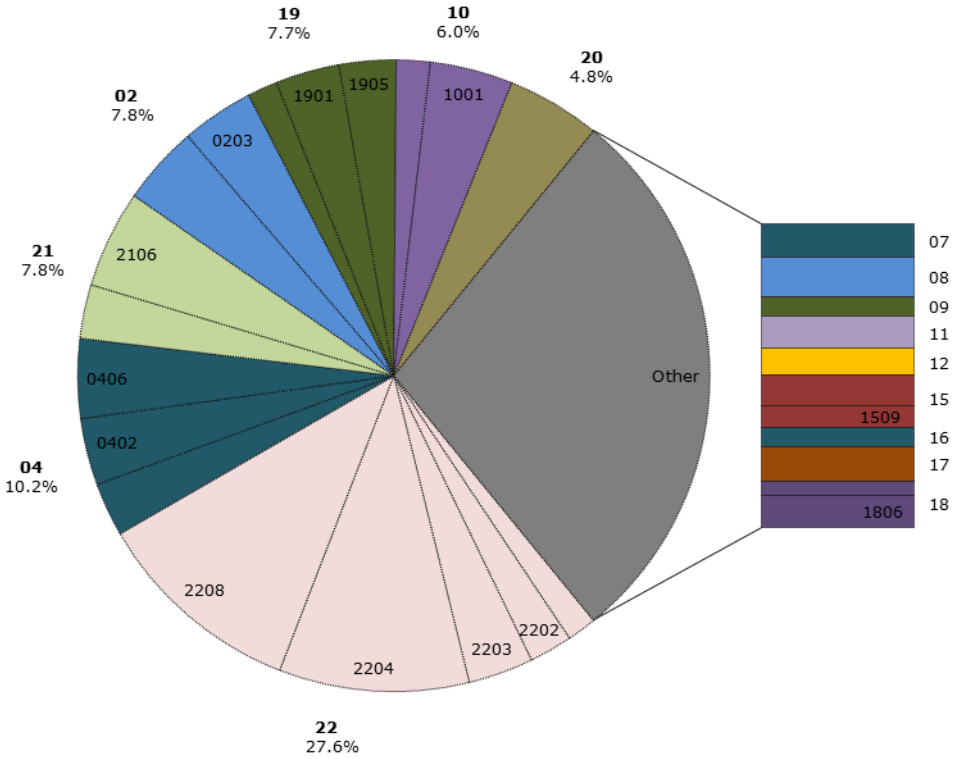
[19] The countries considered throughout the period covered in the study are the current members of the EU, including the Member States incorporated after 2004.

[20] Consequently, we have gathered data from the Harmonised System (HS) chapters 02 to 22, excluding chapters 03, 05, 06, 13 and 14 (following Winkelmann et al., 1995).

[21] All the results may be found in the annexes. In this chapter, the term 'chapter' indicates the two-digit level and the term 'product' the four-digit level.

[22] The values indicate the joint market share of the first four and the first ten products according to their market share.

Figure 2. Distribution of extra-EU28 exports by value. Average 2002-2012



Source: Authors' calculations based on WITS and Comext databases.

02	Meat
0203	Meat of pork
04	Dairy produce
0402	Milk and cream
0406	Cheese and curd
07	Edible vegetables
08	Edible fruits and nuts
09	Coffee, tea, mate and spices
10	Cereals
1001	Wheat and meslin
11	Products of the milling industry
12	Oil seeds and oleaginous fruits
15	Animal or vegetable fats
1509	Olive oil
16	Preparations of meat or fish
17	Sugar and sugar confectionery
18	Cocoa and its preparations
1806	Chocolate and other food preparations
19	Preparations of cereals
1901	Malt extract, food preparations of flour, etc.
1905	Bread, pastry, cakes, biscuits and other bakers' wares
20	Preparations of vegetables
21	Miscellaneous edible preparations
2106	Food preparations not elsewhere specified
22	Beverages, spirits and vinegar
2202	Waters
2203	Beer made from malt
2204	Wine of fresh grapes
2208	Spirits, liqueurs

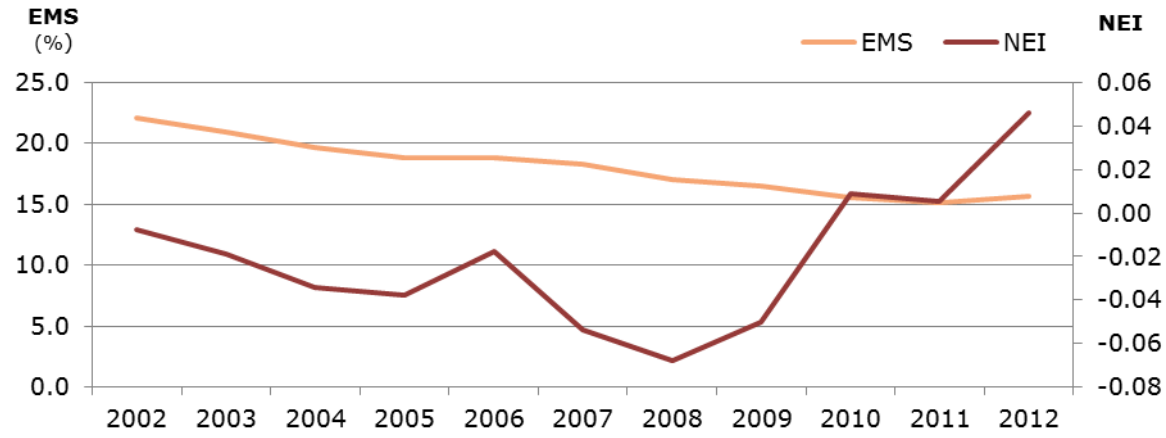
The EU-28 moved from net importer of agri-food products to net exporter within this period, as the value of exports equalled the value of imports in 2010 and in the following years exports exceeded imports (Figure 3). This is shown by the positive trend in the evolution of the NEI for the EU-28. In fact, negative and decreasing values are recorded up to 2008, with improvements in the index by the end of the period. However, the export performance of the EU-28 has declined over the 11-year period (Figure 4). Thus, the EMS decreased from an average of 21.5 % (2002-2003) to an average of 15.4 %

(2011-2012). Hence, global agri-food exports have increased at a higher rate than EU exports.

The greater EMS values are found in France (3.4 % on average), the Netherlands (2.3 %), and Italy and Germany (1.9 %). Altogether, these four countries account for about 55 % of the EU-28 EMS. As is the case for most Member States, the EMSs of all four countries have declined over the period (Figure 4).

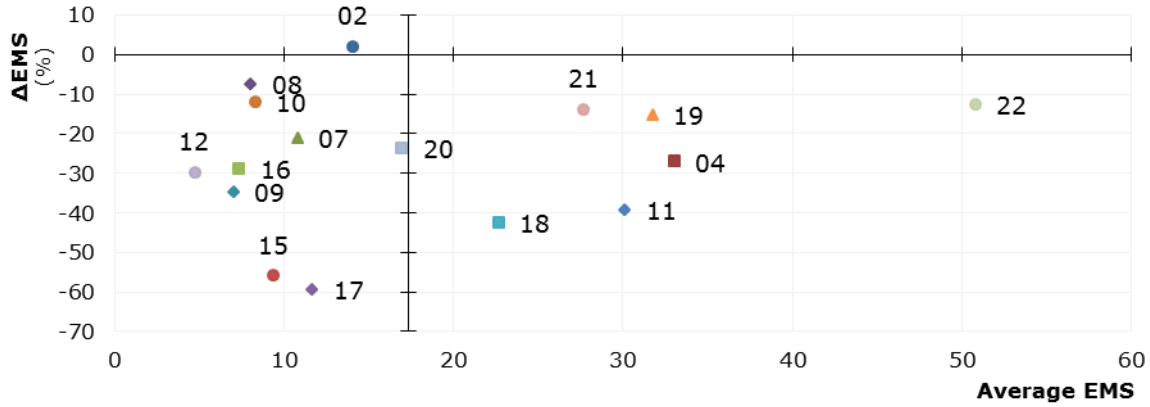
Performance varies widely among the EU Member States (Table 3). In general, countries that have increased their EMS are among those with a lower EMS. This is the case of the three Baltic Republics, Luxembourg, Poland, Portugal and Romania. The greatest declines in EMS took place in Denmark, Hungary and Slovenia. Regarding the NEI, there is a noticeable trend of the majority of greater improvements taking place in the smaller Member States. The general trend of NEI increase is not followed by Denmark and the Netherlands, which are declining in their previous trade deficit position. The positions of other countries are also declining from previous surpluses (particularly Slovenia, Finland and Sweden).

Figure 3. Evolution of EMS and NEI for the EU-28, 2002-2012. Total agri-food trade



Source: Authors' calculations based on WITS and Comext databases.

Figure 4. Evolution of EMS for the EU-28, 2002-2012, agri-food chapters



Note: the vertical axis is located at the average EMS for EU-28 agri-food trade (17.34 %).
Source: Authors' calculations based on WITS and Comext databases.

Table 3. Export market share and net export index

Export market share (EMS)					Net export index (NEI)				
ΔEMS 2002-2012 (%)	Average EMS 2002-2012 (< 1 %)		Average EMS 2002-2012 (>1 %)		NEI < 0		NEI > 0		ΔNEI 2002-2012 (%)
>50 %	EST				ESP	GRC	BGR	LTU	>50 %
	LVA				CYP	ROM	POL		
	LTU				SVK	MLT	LVA		
	ROM				PRT	HRV	EST		
					CZE				
0 - 50 %	AUT				BEL		AUT		0 - 50 %
	LUX				LUX		FRA		
	POL				GBR				
	PRT				DEU				
-50 % - 0	BEL	MLT	DEU		DNK		ITA		-50 % - 0
	BGR	SVK	FRA				HUN		
	HRV	SWE	ITA				IRL		
	CYP		NLD						
	CZE		GBR						
	FIN		ESP						
	GRC								
	IRL								
< -50 %	DNK				NLD		SVN		< -50 %
	HUN						FIN		
	SVN						SWE		

Source: Authors' calculations.

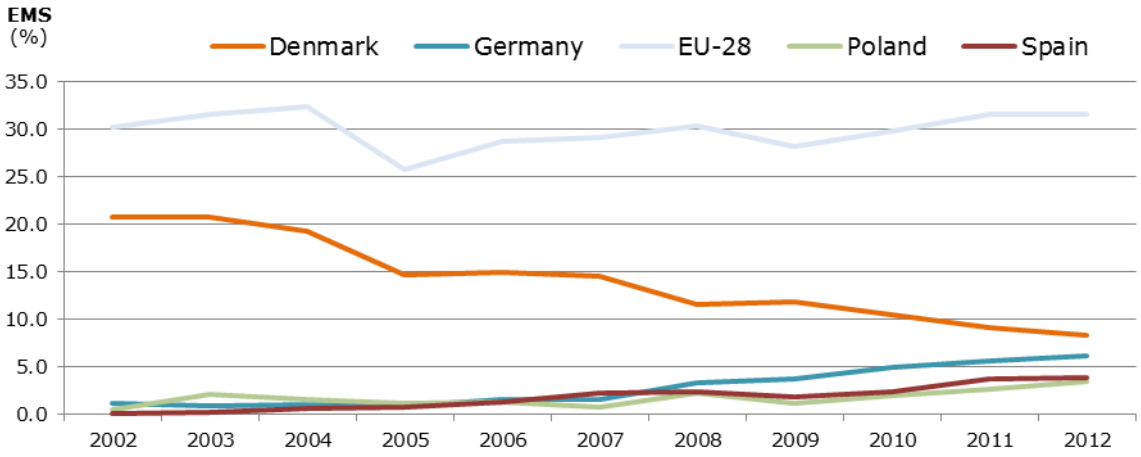
2.3. Meat

Meat is the only agri-food chapter for which the EU-28 has increased its share in world markets (Figure 4). The average EMS is low for beef – about 4 % – although there has been a remarkable boost in Poland's exports since 2009,[23] as well as Germany's. On the contrary, pork records a high EMS, with constant values around 30 % over the entire period and consistently high NEI values averaging over 0.9. Apart from this, the IPR shows a very reduced value of about 0.003 yearly, meaning that imports have very little

[23] Only partially linked to the growth of Russia as destination market for EU beef (see the beef case study, Section 4.3).

relevance in respect to domestic consumption. Therefore, the international competitiveness is high in this sector. In Member States, the leading export position is held by Denmark, followed by Germany and Spain. Nevertheless, Denmark is losing its world market share and is being replaced by Germany, followed by Poland and Spain (Figure 5).

Figure 5. Evolution of EMS for the EU-28 and selected countries, 2002-2012. Pork (in %)



Source: Authors' calculations based on WITS and Comext databases.

With regard to poultry, the competitive position of the EU-28 is not as strong as in the case of pork. On average, the EMS is 11 %, but declining over time. As the average NEI remains positive (0.4) and the IPR is relatively low (2.5 % on average), it may be indicated that the EU-28 exporters are not taking advantage of global market growth. France is clearly the dominant country for this type of meat in terms of extra-EU28 exports.

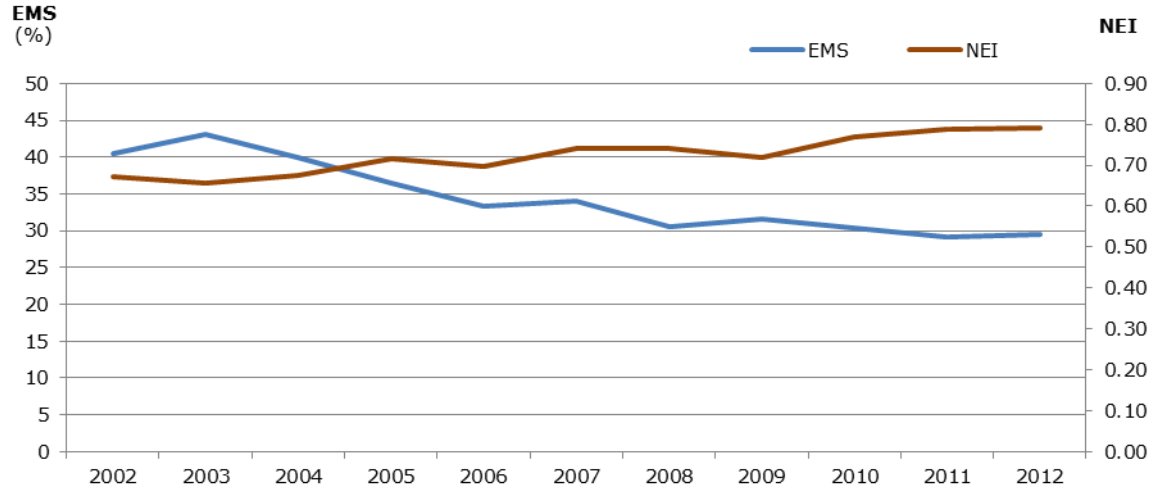
2.4. Milk and dairy products

This section focuses on the gradual decline of competitiveness of the EU-28 in world markets (Figure 6). While in 2002 the EU-28 had 40 % of the world market share (measured by the EMS), this value was less than 30 % in 2012. By contrast, the development of the NEI has been consistently positive, and increased over the period of study.

Specifically, there are two products at the four-digit level in which the EU-28 has an outstanding position in world trade. Firstly, cheese and curd (HS0406), which is ranked fifth among the EU's agri-food exports in terms of value, averaging EUR 2.5 billion annually (4.1 % of export value). Secondly, concentrated milk (HS0402) contributes an average of over EUR 2 billion annually, or 3.5 % of the value of EU-28 agri-food exports, ranking seventh in the list. In these two cases, the dynamics of the EMS and NEI indicators are similar to those described in the chapter overall: a gradual loss of competitiveness in world markets due to a decline in the respective EMS, and an increasing NEI that indicates a strong net exporter pattern. Differences arise when considering the more relevant exporter countries. Italy and France are virtually tied as the first contributors for cheese, both with an average EMS of about 8 % but with a declining trend, while Germany and the Netherlands show a better performance over time. Denmark's EMS has plummeted over time, but it still maintains more than 3.1 % of

the world market share. EU-28 EMS is 45 % on average. For concentrated milk, the main EU-28 players are the Netherlands (average EMS 9.6 %), Belgium (3.4 %), France (3.2 %), Germany (2.8 %) and Denmark (2.7 %). The EU-28 EMS is about 28 % on average. In most of these countries, with the exception of Belgium and Germany, competitiveness has declined over the period of analysis.

Figure 6. Evolution of EMS and NEI for the EU-28, 2002-2012. Dairy produce



Source: Authors' calculations based on WITS and Comext databases.

2.5. Vegetables

The competitiveness of EU-28 edible vegetables is below average, but development shows that this sector is performing better than other products. The EMS is about 11 %, with a minor reduction over time. Another relevant note is the remarkable weight of imports, shown by an average NEI of -0.3. The trend, however, has shown certain improvement in the last four years. Across countries, the position of the Netherlands is overwhelming, in this case due to its combined role as a producer and re-exporter. Nevertheless, its EMS follows a downward trend. Poland and Lithuania, on the other hand, are clearly improving their EMSs. Figure 7 depicts the joint development of the EMSs for the EU-28, the Netherlands and Lithuania. Only the Netherlands, Poland, Lithuania and Denmark are net exporters. The average IPR for the EU-28 is 8.4 % and is growing over time.[24]

2.6. Fruits and nuts

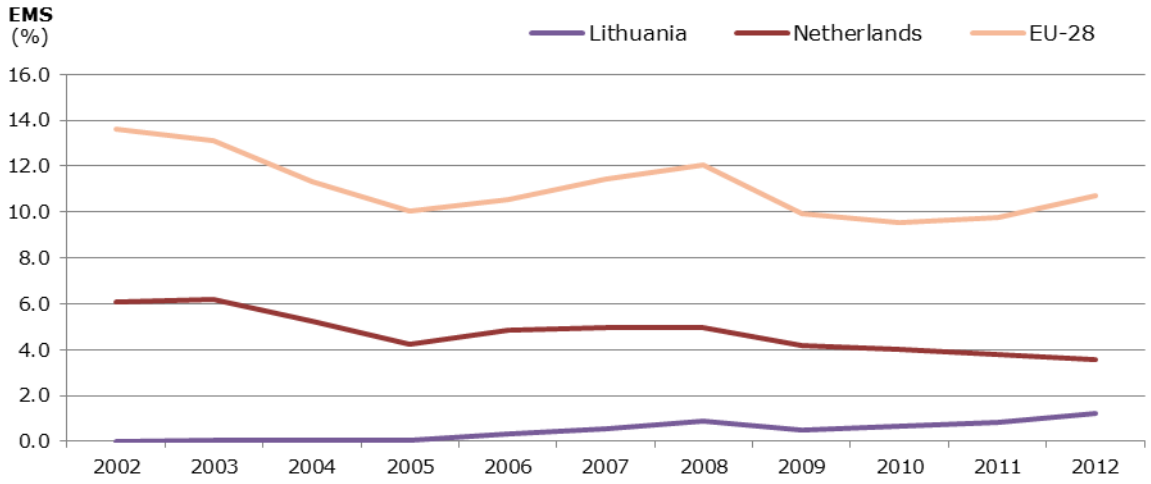
The competitiveness of EU-28 edible fruits and nuts remains unchanged over time, with the average EMS being around 8 %. This result is accompanied by a situation of dependence on foreign fruits, shown by an average IPR of 40 % and a trend in growth. Moreover, the NEI is consistently negative, with values around -0.7.[25] Among other countries, Spain, Italy and Poland account for 50 % of the EU-28 EMS (Figure 8). Noteworthy cases are those of Poland, which has demonstrated the strongest growth in recent years, and the Netherlands, whose EMS declined in the last three years of the analysis. Italy has also experienced a gradual decline, while Spain is maintaining its global EMS. Regarding the IPR, there is a wide range of values between countries. Some countries, such as the Netherlands or Luxembourg, show average IPRs close to 100 %.

[24] See the discussion on the role of extra-EU suppliers capable of meeting the requirements of the big retailers in the section concerning the case study on fruits and vegetables (Section 4.4).

[25] See previous footnote.

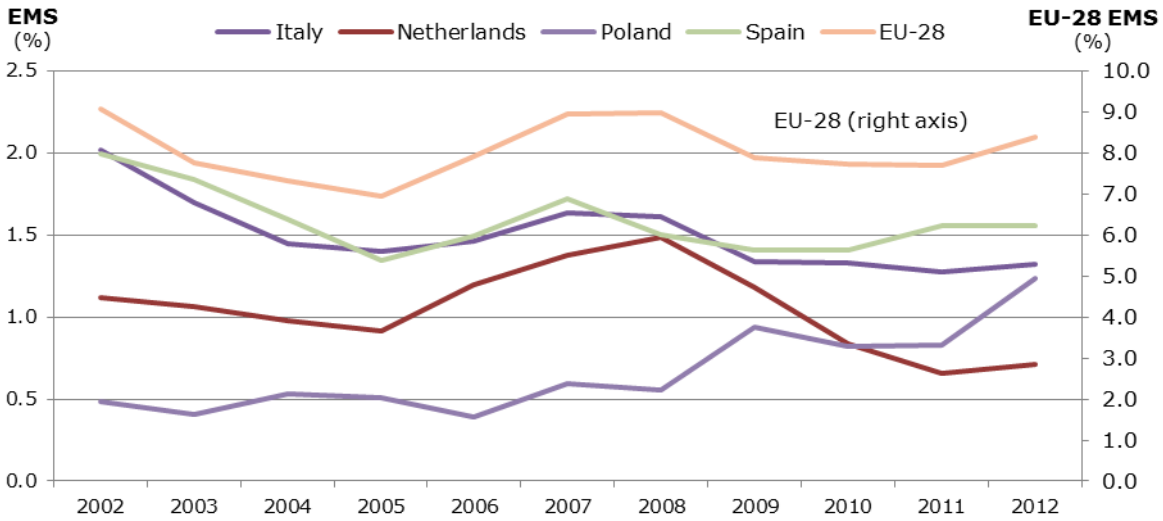
In others such as Greece, Hungary and Spain, the average IPR is below 15 %. Regarding the NEI, the IPR is negative in almost all EU-28 Member States, with the exception of Lithuania, and with negative values (about -1) in Ireland and the UK. This shows the utmost relevance of imports in domestic consumption.

Figure 7. Evolution of EMS for the EU-28 and selected countries, 2002-2012. Vegetables (in %)



Source: Authors' calculations based on WITS and Comext databases.

Figure 8. Evolution of EMS for the EU-28, Spain, Italy, Poland, the Netherlands. Fruits (in %)



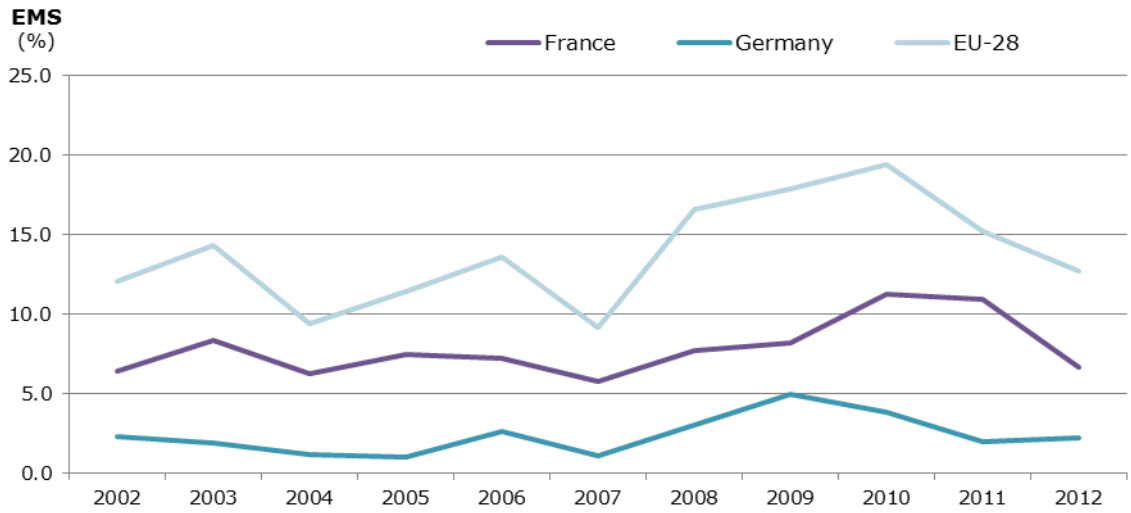
Source: authors' calculations based on WITS and Comext databases.

2.7. Cereals

The EU-28 cereal market share, assessed using the EMS two-year average, decreased from 9.3 % to 8.2 %, i.e. a small loss over a long period. Additionally, the year-to-year variations of this indicator were relatively large. The NEI indicator fluctuates around zero, i.e. the value of exports and the value of imports tend to balance each other out. The import share is usually about 7 % of apparent consumption as well. However, as the case study in Chapter 4 shows, there are differences in competitiveness for different cereals.

Wheat[26] is the fourth product in terms of value of EU-28 exports, with a yearly average of EUR 2.5 billion annually, and a value of 4.3 % of EU-28 agri-food exports between 2002 and 2012. The average EMS is 13.8 %, with significant peaks between 2008 and 2010. France and, to a lesser extent, Germany are the two main exporters among the Member States, with France accruing about 7 % of the world market share. There are also noticeable improvements in the EMS for Latvia, Lithuania and Romania. In terms of the balance between exports and imports, there are several extreme cases within the EU-28, since NEI values range from -1 or thereabouts for Belgium, Ireland, Cyprus and Italy, to +1. Overall, the EU-28 is a definite net exporter of wheat, with an average NEI of 0.27. Imports account for about 6.4 % of apparent consumption, with consistent values over the period. At the opposite extreme, the EU-28 EMS for maize is quite low, but with a positive trend over time, since the EMS has doubled from 1.5 % in 2007 to about 3 % between 2010 and 2012. This boost was mainly caused by the emergence of Romania, with the EMSs of France and Hungary being more stagnated. The EU-28 is also a definite net importer, with an overall average NEI of -0.57 and an increasing trend in the IPR, which reached 9.7 % in 2012.

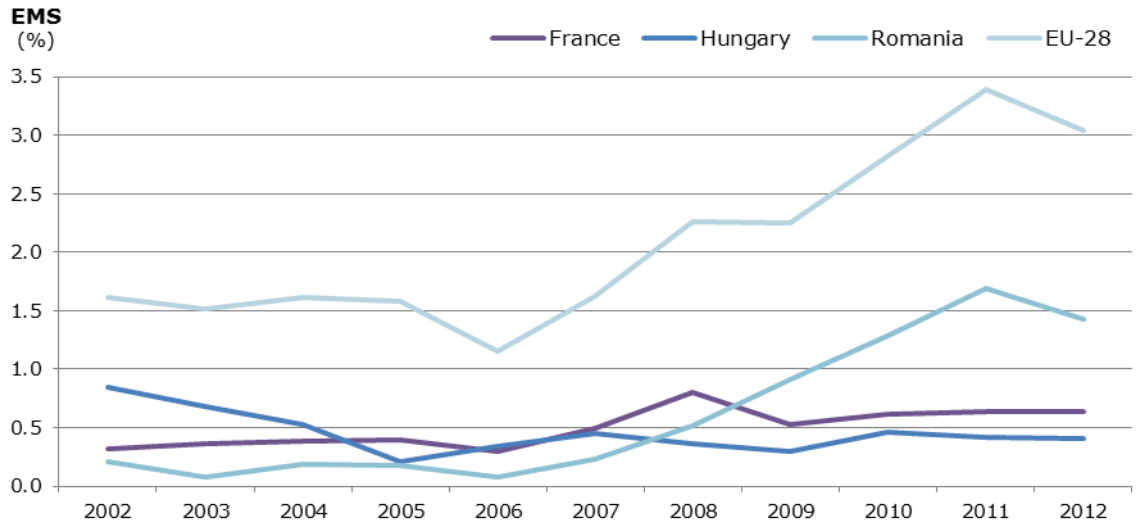
Figure 9. Evolution of EMS for the EU-28, France and Germany, 2002-2012. Wheat (in %)



Source: Authors' calculations based on WITS and Comext databases.

[26] Both durum and soft wheat included.

Figure 10. Evolution of EMS for the EU-28, France, Hungary and Romania, 2002-2012. Maize (in %)



Source: Authors' calculations based on WITS and Comext databases.

2.8. Milling industry products

In this chapter, the EU-28's international competitiveness is declining from a positive starting point. The average EMS of the EU-28 was 42.5 % for 2002-2003, but this decreased to 24.9 % for 2011-2012. The drop is continuous over time. The EU-28 is a definite net exporter of these products, with an average NEI of around 0.9. Some of the products mentioned in this chapter are among the top ten in the EU-28 in terms of their average EMS over the period. These products include wheat gluten and malt. In both cases, the average EMS is close to 50 %. Again, a downward trend may be noticed, as the average EMS was approaching 60 % in 2002 and had dropped to approximately 40 % by 2012.

2.9. Oilseeds

The EU-28 is clearly not competitive in the oilseeds sector. Overall, the EU-28 EMS has declined over time, reaching close to 4 % in 2012. The NEI is stable in negative values, with an average of -0.64, while the IPR is about 33.5 % on average, with significant variations among countries. In Cyprus, Ireland and the Netherlands, nearly all oilseeds consumed are extra-EU, while in other countries like Austria, Bulgaria and the Czech Republic, the dependence on imports is lower. Table 4 summarises the average results for the three indicators in the cases of soya beans, rapeseed and sunflower seeds. In these three cases, imports exceed exports.

Table 4. Trade indicators for selected oilseeds. EU-28

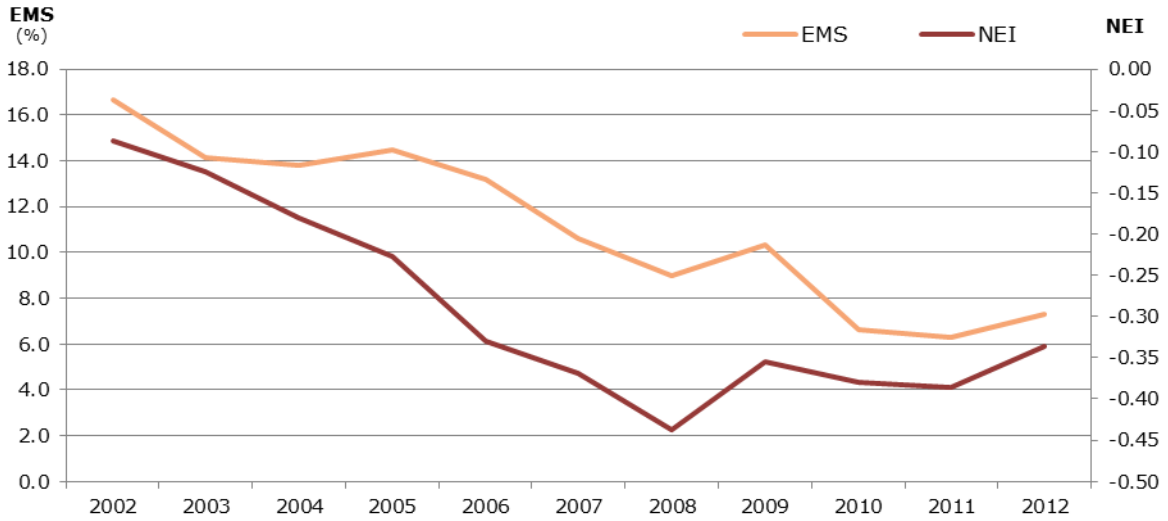
	EMS (%)	NEI	IPR (%)
Soya beans	0.10	-0.99	93.5
Rapeseed	4.88	-0.25	8.8
Sunflower seeds	26.41	-0.23	12.9

Source: Authors' calculations based on WITS and Comext databases.

2.10. Animal and vegetable fats

The loss of competitiveness in this chapter (Figure 11) is shown by the 8.5 % decrease in the EU-28's EMS, and the worsening of the NEI (from -0.09 in 2002 to -0.34 in 2012). In any event, the EU-28 has a clear leadership in olive oil. This product ranks 13th in terms of the average value of extra-EU exports, with EUR 1.2 billion annually, and fifth in terms of the EMS.[27] Specifically, the average EMS is 73.3 % with a recent growing trend. The two dominating countries are Italy and Spain, which account for over 80 % of EU-28 exports. The NEI is positive and increasing over time, while the IPR remains positive.

Figure 11. Evolution of EMS and NEI for the EU-28, 2002-2012. Animal and vegetable fats



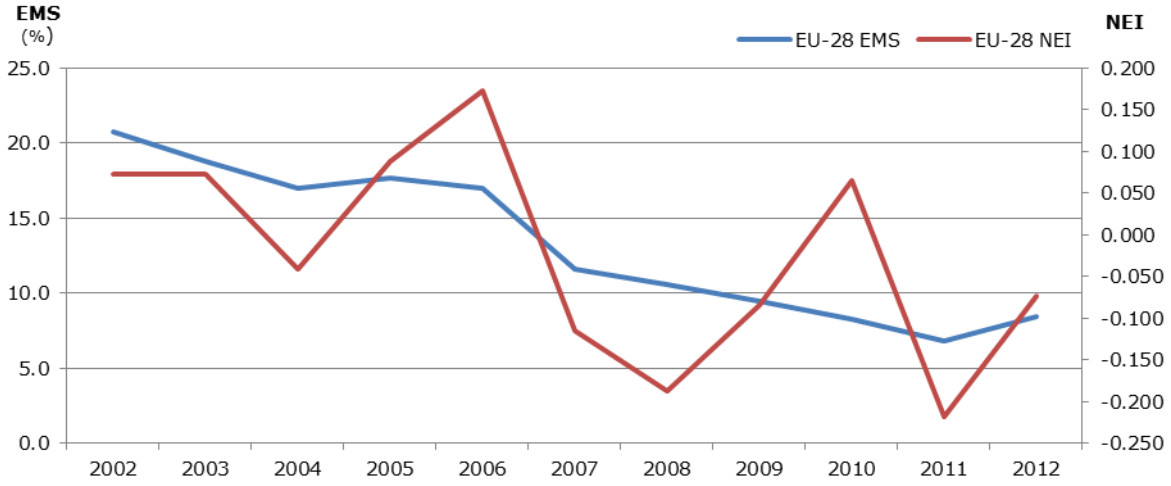
Source: Authors' calculations based on WITS and Comext databases.

2.11. Sugar and sugar confectionery

In this chapter, the competitiveness of the EU-28 is declining over time (Figure 12). First, the EMS has dropped substantially, from an average value of 19.8 % between 2002 and 2003 to an average of 7.7 % between 2011 and 2012. Second, the EU-28 has shifted from net exporter to net importer, as the positive NEI at the beginning of the period decreased to a negative value towards the end. Within this chapter, sugar (HS1701) is one of the top fifteen EU-28 exported products according to its export value (close to EUR 650 million per year), and accounts for about one half of the HS 17 chapter exports. The EU-28 is losing competitiveness rapidly, as its EMS declined from about 16 % between 2002 and 2003 to 4 % between 2011 and 2012. The traditional main sugar exporters are France and, to a lesser extent, Belgium and Germany. The three are also losing their world market share. The EU-28 is a net sugar importer, and the situation is worsening.

[27] More information on olive oil can be found in the corresponding case study (Section 4.5).

Figure 12. Evolution of EMS and NEI for the EU-28, 2002-2012. Sugar and sugar confectionery



Source: Authors' calculations based on WITS and Comext databases.

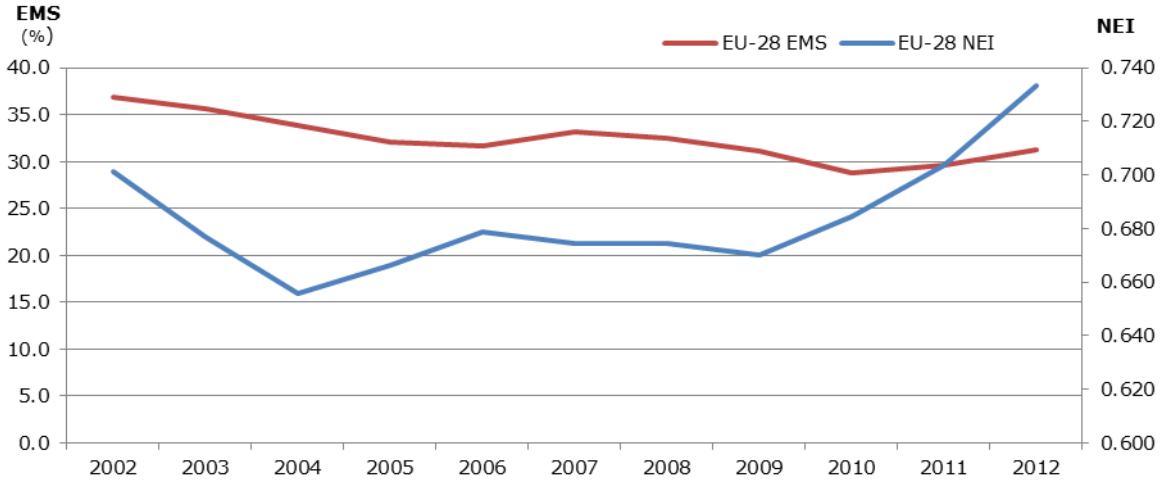
2.12. Preparations of cereals

Over the period, the international competitiveness of the EU-28 in this chapter has declined from an EMS above 35 % to around 30 % in 2011 and 2012. On the other hand, the EU-28 remains a strong net exporter, with an average NEI value of 0.70. In this chapter, the product HS1901 (malt extract, food preparations of flour, etc.) is one of the most popular goods exported by the EU-28, with an average of about EUR 2 billion annually. In this subsector, the main EU-28 exporters are the Netherlands and Ireland, both with an EMS of about 10 %. However, they differ in development as Ireland's EMS is gradually decreasing and the Netherlands' is increasing, particularly since 2008. France maintains the third position with about 6 % of EMS. Given this information, the EU-28 is a strong net exporter of this product, with an average NEI of 0.80.

2.13. Preparations of vegetables

For this chapter, the EU-28 has experienced a moderate loss of competitiveness, as shown by the modest reduction in the EMS. On average, the EU-28 accounts for 17.3 % of global exports. On the other hand, an average NEI of -0.15 indicates that its imports exceed its exports. The leading Member States are Italy and Spain, both with an average of 3.8 % in EMS. For both, the development of the indicator is similar to the general EU-28 pattern.

Figure 13. Evolution of EMS and NEI for the EU-28, 2002-2012. Preparations of cereals

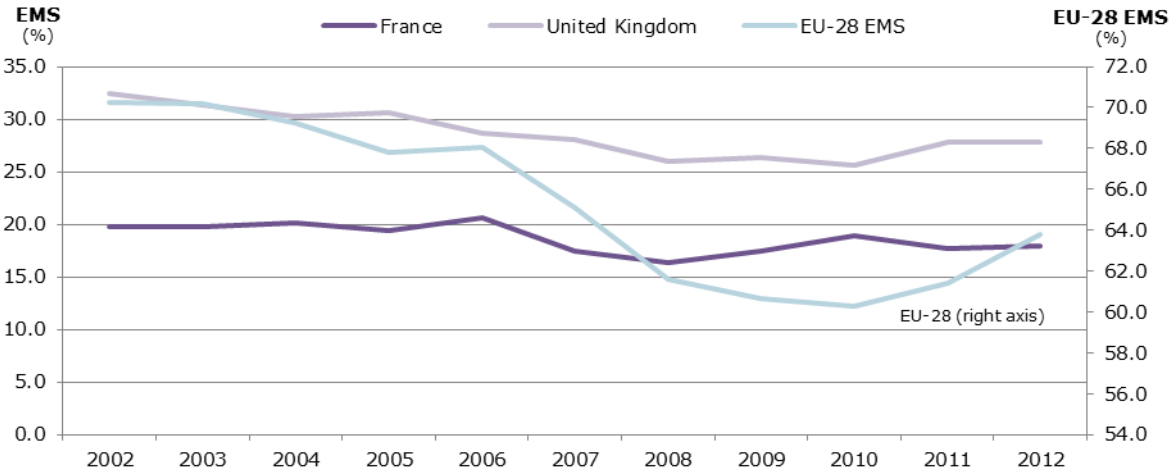


Source: Authors' calculations based on WITS and Comext databases.

2.14. Beverages, spirits and vinegar

There is no doubt that beverages, spirits and vinegar make up the leading export sector in the EU-28 agri-food sector. Considering the averages over the period, the export value of these products represents more than 25 % of the EU's total agri-food exports. Also, the average EMS over the period is the greatest out of all the chapters, being over 50 %. Furthermore, the EU-28 is undoubtedly a net exporter, as indicated by an average NEI of 0.57. However, the dynamic view depicts a less optimistic situation because the EMS shows a certain decline over time. As a matter of fact, the EMS decreased from over 56 % in 2002 and 2003 to less than 50 % in 2011 and 2012. By contrast, the NEI has experienced a general growth, primarily since 2010. Turning to the most relevant products within this chapter, the HS2208 (mainly liqueurs) ranks first in average export value out of all the EU-28 agri-food exports, representing over 10 % of EU-28 exports and EUR 6.5 billion annually. The EU-28 has also shown steady NEI values of about 0.73 over the 11-year period. The EMS for the EU-28 is 65.3 %, with most of it corresponding to the United Kingdom (28.6 %) and France (16.7 %). Lesser but still relevant EMSs are recorded for Sweden (4 %) and Germany (3 %), followed by Ireland, Italy, the Netherlands and Spain. Over time, the two leading countries have reduced their EMSs (Figure 14).

Figure 14. Evolution of EMS for the EU-28 and selected countries, 2002-2012. Liqueurs (in %)

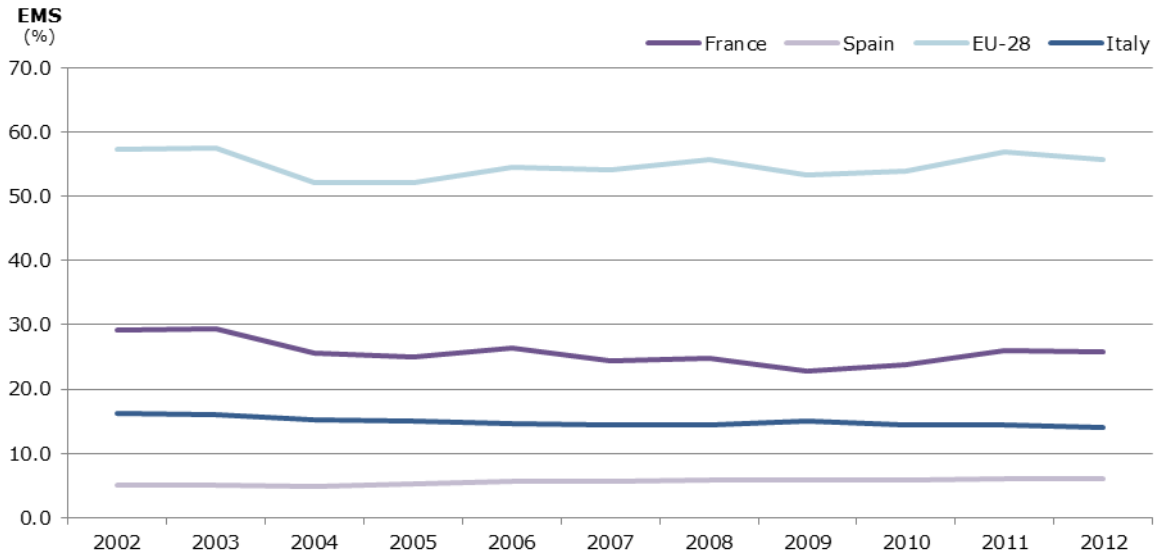


Source: Authors' calculations based on WITS and Comext databases.

Another outstanding product is wine (HS2204). Indeed, exports of wine reach a yearly average of EUR 5.9 billion, or 9.8 % of EU-28 agri-food exports. In spite of the fierce competition in international markets,[28] the EU-28 has just about managed to maintain its world market share, since the EMS declined by around only one percentage point between the 57.4 % average of 2002-2003 and the 56.3 % average of 2011-2012. Nevertheless, EMS values were slightly lower between 2004 and 2010, showing an incipient recovery. The three leading countries, with significant EMSs, are France, Italy and Spain. However, there are several differences in the development of their respective EMSs, as Spain seems to follow a gradual growth pattern, unlike France and Italy. Regarding the export/import balance, the NEI of the EU-28 is positive and increasing over time, while the IPR is simultaneously increasing, having reached 30.3 % in 2012. The third product according to relevance is the HS2203 (beer), which adds over EUR 2 billion annually, or 3.4 % of total EU-28 exports. The EU-28 is the world's top exporter, with an average EMS of 44.4 %, although it has experienced a decline since 2002. The main reason for this is the sharp decline of the contribution of the Netherlands. This decline has not been compensated by the growth of other countries, such as Germany, Belgium or Portugal (Figure 16).

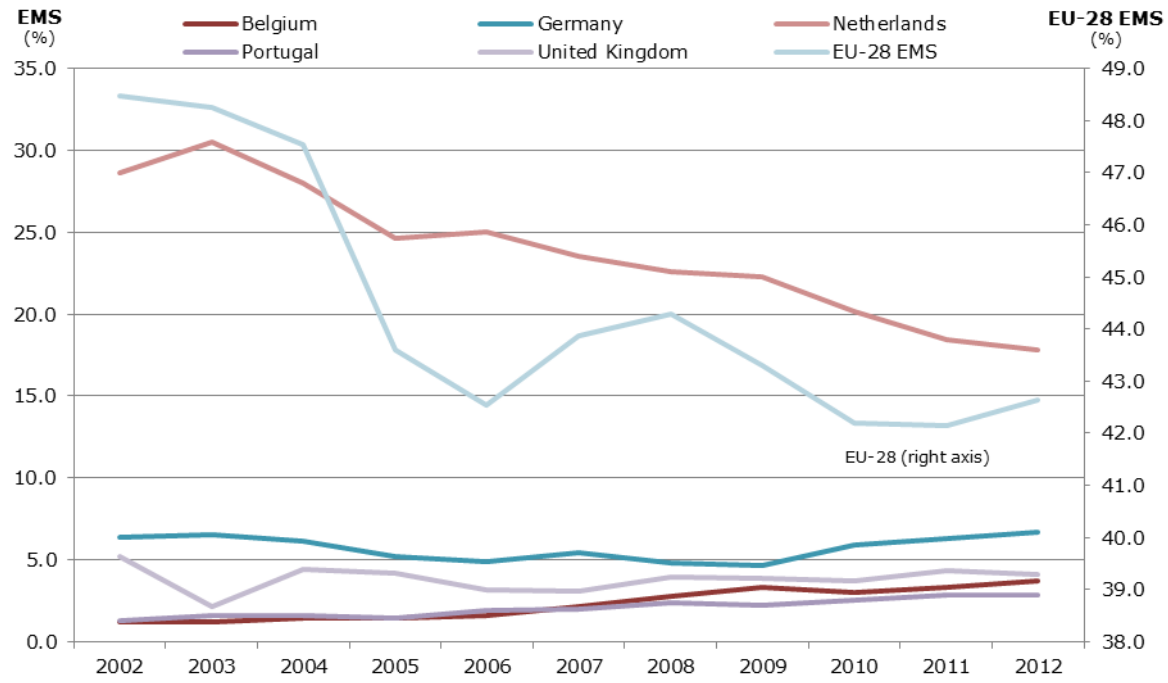
[28] See Section 4.6.

Figure 15. Evolution of EMS for the EU-28 and selected countries, 2002-2012. Wine (in %)



Source: Authors' calculations based on WITS and Comext databases.

Figure 16. Evolution of EMS for the EU-28 and selected countries, 2002-2012. Beer (in %)



Source: Authors' calculations based on WITS and Comext databases.

3. KEY DETERMINANTS OF TRADE COMPETITIVENESS

KEY FINDINGS

- Quality and R&D&I can be considered as crucial sources of competitive advantage.
- Experts' perceptions regarding the influence of policies are generally favourable to non-traditional tools outside the traditional Pillar I measures under the CAP.
- Innovation policies are expected to contribute to increasing farmers' competitiveness.
- Correcting unfair practices appears relevant in trade negotiations. This includes bilateral agreements on standards that should reflect EU citizens' concerns, as well as the competitiveness of the EU agro-food economy.

In the light of this background, two objectives will be pursued in the following pages:

(i) to investigate the **outlook for the competitive position** of the EU agro-food sector in an international context;

(ii) to analyse the **determinants of competitiveness**, in particular agricultural productivity, coordination in the food supply chain, sustainability, agricultural policies, innovation and trade policies.

3.1. A Prospective Survey

3.1.1. Methodology

An online survey was launched to interview experts from different sections of the food supply chain. Three key aspects were addressed to build the survey: a) the selection of stakeholders in the sample; b) the background of the experts consulted; c) the objectives of the survey.

a) The sample of stakeholders included an **extensive list of contacts,** representing entry points to the analysis of food chains. Networks consulted were: the European Association of Agricultural Economists, Food and Drink Europe, Pluriagri, the Joint Research Programming Initiative on Agriculture, Food Security and Climate Change (FACCE-JPI), and selected members of national and EU bodies, including COPA-COGECA, the European Commission and the European Parliament (see Annex III for a list of contacted organisations). A total of 158 respondents were retained after excluding surveys with incomplete answers. The survey was carried out in three languages, namely English, French and Spanish, and the sample therefore consisted of 65 surveys in English, 64 in French and 29 in Spanish. The surveys were completed in December 2013 and January 2014. Annex IV provides the complete set of questions.

b) The interviewed experts belong to organisations and firms based in **19 Member States**, with a significant representation (4 % or more) from France, Spain, Belgium, the Czech Republic, Finland and Italy. This corresponds to a large extent to the geographical background of the team members in this report. To cover a large number of EU Member States was not easy, but we consider that the scope of the survey is broad enough to provide an outlook for the expected competitiveness of

the EU agri-food sector. 87 % of the answers were from experts based in the EU-15 and 13 % from experts based in the EU-13.

Regarding the geographical scope of the organisations surveyed, about 57 % operate in one or several EU Member States, 40 % cover the EU generally, and 3 % are concerned only with non-EU countries. The experts' professional background also shows diversity, the two most represented groups being research organisations (34 %) and farming organisations (28 %). There is also a significant presence of public officials (18 %) and processors (15 %), with only a small representation of interprofessional organisations (5 %), retailers (4 %) and wholesalers (4 %).[29] Experts were also asked to indicate up to three sectors where they had prior knowledge. The most represented sectors were grain (39 %), milk and dairy products (28 %), fruit and vegetables (23 %) and beef and veal (18 %), but there were significant numbers (over 10 %) claiming experience in olive oil, wine, pigs, pork and sugar. Almost one third of the experts claimed prior knowledge of the agri-food sector considered as a whole.

In order to simplify the analysis and provide a deeper interpretation of the findings, some specific groups were formed. Thus, average responses were estimated for groups of stakeholders classified by origin (EU-15 and EU-13), scope of organisation (EU-wide or not), profession (researchers, farmers, processors, traders (both wholesalers and retailers) and public officials), and larger sectors (grouping the responses of experts with a background in, variously, Mediterranean products (fruit and vegetables, wine and olive oil), livestock (bovines, poultry, sheep and goats and pigs) and arable crops (grain and sugar).

c) The survey was organised into **three groups of questions**, permitting the exploration of the following:

I. The **general trends concerning the situation of the EU agri-food sector** (contribution to sustainable growth and employment and consumer behaviour), as well as trends in the competitive position of the agri-food sector in EU Member States with regard to the next decade and compared with the other main world players (the US, Canada, China, India, Australia, South Africa, Russia, Brazil and Argentina). This includes the contribution of sustainable, productive, and competitive agriculture to the Europe 2020 strategy, taking account of the growth and employment potential of rural areas while also ensuring fair competition. Experts were asked to evaluate a series of statements from 'not likely' to 'very likely' using a Likert scale (from 1 to 7).[30] The statements are listed in Annex II, and the results are presented in Sections 3.1.2, 3.1.3 and 3.1.4 of this report. Experts were also asked to indicate up to three sectors in which the EU's competitiveness is expected to improve and up to three EU Member States whose agri-food competitiveness is expected to improve.

II. The **impact of polices on the competitiveness** of EU agri-food products. While income support policies (CAP; Pillar I) have an impact on farmers' activities, rural development (CAP; Pillar II) concerns actions and resources dedicated to the EU's agriculture and food industry. Apart from this, other policy regulations may also influence the sector. Experts were asked to evaluate a series of policy measures from 'very negative' to 'very positive' following a Likert

[29] The categories were not exclusive, and the total therefore exceeds 100 %.

[30] Respondents were asked to evaluate their level of agreement or disagreement on a symmetric agree-disagree scale for a series of statements. The scale is named after its inventor, Rensis Likert.

scale (from 1 to 7). These measures will be further detailed and evaluated in Section 3.5.1.

III. **Policy recommendations.** A toolbox of measures could help Member States address the different needs relating to competitiveness in accordance with specific features of their agri-food sector. Experts were asked to select, among 12 policy areas, up to three priority areas where EU policies need to be strengthened. Policy needs will be further detailed and evaluated in Section 3.6.

3.1.2. General outlook for 2020

The experts surveyed had in the first place evaluated the general outlook for the EU agri-food economy. They were asked to assess scenarios for the year 2020, including:

(i) the ability of the EU agri-food sector to contribute to **economic growth** and to **create employment** in a sustainable way;

(ii) the possible introduction of **fairer practices in the European food chain**; and

(iii) a possible shift of **consumption patterns** in favour of local products and quality products, or, alternatively, towards the purchase of cheaper products.

Tables 5 and 6 summarise the results of the survey (detailed results are presented in Annex II). **Experts appear to believe in sustainability, quality and the potential of growth in the EU agri-food economy**, with 68% thinking it likely or very likely that the EU agri-food sector will become an engine for economic growth by 2020. Experts were more sceptical on a possible shift of EU consumers to cheaper products. This scenario was selected by 43 % of respondents, compared to the 66 % who considered likely or very likely a future scenario based on a quality agri-food sector. There is also a degree of pessimism concerning the ability of the EU agri-food sector to increase employment opportunities in rural areas (52 % agreed). Even **more pessimistic views appear regarding the likelihood that fairer practices will spread** within the European food chain (36 % indicated this scenario). Despite this, experts' views reflect a generally optimistic outlook, suggesting that sustainability, quality, growth, employment and local products are seen as elements of a feasible equation.

In some cases, particular groups showed significant differences from the sample averages. Thus, EU-13 experts proved to be more pessimistic regarding the ability of the agri-food sector to promote growth and supply sustainable production or the movement of European consumers to cheaper products. Experts with backgrounds in Mediterranean products were more optimistic when addressing employment, but more negative with respect to the future spread of fairer practices. Experts from EU-wide organisations, processors, and those with a background in livestock were more sceptical regarding a future shift of European consumers to local products.

Table 5. General Outlook. Experts' Survey

Statements	% of Total Answers			Average	Responses	Highest Differences	
	Not likely	Neutral	Likely			Below ave.	Above ave.
1	22.2	9.5	68.4	**4.93**	158	EU-13 Researchers	EU-15 EU-wide
2	10.1	17.1	72.8	**5.07**	158	EU-13	EU-15
3	24.1	23.4	52.5	**4.53**	158	EU-13	EU-15 Mediterranean crops
4	32.9	30.3	36.8	**4.03**	155	EU-15 Mediterranean crops	
5	29.7	27.1	43.2	**4.38**	155	EU-13	
6	9.0	25.0	66.0	**4.93**	156		
7	15.0	20.3	64.7	**4.77**	153	EU-wide Processors Livestock	
1	The EU agri-food sector will be an engine for economic growth.						
2	The EU agri-food production will be more sustainable.						
3	The EU agri-food sector will increase employment opportunities in rural areas.						
4	Fairer practices will spread within the European food chain.						
5	Consumption patterns will shift towards the purchase of cheaper products.						
6	Consumption patterns will shift towards the purchase of quality products.						
7	Consumption patterns will shift towards the purchase of local products.						

Source: Authors' calculations.

3.1.3. Competitive trends

Experts were asked to assess how the competitive position of the agri-food sector in the EU Member States will evolve in the next decade compared to that of the main world players. They evaluated the likelihood of the scenarios shown in Table 6. in relation to the competitive outlook of the agri-food sector in the EU Member States (from 1 = not likely to 7 = very likely) by 2020. Aspects to be considered were: the overall EU trade surplus; the trade balance in specific sectors; external demand as an export engine; R&D&I as a source of competitive advantage; the productivity gap with third countries; the differences in socio-environmental regulations and standards as constraints; and the problems related to the small size of firms in the EU. Interestingly, **quality of agri-food products and R&D&I were considered as likely or very likely sources of competitive advantage** by 73 % and 83 % of the experts respectively. In turn, there is a certain pessimism as regards the ability of the EU Member States to improve their international competitive position; only 35 % of experts believed that the EU trade surplus will continue growing up to 2020. **Almost 70 % responded that the trade**

balance will continue to be negative in significant sectors, and less than one half (46 %) claimed that EU agri-food products will rely more on external demand, which means paying proper attention to the internal market. The EU will be lagging behind the productivity levels of third countries according to 51 % of the sample: this is consistent with the findings of FoodDrinkEurope in its report for 2013 (a growing productivity gap in relation to other OECD economies). The main problems highlighted in the survey were the differences with third countries in terms of socio-environmental regulations (**78 % indicated that differences in standards are likely or very likely to hinder the competitiveness** of EU products), as well as the small size of firms in the EU (with 49 % expressing a pessimistic view on this issue).

Table 6. Competitive position statements – Group differences

Statements	% of Total answers			Average	Responses	Highest differences	
	Not likely	Neutral	Likely			Below aver.	Above ave.
1	39.9	25.3	34.8	**3.91**	158		
2	16.5	13.9	69.6	**5.01**	158		Traders
3	25.5	28.7	45.9	**4.46**	157		EU-wide Processors
4	9.6	17.3	73.1	**5.23**	156		Traders Mediterranean crops
5	5.8	11.5	82.7	**5.53**	156		
6	29.4	19.6	51.0	**4.51**	153	EU-wide Public officials Mediterranean crops	Other arable crops
7	18.8	13.6	67.5	**5.15**	154	EU-wide Public officials	
8	30.1	20.5	49.4	**4.37**	156	Livestock	Traders Mediterranean crops
1	The EU trade surplus will keep growing in broad terms.						
2	The EU's negative trade balance will continue in significant subsectors.						
3	EU agri-food products will rely more on foreign demand.						
4	R&D&I will be a source of competitive advantage for EU products.						
5	Quality will be a source of competitive advantage for EU products.						
6	The EU will be lagging behind productivity levels of third countries.						
7	Differences in socio-environmental regulations and standards will hinder the competitiveness of EU products.						
8	The small size of most EU companies will hinder their international competitiveness.						

Source: Authors' calculations.

As indicated in Table 6. , traders are differentiated as a group insofar as they argue that negative trade balances will continue in significant subsectors. This group also showed an especially positive opinion on the need for R&D and a negative opinion on the size of European firms as a constraint on international competitiveness. The negative outlook concerning the EU productivity gap and socio-environmental differences was particularly low in the case of EU-wide organisations (they are also optimistic as regards the likely of external demand).

3.1.4. Sector and country performance

Experts were asked to state in which sectors they feel EU competitiveness is likely to improve in the coming years (Table 7). It is not surprising that the present situation affects the perception of the future, so sectors that have been in crisis in the last few years could be seen as sensitive to potential improvements. This could be the case of the milk and dairy sector, which was considered to have good prospects by almost 45 %. This may be due to expected technological improvements and the policy measures adopted for the value chain (dairy package), coupled with the disappearance of the quota system (see case study in Section 4.2). The export-oriented Mediterranean sectors also met with relatively good expectations (34 % for fruit and vegetables, 34 % for wine and 23 % for olive oil). The grain sector is another that was seen as having potential (28 %). This is consistent with the medium-term prospects for the EU cereal markets, which are likely to be characterised by low stock levels and stable prices, boosted in part by demand for animal feed and energy. The meat sector appeared to have a lower likelihood of improvement, with favourable expectations below 20% of the sample for beef and meal, pork and poultrymeat, and even lower expectations in the case of sheepmeat and goatmeat (6 %). Competitiveness in sugar is only expected to improve by 14 % of the sample, contrary to the Commission's forecasts (2013d) pointing to an increase in sugar production rather than in ethanol following the abolition of the quota scheme in 2017.

Average answers for specific groups may depend on the background knowledge of the experts. Thus, experts from the Mediterranean group have more faith in the potential of fruit and vegetables, wine and olive oil. The arable crop group similarly shows a positive outlook for grain. Experts from EU-wide organisations have different opinions on olive oil and pork as sectors with positive outlook. EU-13 experts share a positive outlook for pork, but are particularly negative towards bovine and poultry. The positive outlook for milk and dairy products is considerably lower for EU-15 experts, processors and farmers. The same group also had a more negative outlook regarding the prospects for wine.

The experts' opinions on which Member States are likely to improve their international competitive position (Table 8) pointed to France, Romania, Poland, Spain and Germany as those with the best outlook (over 20 % of responses indicated one of those countries). There were also significant rates (over 10 %) for Italy, Bulgaria, the Netherlands and Hungary. These results must be considered carefully, as we understand that the potential of the agri-food sector, as the present report reveals, largely depends on a variety of factors that cannot be simplified in a single forecast. Expectations of EU-13 experts are particularly higher for Poland, Germany, the Czech Republic and the Netherlands, and lower for France, Italy, Romania and Spain. However, EU-wide organisations were relatively more optimistic in respect to Italy's and Spain's prospects, as were processors in France. Traders, however, had a less optimistic outlook for Italy, Poland and Germany. The outlook for Romania was especially positive for farmers. The lack of uniformity in the answers suggests that the evaluation of prospects depends greatly on the experts' background.

Table 7. Expected improvement in sectors - Group differences

Statements	% of total answers	Responses	Highest differences	
			Below average	Above average
Grain	27.8	42		EU-13 Other arable crops
Fruit and vegetables	34.4	52	Processors	Mediterranean crops
Wine and spirits	33.8	51	Farmers Livestock	Traders Mediterranean crops
Olive oil	23.2	35	EU-13 Livestock	EU-wide traders Mediterranean crops
Sugar	13.9	21		
Milk and dairy products	45.0	68	EU-15 Farmers Processors Other arable crops	EU-13
Bovine	17.9	27	EU-13 EU-wide	
Sheep and goats	6.0	9	EU-wide	EU-13
Pigs and pork	18.5	28		EU-13 EU-wide Processors
Poultry (including eggs)	16.6	25	EU-13 EU-wide Mediterranean crops	
Other animals	1.3	2		
Other vegetable products	11.9	18		
Other agri-food sectors	10.60	13		Public officials

Source: Survey data.

Table 8. Expected improvement in Member States - Group differences

COUNTRY	Percentage	Total answers	Highest differences	
			Below average	Above average
Austria	2.7	4		Traders
Belgium	2.7	4		
Bulgaria	14.2	21		
Croatia	6.1	9		
Czech Republic	6.8	10		EU-13
Denmark	6.8	10		EU-wide
Estonia	2.7	4		
Finland	2.7	4		
France	39.9	59	EU-13 EU-wide Mediterranean crops	Processors
Germany	20.9	31	Traders Mediterranean crops	EU-13
Greece	3.4	5		
Hungary	10.1	15		
Ireland	4.7	7		
Italy	16.9	25	EU-13 Traders	EU-wide Mediterranean crops
Latvia	2.0	3		
Lithuania	3.4	5		
Luxembourg	0.0	0		
Malta	0.7	1		
Poland	39.9	59	Traders Processors	EU-13
Portugal	4.1	6		
Republic of Cyprus	1.4	2		
Romania	31.1	46	EU-13	Farmers
Slovakia	1.4	2		
Slovenia	1.4	2		
Spain	31.1	46	EU-13 Livestock Other arable crops	EU-wide Mediterranean crops
Sweden	1.4	2		
Netherlands	10.8	16		EU-13 Public officials
United Kingdom	3.4	5		

Source: Survey data.

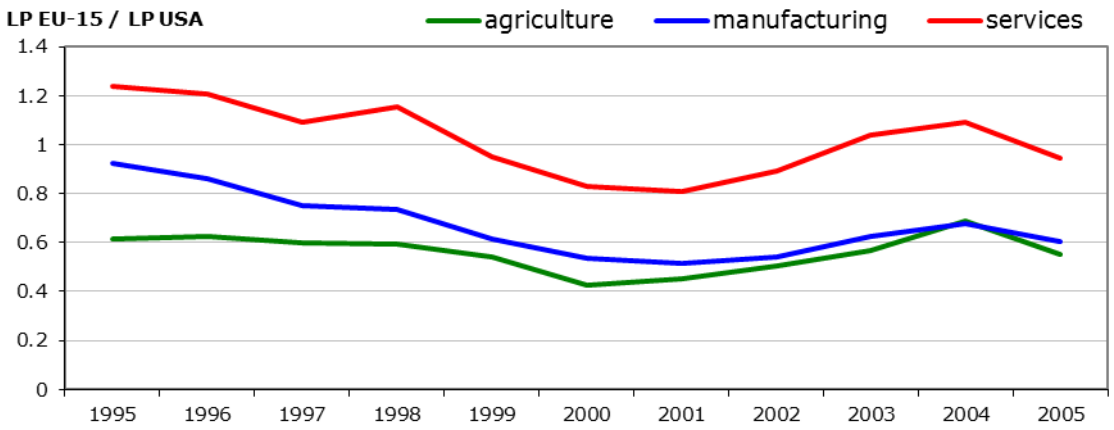
3.2. The scope for agricultural productivity

International performance does not only depend on agricultural productivity, as the EU agri-food sector relies greatly on final products. This will be shown in Chapter 4, which includes the case studies. Let us consider, however, what happens at the farm level. Is there a productivity gap in agricultural production between the EU and its main competitors?

3.2.1. The productivity gap: who is responsible?

When comparing labour productivity across industries, the EU lags behind the United States in all sectors of the economy (Figure 17). It further appears that productivity gaps across different industries show a similar pattern. Thus, productivity improvements in agriculture will largely depend on improvements in other industries. One of the key reasons for the fact that the EU lags behind the US in productivity is its late adoption of information and communication technologies (ICT). High product market regulation, low flexibility of labour markets and less openness to innovation are factors that have contributed to delayed ICT adoption in Europe.

Figure 17. Labour productivity gap between the US and the EU-15



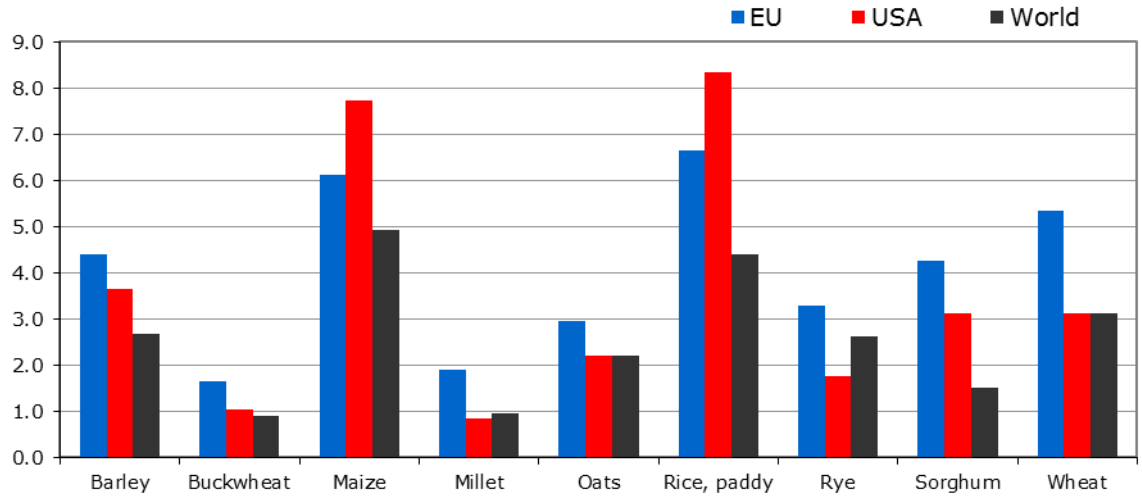
Note: Labour productivity is measured as real Gross Value Added per hour worked.

Source: KLEMS Database, 2014.

3.2.2. The yield gap

Let us explore the situation of agricultural productivity. It can be argued that **the EU has only limited scope for an increase in crop yield, as yields are already reaching the production possibility frontier**. This is shown in Figure 18, which compares the yields of cereal crops in the EU, the US and worldwide. The EU ranks highest for all crops except maize and rice. Specifically, in the Netherlands, Belgium, France, Denmark and Germany the recorded wheat yields were higher than 7 tonnes/ha. This premium position is challenged only by New Zealand, where yields reach almost 9 tonnes/ha. This suggests that any further improvement in yields on the part of the above EU Member States will probably be limited.

Figure 18. Cereal yields in 2012



Source: FAOSTAT Database of crop production (2014).

However, considerable distinctions are apparent if one examines the variations between EU Member States (Figure 19). There is still a large potential for improvement in technology in many Member States.

As to performance in animal production, **the increase in milk productivity in the US was notably higher than in the EU (Figure 20)**: today, the EU milk yield reaches only 66 % of US levels. Even in the best-performing Scandinavian Member States, yields do not reach US levels. Apart from this, there are also significant gaps within the leading EU countries. For instance, milk yield levels in Bulgaria, Romania and Greece are 60 % below those in the Scandinavian Member States.

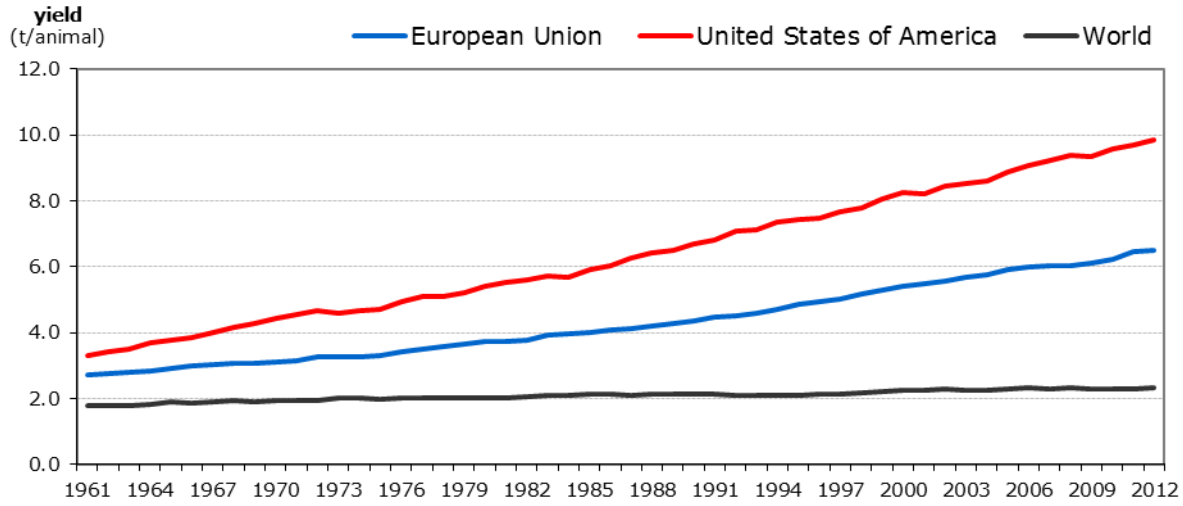
Figure 19. Wheat yields across EU-27 (calculated as average of 2003-2012)

Source: FAOSTAT Database of crop production (2014).

However, the yields themselves are not sufficient for assessing productivity, as they only refer to the productivity of an individual production factor. The TFP index is a better measure because it captures a broad set of productivity improvements, including those that save other agricultural resources than just land. Figure shows that in the last two

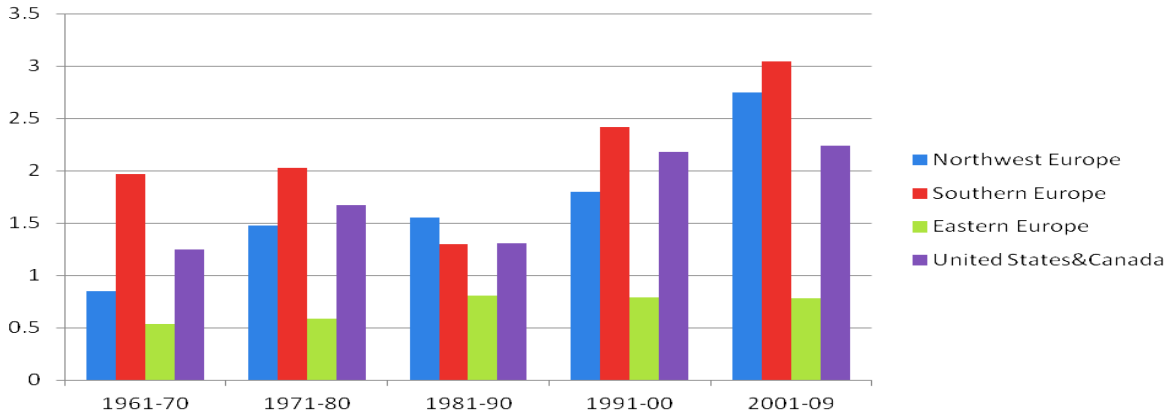
decades, the countries of **north-western and southern Europe have shown notable growth in terms of total factor productivity**, in excess of that registered in the US. By contrast, **productivity grew only very slowly in the countries of eastern Europe**.

Figure 20. Evolution of cow milk yields (t/animal)



Source: FAOSTAT Database of livestock primary production (2014).

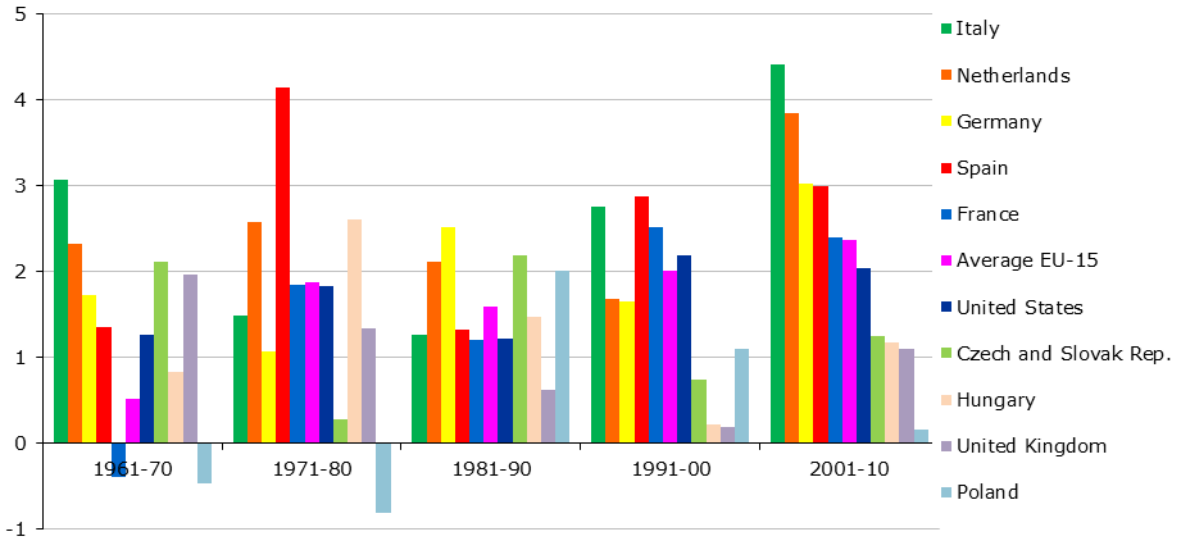
Figure 21. Annual Agricultural Total Factor Productivity growth (%)



Source: USDA (2014).

A more detailed picture is provided in Figure 22. Countries such as Italy, the Netherlands and Spain enjoyed significant growth of total factor productivity, particularly in the last decade. On the other hand, the performance of the Czech Republic, Hungary and Poland was very poor, as was that of the United Kingdom. The negative performance of the CEEC countries is influenced by their transition from centrally-planned to market-oriented economies, which led to a significant contraction of the agricultural sector in the economy. Even after the recovery, the volume of agricultural production is way below the pre-transformation level: in the Czech Republic, for instance, it has only reached 70 %. The transition period also negatively affected domestic research intensity. In the Czech Republic, government expenditure on research and development declined by almost 50 % between 1989 and 1990. The 2013 report by Ratinger and Kristkova refers to declining returns on agricultural research in the Czech Republic which might be related to the structural break in the financing and coordination of research in that country following the political changes of 1989.

Figure 22. Annual Agricultural TFP growth (%)



Source: USDA (2014).

3.3. Coordination in the value chain

Coordination in the supply chain through contracting or vertical integration is an efficient way to cope with high transaction costs (Uddin et al., 2011), whereas the use of spot or open market systems is not efficient. Transaction costs arise from contact and negotiation between buyers and sellers, and are stimulated by opportunistic behaviour and the asymmetry of information between the buyer and seller in the supply chain (European Parliament, 2010, 2011a, 2012a). Vertical coordination can take different forms. Auction and spot markets indicate the lowest level of coordination, which is characterised by short-term relationship, opportunism and limited information sharing. With increasing vertical coordination, the coordination becomes managed internally and the members of the supply chain share open information, characterised by long-term relationship and mutual interest.

In livestock production, for instance, the need for a coordinated supply chain is driven by an increased risk exposure of farmers due to the decoupling of direct payments. According to Revoredi-Giha and Leat (2008), collaborative supply chains in finished livestock may contribute to achieving higher income stability due to stable market access and less variability in the carcass price. The outcomes of the quoted study showed that '**farmers selling through producer clubs are more satisfied than farmers selling through auctions**'. It was estimated that **transaction costs** of the supply chain between producer and processor, as well as the costs of distribution and retail, increase by 80 % in the absence of a highly coordinated supply chain.

The European Commission's DG Agriculture and Rural Development recently funded a major study entitled *Support for Farmers' Cooperatives* (SFC, Bijman et al., 2012) in order to provide background knowledge that will help farmers organise themselves in cooperatives as a means of consolidating their market orientation and generating a solid market income. The factors that determine the success of producer organisations (POs)

and cooperatives in food chains relate to: (a) position in the food supply chain, (b) internal governance, and (c) the institutional environment.[31]

a) Position in the food chain

Cooperatives account for a large share of farm product market in some sectors but not in others, with substantial differences existing in the EU between sectors and Member States. In the dairy sector, the cooperatives' average market share is almost 60 %. In fruit and vegetables, as well as in the wine sector, their market share is around 40 %: in several Member States market shares of 80-100 % are typical. In the dairy and fruit and vegetable sectors, cooperatives have an important market share due to the perishability of the product, and there are therefore high transaction costs involved in trading such products. In wine and olive oil, as well, cooperatives have a substantial (though sometimes minor) market share. In the case of cattle, pigs and sheep, the animals are often sold under contract to traders or to non-cooperative slaughterhouses.

Cooperatives play an important role in helping farmers capture a share of value added. Bijman et al. (2012), the authors of the SFC study, found that a large market share for cooperatives in one specific sector or country can help increase price levels and reduce price volatility. This has been demonstrated in an SFC case study examining the dairy sector. **However, in most sectors the bargaining power of cooperatives is still limited**. In order to be competitive the cooperatives must also follow an ongoing consolidation process in all parts of the food chain, including (international) mergers of cooperatives.

b) Internal governance and organisation

In many cooperatives, **there is room for strengthening management and supervision capacities**. In some Member States, cooperatives and national legislators need to pay more attention to farmers' ability to effectively control both the board of directors and the professional management; for instance, by strengthening the capacities of the supervisory board and by allowing non-member experts on boards of directors and supervisory boards. Proportional voting rights, professional management and supervision by outsiders also have a positive effect on cooperative performance.

A long-term trend is that primary cooperatives become larger and more directly involved in marketing their products. Several cooperatives have evolved into hybrid forms, as regards both adopting organisational structures similar to those of investor-owned firms (IOFs) and developing non-user ownership structures. Cooperatives with hybrid ownership structures are still majority-owned by farmers. However, farmers do not necessarily use their services. In addition, cooperatives with hybrid ownership structures may have allocated ownership rights to investors from outside the agricultural sector. In some cases, this is required if a cooperative is willing to grow but fails to provide its members with adequate incentives. Most cooperatives prefer to internationalise by acquiring or setting up foreign IOFs, and not by merging with other cooperatives or inviting foreign farmers to become members. Avoiding the dilution of ownership (income and control rights) is given as the main reason for this tendency. There are no dissuasive legal barriers to merging across borders.

[31] The comments that follow are largely based on Bijman et al. (2012) (final report of SFC study).

c) Institutional context

In the SFC study quoted, more than 300 policy measures (European, national and regional) were identified, including cooperative legislation, competition rules and financial incentives. Considerable differences exist between Member States, in terms of policy measures adopted. An important finding, however, was the **lack of a clear link between the current support measures and the market share of these organisations**. The existence of such a link was also ambiguous in other OECD countries.

In some sectors, producer organisations and cooperatives have benefited from the CAP and a few of its reforms, such as those in the wine and F&V industries (see Sections 4.4 and 4.6). However, **one of the most challenging issues relates to the possible conflict between competition rules and producer organisations**. According to the SFC study, a number of cooperatives and producer organisations detect legal uncertainty in competition law and report high legal costs.[32] They see a lack of coherence between, on the one hand, an agricultural policy that promotes bundling under the common market organisation, and, on the other hand, a competition policy that seems to prohibit information-sharing along with other forms of collaboration. Other OECD countries (e.g. the US) have more exemptions (albeit subject to strict conditions) enabling cooperatives to rebalance market power under competition law.

The situation in the new Member States is diverse and contradictory, owing to differences in historical background, pre-collectivisation land reforms, post-collectivisation transformation laws, collective memories, policy streams and social and cultural contexts. What they all have in common, however, is the persistent impact of the communist legacy, as low trust is an obstacle to cooperative development. Building trust and coping with freerider problems are aspects that exhibit similarities with the early stages of the cooperative movement in Western Europe. This calls for trustworthy and skilful leadership.

The SFC study recommended that governments at the national and EU levels develop policies and measures to support capacity-building and technical (organisational) assistance, especially for small and start-up cooperatives. This is particularly important in the new Member States, where self-organisation is hampered by a lack of social and human capital. The low level of self-organisation and networking is not only a barrier to cooperative development but also represents a persisting societal characteristic with far broader implications.

In order to improve farmers' negotiating position in the food chain, the recent CAP reform has provided the possibility for farmers to establish producer organisations (POs) in all sectors in order to collectively negotiate contracts for the supply of their products subject to certain conditions and safeguards. This is an important extension compared to former CMO (1234/2007): it also allows the extension of the 'milk package' philosophy to other sectors. Of course, certain guidelines and legislative changes would be needed to reinforce consistency between the CMO[33] and competition provisions.[34] [35]

[32] See also: European Commission (2010), VV.AA. (2003), Desai et al. (2010).
[33] See the relevant regulation (European Union 2013c).
[34] For a detailed analysis of the changes required, see De Cont, Bodiguel and Jannarelly (2012).
[35] See also Guillem Carrau (2012).

3.4. Innovation

There are certain characteristics that distinguish agricultural research from research in other sectors (Alston, 2010). First, there is a much larger role of the public sector in financing agricultural research, and the derived social returns on research are considerably high (see Alston's meta-analysis concluding that average returns on R&D in agriculture are as high as 44 %). Second, R&D investment in agriculture tends to have a very long gestation period and the benefits are enjoyed with considerable delay (up to 20 years) - contrary to industrial research, the benefits of which are enjoyed immediately. Third, at EU level, the pursued benefits of agricultural research go beyond simple productivity increases; they also take account of broader contributions, including in the environmental and social areas. Finally, by comparison with other sectors the speed of technological transfer from science to farming practice is quite low, with a strong reliance on public R&D policy, which is less oriented to applied research and innovation. Particularly because of the low applicability of research, recent EU policy measures have focused increasingly on the innovation potential of the agri-food sector. An example is the European Innovation Partnership (EIP) in agriculture, which is a pilot initiative that highlights the importance of agriculture in the strategy for achieving smart and sustainable development. In the section that follows, the main EU policies that stimulate research and innovation in agriculture are introduced, and their positive role in increasing competitiveness is discussed.

3.4.1. European policies for R&D and innovation

Recent EU agricultural policies have placed greater emphasis on the importance of R&D and innovation for stimulating agricultural competitiveness. Various sources of funding can be used for research and innovation projects: the most important are Horizon 2020, the CAP's Rural Development Programme, and the cross-cutting initiative of the European Innovation Partnership (EIP) for Agricultural Productivity and Sustainability.

a) Horizon 2020 is the new research policy programme replacing the Seventh Framework Programme (FP7), which will dedicate around EUR 4 billion to research in agriculture. Concrete topics supported by Horizon 2020 are: food security, sustainable agriculture and the bioeconomy. The budget for agricultural research under Horizon 2020 is considerably higher than that for the previous programming period. However, if one compares this amount with the total budget for the CAP (EUR 400 billion), it may be concluded that research is not the main priority in terms of public agricultural support.

b) Through the Rural Development Programme, the Commission aims to promote innovation and knowledge transfer, recognised as an important factor of rural development. In concrete terms, the goals for knowledge and innovation transfer are: i) to strengthen the knowledge base in rural areas; ii) to connect agriculture and research; and iii) to foster lifelong learning and vocational training. These actions are financed from the European Agricultural Fund for Rural Development, under which a total of EUR 101.2 billion is dedicated to Pillar II for the period 2014-2020, as well as an additional EUR 5.1 billion targeted on research and innovation.

c) The EIP in agriculture aims to enhance the effectiveness of innovation-related actions supported by Rural Development Policy as well as the European Research Area. The focus is on creating added value by better linking research and farming practice, encouraging the wider use of available innovation measures, promoting the faster and broader transposition of innovative solutions into practice, and informing the scientific community about the research needs of farming practice.

3.4.2. Why an R&D and innovation policy is needed

On the one hand, European farmers should benefit from international research spillovers. On the other, there are three reasons why this may not be the case in agriculture. First, as Alfranca (2005) points out, the transferability of research inventions from abroad is limited by the high diversity of agriculture existing in Europe. Second, it may be further constrained by notable differences in research priorities. An example is provided by GMO technologies, which have boosted yields of corn and soya beans in the US and Brazil, but are not well accepted in Europe owing to environmental concerns. Third, empirical evidence shows that **domestic R&D effects are far more considerable than the effects of foreign spillovers**. According to Jacobs, Nahuis and Tang (2002), the TFP elasticity of domestic R&D is 37%, whereas that of foreign R&D stands at 3 %.

The primary agricultural sector has a very low innovation activity. García et al. (2012) point out that the food industry has an innovation intensity six times higher than that of agriculture. The main reason is that new approaches take too long to be put in practice, and in turn practical needs are not sufficiently presented to the scientific community. Given that in the EU small and medium-sized farms prevail, with less ambition to engage in research and innovation than is the case in other industries. This is further accentuated by the weak market position of farmers within the agri-food supply chains. This negatively affects their willingness to cooperate, which is essential for R&D activity.

Another study by García et al. (2013) shows that cooperatives have a greater tendency to engage in R&D activities, precisely due to their collaborative character. Apart from that, the generally lower skill level of farmers as compared to professions in other parts of the supply chain further complicates the situation. The smaller the producer, the lower the participation in knowledge acquisition will be, negatively influencing the innovation capability of the producer.

Paradoxically, evidence shows that farmers have the biggest potential to improve value added to the supply chain where they are more innovation-oriented. Therefore, the **EIP might be successful in increasing farmers' competitiveness**, as it will ensure a faster exchange of knowledge from research to farming and will provide feedback on practical needs to science via operational groups. It will also encourage farmers to cooperate among themselves and with other partners.

In our experts' survey, **we found a substantial recognition of the importance of research policy across all types of consulted stakeholders**. The survey on competitiveness of EU Member States in agri-food world markets revealed that around 70 % of respondents found it likely that R&D&I will be a source of competitive advantage for EU products. The respondents also expressed some concern that the EU will be lagging behind third countries in productivity terms.

There does not seem to be an unified opinion on the role of public research in agriculture. Most of the evidence is in favour of public support, which is driven by high social returns derived from public agricultural research (as reported in Alston et al., 2000). Moreover, Johnson and Evenson (1999) found that public R&D has a direct impact on agricultural TFP - unlike private domestic R&D, which affects productivity only indirectly. However, there is also evidence of possible competition between private and public R&D (Box 2). In an ideal scenario, the results of public research are discoveries constituting a public good and reducing the costs of private R&D. However, the existence of applied public-sector research might reduce the profitability of private R&D. Alfranca

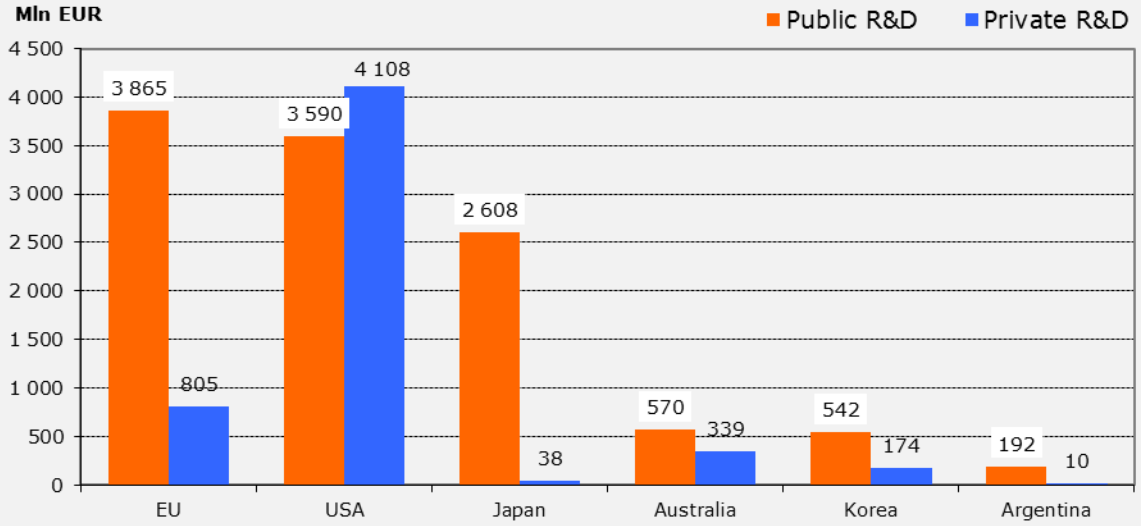
(2005) found that the EU public sector may have been overinvesting in applied discoveries with strong protection of property rights, resulting in private R&D in agriculture being crowded out. Therefore, public-sector research should mainly concern discoveries in the areas of basic and general sciences that are more complicated to protect.

Box 2. The role of business R&D in agriculture

THE ROLE OF BUSINESS R&D IN AGRICULTURE

Figure 23 compares levels of private and public R&D expenditure in the EU, the US, and other OECD countries. It is observed that both the EU and US public sectors invest considerable amounts in agricultural R&D. However, compared to the US the EU contributes very little to business research. It is clear that total public R&D levels must be maintained and increased. However, at the same time the role of private businesses should be enhanced within the concept of partnership. According to the innovation surveys, neither universities nor public research organisations are considered by firms as key partners for their innovation activities.

Figure 23. Agricultural R&D expenditure in selected countries (converted to EUR million)



Note: Data are for 2011 (EU); 2010 (Japan, Korea and Argentina); and 2008 (USA).

Source: OECD (2014), Eurostat (2014)

Public R&D expenditure in the EU is calculated as the sum of governmental and educational support to agricultural sciences (data for Denmark, France, Luxembourg, Poland and Sweden are missing). Private EU R&D figures are based on BERD estimates for agricultural sciences (only available for EU-12); data for Japan are approximated by the BERD for the agricultural sector.

3.4.3. Evaluating R&D policies

There are several reasons why R&D policy might not be effective in stimulating competitiveness, as follows:

Ambiguous research objectives and priorities

The impact assessment of the CAP with a view to 2020 states that the priority of research is to develop 'an agricultural sector that "produces more with less", overcoming the existing development path of enhancing productivity at the expense of the environment and natural resources' (European Commission, 2011). This suggests that

research should lead to advances in productivity and efficiency, while also improving sustainability, especially with respect to soil quality, ecosystem stability and climate change mitigation. However, these two objectives sometimes contradict each other. This point is emphasised by Alan Matthews (2013a), who expresses doubts about the balance between productivity and sustainability goals in the selection of winning projects for Horizon 2020. Apart from this, it is not clear what priorities should be assigned to various aspects such as bioeconomy, food industry and agricultural production.

Who is responsible for innovation and research policy?

There are some complaints about the long-standing organisational fragmentation of policy responsibility in relation to innovation in EU agriculture (House of Lords, 2012). Whereas innovation projects financed under the CAP are directed by the Commission's DG Agriculture DG, Horizon 2020 falls under DG Research. There are positive expectations that the EIP initiative would support coordination between the two DGs. Besides the unclear coordination, another important aspect is support for the policy on the part of the Member States. If there is a lack of interest from Member States, the potential offered by the new research programmes and EIP initiatives will not be fulfilled.

How can R&D policy effects be measured?

The basic indicator of measurement is the return on research, which can be calculated as the ratio between the benefit and the R&D&I expenditure. However, there are three problems with constructing such indices.

First, it is almost impossible to construct a consistent time series of R&D expenditure for EU Member States. For instance, figures for government expenditure on agricultural research are not available for the Netherlands, France, Austria, Denmark or Greece. Data for business R&D expenditure in agriculture are provided only by the newest Member States. By comparison with the US, there are very few European studies that calculate research returns for agriculture (except for some studies of individual countries such as Thirtle et al. (2008) for the UK or Esposti (2002) for Italy).

Second, the benefits of research are enjoyed only after a certain period of time, which depends on the type of research: the more basic the research, the longer the time period. Regarding innovation, the effect could be more immediate; however, there is little evidence in the literature as regards measuring time-lags of innovations in agriculture.

Third, the measures of the research effects are more complicated if there are broader objectives, as in the case of the EU. Whereas productivity improvements can be measured by various TFP indices, the sustainability objectives require specific indicators. The impact of innovation, which is targeted towards management improvements, is probably the most difficult to measure.

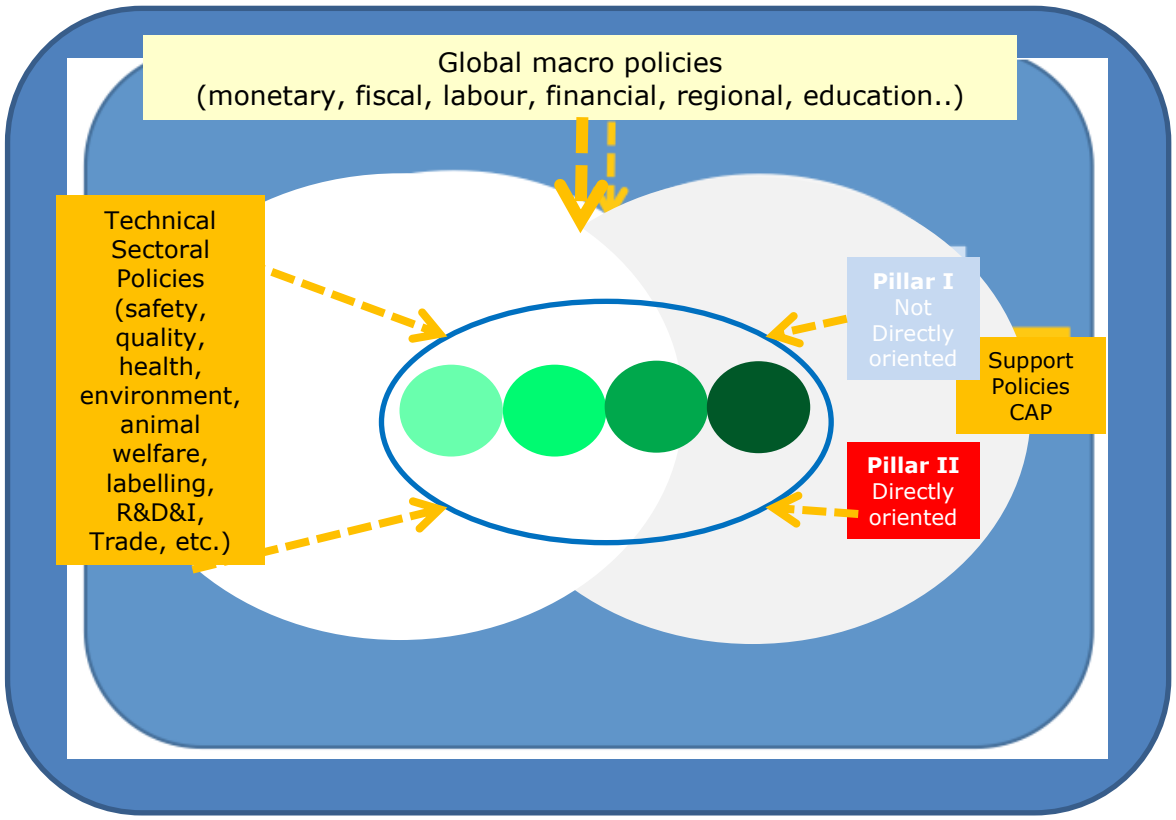
3.5. CAP assessment

3.5.1. Institutional framework

In general, competiveness policies are all those which influence costs and prices, both directly or indirectly (Figure 24). Agrofood competitiveness is influenced by: i) global macro policies; ii) technical sectoral policies; and iii) support policies (CAP). In relation to this policy, Pillar I measures are not directly oriented towards competitiveness, although they affect it. The impact of Pillar II policies is more direct and evident. Links between the CAP and competitiveness are clearly established in the Treaties, which establish that

the CAP aims at increasing agricultural productivity 'by promoting technical progress and by ensuring the rational development of agricultural production and the optimum utilisation of the factors of production, in particular labour'.[36] We will now refer to some general elements of the 2013 reform.

Figure 24. Regulation factors affecting the EU's agri-food competitiveness



Source: Own authors.

Besides, all EU policies, including the CAP, are meant to support the Europe 2020 strategy.[37] Consequently, the regulations for developing the new CAP 2014-2020, as agreed in June 2013,[38] are designed to achieve the overall objective of promoting smart, sustainable and inclusive growth.[39] The reform contributes to the objectives of the CAP without disregarding the social structure of agriculture or the structural and natural disparities existing between the various agricultural regions.[40]

The agreement provides a framework enabling direct payments (see section 3.5.2)[41] to be distributed more fairly among Member States, regions and farmers. Member States

[36] Article 39.1 TFEU.
[37] '*Europe 2020: A strategy for smart, sustainable and inclusive growth'* (COM(2010)2020, 3 March 2010).
[38] See the Commission's website (http://ec.europa.eu/agriculture/cap-post-2013/index_en.htm) and its MEMO 13/621 (http://europa.eu/rapid/press-release_MEMO-13-621_en.htm?locale=EN), as well as Council press release 11372/13 of 26 June 2013. (http://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressData/en/agricult/137615.pdf). Legal texts adopted by the European Parliament and the Council are published in http://ec.europa.eu/agriculture/cap-post-2013/legislation/index_en.htm.
[39] See speech by Dacian Cioloş, http://europa.eu/rapid/press-release_IP-13-613_en.htm
[40] The 7/8 February 2013 European Council conclusions on the MFF are available at: http://www.consilium.europa.eu/press/press-releases/european-council?lang=en&BID=76 and, particularly, http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/135344.pdf (EUCO 37/13, 8.2.2013).
[41] See European Union (2013a).

will be able to increase direct payments to **small and medium-sized farms**, and **young farmers will be encouraged to set up businesses. Member States will also be able to allocate increased amounts of aid to** less-favoured areas, **and it will be possible to allocate** coupled payments **for a limited number of products.**

Market orientation of European agriculture is a condition for growth and employment. This can be achieved by enabling farmers to become **reliable participants in the food production chain** (see Section 3.3 above).[42] New crisis management tools will be put in place. Under rural development programmes, Member States will be able to encourage farmers to take part in risk prevention mechanisms (income support schemes or mutual funds) and to devise subprogrammes to be deployed for sectors facing specific problems.

The evaluation of the impact of Pillar I on competitiveness depends on whether the reforms imply significant changes in applied market measures. Two examples of regulations that could possibly affect the market are the dairy package and the sugar reform. The Dairy Legislative Package[43] has provided a legislative framework in relation to contractual relations between milk producers and dairies with a view to strengthening the bargaining power of farmers. In a recent article, Alan Matthews (2013c) questioned the necessity and effectiveness of the dairy package, on the grounds that it focuses on relationships between producers and industry while the profitability of milk production depends on the evolution of the gross margins of the dairy farm. As for the sugar reform adopted in 2006, the EU shifted from being a net exporter of sugar to a net importer, though this situation could be partly reversed after the end of the quota system. Production in Europe will probably be concentrated in the north-western region, reflecting how policy changes can affect the regional distribution of production (European Commission 2013d).

The removal of supply constraints in the EU agricultural sector, such as the processes observed in the sugar, milk and wine sectors (see Sections 4.2 and 4.6), will probably boost Europe's most competitive areas and cause trouble elsewhere. The consequences of supply liberalisation are uncertain, but it is likely to give rise to market outcomes at Member State level, justifying a wide range of measures to enhance competitiveness, such as the quality and innovation tools foreseen in the milk package and the reform of the wine policy.

Production shifts are likely to have effects on agricultural systems. The CAP reform provides a framework for Member States, rural areas and farmers to take simple measures to preserve and enhance ecosystems that are related to agriculture and forestry. They also promote resource efficiency and the shift towards a low-carbon economy in the agricultural, food and forestry sectors (see section 3.5.3 below).

Rural development programmes will include a toolbox of measures to help Member States address different competitiveness needs according to the situation, as well as the specific needs of their agricultural and forestry sectors (see Section 3.5.4).[44] In particular, these include **knowledge transfer and innovation** (see Section 3.4 above), new forms of organisation of the food chain, and the processing and marketing of agricultural products.

[42] See European Union (2013c)

[43] Regulation (EU) No 261/2012 of the European Parliament and of the Council of 14 March 2012 amending Council Regulation (EC) No 1234/2007 as regards contractual relations in the milk and milk products sector (http://ec.europa.eu/agriculture/milk/index_en.htm).

[44] See European Union (2013b).

Table 9 shows the main agricultural policy instruments in CAP 2014-2020 and their potential effect on competitiveness. Although there is a wide range of measures within each Pillar, there is an important difference between Pillar I and Pillar II. Direct payments in Pillar I increase competitiveness in foreign markets. However, such competitiveness is dependent on public support and not on a sound basis. It is '*public-dependent-flawed competitiveness*'. Pillar II measures improve internal and external competitiveness and, once implemented, have a more sustainable effect ('*one-shot competitiveness*'), although some of them only yield results in the medium term. In fact, this way of promoting competitiveness appears as the only one capable of enhancing the productivity and efficiency of resource allocation.

Table 9. Overview of 2014-2020 CAP Tools and Competitiveness

MEASURE	Direct Effect on Holdings	Competitiveness Potential Effects
Basic payment	Lower fixed costs	Ambiguous. Positive in larger farms.
Payment for agricultural practices beneficial to the environment	Lower fixed cost	Unclear
Payment for areas with natural constraints	Lower fixed cost	Low
Payment for young farmers	Lower fixed cost	Moderate
Voluntary coupled support	Lower fixed cost	Low
Producer organisation	Lower cost/ Increase prices	Large in the medium term
Interbranch organisations	Lower transaction costs	Large in the medium term
Knowledge transfer and information actions	Lower cost/ increased prices/ opened markets	Large
Advisory services, farm management and farm relief services	Lower cost/ increased prices/ opened markets	Large
Quality schemes for agricultural products and foodstuffs	Increased prices/ opened markets	Large
Investments in physical assets	Lower cost	Large
Restoring agricultural potential damaged by natural disasters; prevention actions	Lower cost	Low/moderate
Farm and business development	Lower cost/ opened markets	Large
Formation of producer groups and organisations	Lower cost/ increase prices/ opened markets	Large in medium term
Organic farming	Lower cost of implementing standards	Depends on product differentiation
Payments to areas facing natural constraints	Lower cost	Low/moderate
Animal welfare	Lower cost of implementing standards	Depends on product differentiation
Cooperation	Lower cost/ Increased prices/ opened markets	Moderate/Large in medium term
Risk management	Lower cost	Moderate
EIP - Agriculture	Lower cost/ increased prices/ opened markets	Large in the medium and long term

Source: Own authors.

3.5.2. The issue of direct support

There is a lively debate in the literature, but no consensus, on the economic impact of direct support (Agrosynergie, 2013; European Commission, 2011). It is clear, however, that this impact varies depending on the exact nature of the payments and that **the impact of direct payments on productivity is ambiguous** (Rizov, Pokrivcak and Ciaian, 2013). Direct payments account for a significant share of farmers' income, thus enhancing the economic viability of existing farms; this implies a positive short-term impact on competitiveness. On the other hand, this effect slows down the process of farm concentration, most often associated with lower production costs, and represents a negative long-term impact of direct payments on competitiveness. Another negative impact on competitiveness is the 'greening' of direct payments. Along with the rise in prices of petroleum-based inputs (particularly fuel and fertilisers), all of these changes increase production costs, and therefore put a lid on competitiveness.

In spite of the ambivalence on the impact of direct payments previously discussed, one robust conclusion emerges: **the likely reduction in direct payments received by arable crop farmers and the growing environmental 'cross-compliance' which will be attached to these payments in coming years will reduce the competitiveness of European crops in the short run**. In some production systems, the existence of direct payments plays an important role in terms of achieving profitability. This is confirmed by the Irish example in the case of beef production: in Ireland, only 20 % of beef farms are economically viable and 50 % of gross farm output is formed by decoupled farm payments. The situation will be worse in countries such as France where direct payments will be more sharply reduced than in other Member States as a consequence of the greater flexibility allowed to individual Member States in the implementation of the new CAP. The amounts being contemplated are such that this **greater flexibility among Member States will give rise to significant internal market distortions**.

3.5.3. The issue of sustainability

Environmental challenges are considered relevant in the new CAP's discourse. However, the Commission's proposal was not well understood in many sectors of the EU agri-food economy (Mathews, 2012). The final agreement on green payments and requirements on farms has kept the main elements initially proposed by the Commission, such as the maintenance of green pastures, crop rotation and diversification in farms occupying more than 10 hectares of arable land, and the mandatory creation of an Ecological Focus Area (EFA) where the arable land is over 15 hectares. Organic farming is considered to fulfil the environmental obligations by definition.

Although the requirements do not affect most small farms, **the measures were not appreciated by farmers who did not see the greening of the CAP as an opportunity to justify public support**. Rather, they believe that environmental obligations could involve extra constraints preventing EU agriculture from competing in a globalised market.

Regarding our survey, **the new CAP orientation towards an environmentally friendly policy was not viewed with much enthusiasm among the interviewed experts**, as shown by the low proportion of positive or very positive evaluations received in the cases of agro-environmental/climate payments (41 % of respondents) and green payments (29 %). The low evaluation of animal welfare regulations (72 % of experts had negative to neutral opinions) reflects the existing debate between competitiveness and

sustainability. Experts from EU-wide organisations seemed to support more organic farming and animal welfare regulations. Those with a Mediterranean crop background also seemed keener to select organic farming measures, agro-environmental policies and geographical indications. In turn, processors and experts with an arable crop background did not tend to support an environmental shift for the CAP. Experts with a background in livestock had positive views regarding payments to less-favoured areas. Traders did not seem to favour supporting organic farming. Instead, researchers showed a marked support for green payments.

The interconnection between the different aspects of sustainability and their joint effect on all stages of the supply chain suggests that in order to improve the sustainability of farm production it is necessary to study the whole supply chain. **The challenge is how to consider tools promoting sustainability as an opportunity rather than a threat.**

3.5.4. Structural measures and rural development

The European Parliament has always asserted that rural development policy should aim to reinforce, supplement, and adjust the CAP in order to protect the European agricultural model.

The incorporation of structural measures oriented towards competitiveness has been gradual in the CAP's history and has occurred in two main phases. The first phase began with the Mansholt Plan in 1968 and finished in 2005. In that period, the milestones were: i) the three 1972 directives containing structural agricultural measures (farm modernisation; occupational training for farmers); ii) the 1988 reform of the Structural Funds (when structural agricultural policy was put under regional policy, with rural development being financed by all Structural Funds and Objective 5a devoted to the adjustment of agricultural structures); iii) the creation in 1991 of the LEADER programme; iv) the 1992 MacSharry reforms (with the introduction of accompanying measures); and v) the Agenda 2000 reform, along with the creation of the second pillar of the CAP, new structural measures, the new Structural Funds Regulation and new Objectives 1 and 2.

The second and most explicit phase began in 2005 with the establishment of the single fund for the second pillar of the CAP - the EAFRD (European Agricultural Fund for Rural Development) - and of a new system of 22 measures embedded in four axes, the first (Axis 1) being devoted to improving the competitiveness of the agricultural and forestry sectors.[45] This framework, with some amendments following the adoption of the 2009 'Health Check', formed the basis for the rural development programmes for the period 2007-2013.

It is difficult to assess what effects are attributable to specific measures of these programmes, given the nature and context of multiple intervening factors. Many of these impacts are strongly influenced by site-specific circumstances (e.g. soil, temperature, or rainfall), and may take a long time to emerge. They also depend on other intervening factors (e.g. national/regional policies or implementation mechanisms). In any case, the figures show that in terms of priority issues at EU-27 level the vast majority of resources have been allocated to the first two axes, with Axis 1 (including LEADER actions

[45] Axis 1 consisted of 15 measures mandatorily cofinanced by the Member States, with individual Member States selecting the most appropriate of these measures for inclusion in their Rural Development Programmes (RDPs).

contributing to this objective) representing 33 % of the total EAFRD contribution and Axis 2 receiving the lion's share with 46 % (EU rural development policy for 2007-2013 - European Commission, 2013f).[46] Axis 1 received more than 40 % of the total EAFRD contribution in 8 Member States: Belgium (44.5 %), Spain (42.8 %), Cyprus (43.5 %), Latvia (40.1 %), Lithuania (42.5 %), Hungary (45 %), Poland (42.6 %) and Portugal (44.4 %). All of these except Belgium, are Member States with medium or low income per capita.

The results can be considered positive, but the 2007-2013 experience gave rise to weaknesses that reduced the potential of Pillar II (Dwyer et al., 2012): low internal coherence and conflicting nature of some RDPs; very weak targeting; low additional effects and undesirable side-effects; failure to sufficiently emphasise aspects such as quality design and delivery, supporting advice, information and knowledge exchange or integrated planning for areas and/or sectors; factors dissuading innovation (e.g. risk aversion); failure to pass on lessons learned; vision limited by lack of integrated working practices (potential for better local strategic planning and implementation); and developments in R&D, the dairy package, and innovation policy being insufficiently linked to the CAP and failing to support territorial cohesion.

From this historical perspective, the rural development regulation for the period 2014-2020 resulting from the 2013 CAP reform must be seen as a new and positive step towards adapting agricultural policy to the competitiveness needs of Europe's agri-food chains. With six new priorities,[47] a new set of eligibility measures,[48] new possibilities of action for LAG (Local Action Groups) on a local development basis, the European Innovation Partnership,[49] and even an agricultural research fund linked to Horizon 2020, Pillar II meets the objectives of smart growth (former Axis 1), sustainable growth (former Axis 2) and inclusive growth (former Axis 3), as defined under the Europe 2020 strategy. It also extends the frontier of agricultural and rural competitiveness policy, with one of the three cross-cutting objectives being devoted to innovation (other than in the areas of environment and climate change). However, the budget reduction for Pillar II in the MFF 2014-2020 is greater than that for Pillar I, with -18 % at the 2013 level compared to -13 % at the 2020 level 1.[50]

The debates on the 2013 CAP reform have clearly shown that Pillar II has the most influence on agricultural competitiveness and the best potential for building capacity,

[46] The main measures for competitiveness purposes were those: a) modernisation and mechanisation through investment in physical capital and infrastructure for reducing direct production costs and making labour more productive; b) investment in human capital ensuring improved technical performance and anticipating or responding to market signals, thus improving market orientation; c) increasing the added value of products by means of quality and product innovation policies; and d) supporting the EU's agricultural, forest and agri-food sectors in becoming more environmentally sensitive, climate-friendly and energy-efficient and developing new activities with a positive environmental impact, in particular the production of green energy.

[47] Three of them are directly linked to competitiveness: i) fostering knowledge transfer and innovation in agriculture, forestry and rural areas; ii) enhancing farm viability and competitiveness of all types of agriculture in all regions and promoting innovative farm technologies; and iii) ensuring sustainable management of forests and promoting food chain organisation, including the processing and marketing of agricultural products, animal welfare and risk management in agriculture.

[48] More measures oriented towards competitiveness, more focus on outcomes, more flexibility – without axis - in their use and combination in order to better address needs and opportunities in rural areas, and more complementary and synergies between them.

[49] The aims here are to facilitate exchange of expertise and good practices, to establish a dialogue between farmers and the research community and to facilitate the inclusion of all stakeholders in the knowledge exchange process.

[50] The scale of the Pillar II reduction was particularly regretted by the Commissioner for agriculture, Dacian Cioloş, in his press statement in response to the conclusions of the European Council Summit: he noted that cuts of this nature in the rural development budget would mean less investment and consequently less growth (European Parliament, 2013b).

competitiveness and resilience.[51] The more radical proposals suggested reducing reliance on Pillar I, even with a view to its eventual phasing-out, transferring resources to Pillar II, and ensuring that the research, development, and innovation programmes are more closely linked to mid- and long-term competitiveness objectives and are better targeted.[52]

3.5.5. Quality, information and promotion

Due to the social, environmental and technical standards in place (regarding food safety, animal welfare, traceability, and other factors) and the higher costs and prices of most European food products, their competitiveness of such products depends on their reputation, as well on consumer awareness and the willingness of consumers to pay for them. This makes the EU's new quality and information policies complementary and strategic where competitiveness is concerned. Both policies increase the opportunities for producers to differentiate their products and supply information to both internal and external markets.

The current regulation governing quality schemes for agricultural products and foodstuffs entered into force at the beginning of 2013,[53] and is based on the proposal put forward by the Commission in 2010 for ensuring quality for consumers (providing information on product characteristics and farming attributes) and fairer prices for farmers (encouraging the diversification of agricultural production and protecting product names from misuse and imitation)[54]. The regulation creates a simplified regime for several quality schemes by placing them under a single legal instrument. This results in a more robust framework for the protection and promotion of quality agricultural products, thus reinforcing the existing scheme for protected designations of origin and geographical indications (PDOs and PGIs) and overhauling the Traditional Specialities Guaranteed (TSG) scheme.[55] The text also regulates optional quality terms (e.g. 'mountain product' or 'product of island farming'), and assists producers in marketing their produce locally through a new local farming and direct sales labelling scheme. The aim is to ensure a solid system to help farmers and producers adopt quality strategies.

The legislative proposals for information and promotion for agricultural products[56] were put forward in November 2013, following a public consultation in July 2011 and the Commission communication of March 2012. The new framework will have a more substantial budget (rising from EUR 61 million in the 2013 budget to EUR 200 million in 2020). The new policy will focus on promotion outside the EU and on multi-country programmes. In the future, a European executive agency will manage the European

[51] The reform of the first pillar does not change the essence of its relationship with competitiveness, other than if conditions for receiving aids are taken into account. If the issue of competiveness is considered under the question 'are Europe's farmers incentivized to produce for the market?', the answer is in general positive, and this means that every reform since 1992 has indirectly improved competitiveness. However, if 'green conditions' are put on the table, it is necessary to examine to what extent they will increase costs or reduce farmer's adaptation.

[52] The data on R&D and innovation indicate that food and drink companies' level of investment has been relatively stable. Among the top 1000 companies investing in R&D in all sectors of the EU economy in 2010, 37 food and drink companies invested a total of EUR 2.3 billion, corresponding to 2.2 % of investment.

[53] Regulation (EU) No 1151/2012 of the European Parliament and of the Council of 21 November 2012 on quality schemes for agricultural products and foodstuffs.

[54] Wines, aromatised wines and spirits remain covered by separate legislation.

[55] In addition, the current regulation makes registration faster, clarifies the rules on controls, makes it compulsory to use the PDO and PGI logos for products of EU origin from 4 January 2016 onwards, creates a legal basis for including third-country GIs that are protected through bilateral agreements in the EU register, establishes a legal basis for financing defence of the EU logos, and recognises the role of producer groups.

[56] A trilogue agreement was reached between the Commission, the Council and the European Parliament on EU promotion on 1 April 2014.

promotion strategy.[57] The MEP proposals for promoting EU products in the internal market and launching information campaigns abroad on EU standards are well oriented. All this will help increase demand for European foodstuffs and increase their competitiveness.

3.5.6. Experts' opinion

Our experts' survey contained a set of questions that provided an assessment of both new and already existing CAP measures. Experts were asked to give their opinion on the influence of both new and old policy tools for the competitiveness of EU agri-food products, on a scale from 1 (very negative) to 7 (very positive). **Perceptions of the influence of the policy tools were generally favourable to non-traditional tools outside the main CAP instruments.** Positive or very positive evaluations were given to research and innovation instruments (92 % of the consulted experts), farm restructuring, investment and modernization (90 %), producer organisations (73 %) and measures that strengthen the framework for geographical indications (66 %). Positive evaluations were also attached to local market promotion (57 %). Although lower, there were also positive evaluations attached to the new Community framework for balancing the food chain (54 %) and to organic farming (54 %). Some Pillar I instruments were observed to have positive effects on competitiveness, although they were more neutral. This was the case of non-core Pillar I measures, including coupled support (53 %) and payments to less-favoured areas (52 %). Less positive views were expressed on decoupled support (evaluated positively by only 46 %).

Evaluation of the CAP measures varied between the different expert groups (Table 10). EU-13 experts revealed significantly less enthusiasm for green payments, coupled support, the framework to balance the food chain, and geographical indications. At the same time, their opinions were less negative on decoupled support, measures to promote producer organisations, and local market promotion. Experts from EU-wide organisations were more sceptical on decoupled payments and coupled support.

[57] This includes allowing labelling to specify the origin of products and their brands, within certain limits; extending eligible beneficiaries to include producer organisations and the range of products eligible for inclusion under European quality systems, particularly for processed agro-food products (e.g. pasta); simplifying administrative procedures; facilitating the management of programmes developed jointly by organisations from several Member States; and increasing EU cofinancing.

Table 10. Impact of polices on competitiveness

Statements	% of total answers			Aver.	No. answers	Highest differences	
	Not likely	Neutral	Likely			Below aver.	Above ave.
Decoupled support - basic payment	28.5	25.8	45.7	**4.20**	151	EU-wide	EU13
Green payments	36.4	35.1	28.5	**3.79**	151	EU-13	Researchers
Coupled support	28.7	18.0	53.3	**4.46**	150	EU-13 EU-wide	Processors
Payments to less-favoured areas	19.6	27.5	52.9	**4.52**	153	Other arable crops	Livestock
Organic farming	19.1	27.0	53.9	**4.55**	152	Processors Traders Other arable crops	EU-wide Public officials Mediterranean crops
Producer organisations	11.8	15.1	73.0	**5.12**	152	Traders	EU-13
Farm restructuring – investment – modernization	4.6	5.9	89.5	**5.78**	153		
Agro-environmental – climate payments	31.2	27.9	40.9	**4.19**	154	Processors Other arable crops	Mediterranean crops
Research and innovation instruments.	1.9	6.4	91.7	**5.93**	156	EU-wide	
The new Community framework to balance the food chain	11.9	34.4	53.6	**4.75**	151	EU-13	
Animal welfare regulation	49.0	21.9	29.1	**3.64**	151	Other arable crops	EU-13 EU-wide Researchers
Local markets promotion	15.0	28.1	56.9	**4.78**	153		EU-13
Geographical indications normative framework	7.2	26.8	66.0	**5.01**	153	EU-13	Mediterranean crops

Source: Survey data.

3.5.7. Evaluation and summary

There is tension between globalisation, liberalisation and market access, on the one hand, and social, environmental and technical standards which reflect the citizens' preferences, on the other hand. The challenge is to maintain a balance between policies addressed to competitiveness and other societal goals.

The EU strategy aims to guarantee such a balance by focusing on the creation of value added. Many recent changes in EU policies, including the 2013 CAP reform, are targeted on increasing productivity and value. Examples include the policy for information and

promotion for agricultural products, the agricultural product quality policy, and the sectoral reforms concerning products such as vegetables and wine.

The measures most likely to increase true competitiveness are structural. This makes the CAP's Pillar II an appealing part of the strategy. In particular, support for knowledge transfer and information, advisory services, setting-up of producer groups and organisations, the EIP for Agricultural Productivity and Sustainability, and the LEADER Local Action Groups, may have a substantial impact. The new forms of support for POs and interbranch organisations under Pillar I could strengthen this positive approach. Direct support measures, even though they could be cost-saving manly for medium-sized and larger farms, involve a dependency on public support that should finally evolve towards a better-targeted design in future reforms.

The 2013 CAP reform gives more power to Member States. This could be considered a rational choice given the significant differences within the EU. However, as Pillar II measures require national cofinancing and some Pillar I measures require collective action, differences between Member States may mean unclear final results. Structural change and the land market continue to depend on national institutions. Further efforts may be needed to provide structural support to the most vulnerable regions and chains.

3.6. Trade negotiations

The effectiveness of multilateral trade negotiations in terms of strengthening the EU model of globalisation in the world has been limited (Sauvé et al., 2012). Many countries have proved reluctant to use multilateral trade negotiations as a way to expand their trading opportunities (Mathews, 2013b). International trade negotiations were seen as relevant by the consulted experts for creating the conditions for a better integration of EU agri-food products in global markets.

Many of the experts consulted (Table 11) **believe that the EU should keep an active position in correcting unfair practices in international trade** (European Parliament, 2011b). 83 % see the differences with third countries regarding socio-environmental regulations and standards as a serious problem. It is perhaps not surprising that almost **half believe that the key strategy that the EU should follow should be to ensure a level playing field with third countries**. In addition, support was expressed for the following: promotion of European standards at international level (44 %), enabling better access for SMEs to global markets (43 %), monitoring imports to prevent unfair trade practices (39 %), and stressing international transparency on non-tariff measures (32 %). **Farmers were, unsurprisingly, the most supportive of actions to ensure a level playing field and of monitoring unfair practices**, in other words of opening the gateway to an international agenda less oriented towards tariff liberalisation and more towards promoting European standards.

As for the desirability of negotiating bilateral agreements, only 15 % of experts gave priority to completing negotiations with emerging countries. 8 % and 6 % prioritised negotiations with the US and Mercosur respectively. There was rather more interest in deeper integration with the southern and eastern Mediterranean countries (17 %). Surprisingly, two areas in the sample that were not considered important were surveillance of intellectual property rights protection (8 %) and stricter discipline regarding third-country export restrictions (7 %).

Table 11. Policy recommendations by the surveyed experts

Statements	Percentage	Responses	Highest differences	
			Below average	Above average
1	43.0	68	EU-13 Traders	Other arable crops
2	49.4	78	EU-13 EU-wide Researchers Mediterranean crops	Farmers
3	38.6	61	EU-wide Mediterranean crops	Farmers Traders Processors
4	31.6	50	EU-13	
5	44.3	70	Traders Processors Mediterranean crops	EU-13
6	8.2	13		Other arable crops
7	31.6	50	Other arable crops	EU-13 Mediterranean crops
8	15.2	24	EU-13	EU-wide
9	7.0	11		
10	7.6	12		EU-13 EU-wide Mediterranean crops Livestock
11	6.3	10		EU-13
12	17.1	27		
1	Better access of SMEs to global markets.			
2	Ensuring a level playing field with third countries.			
3	Monitoring imports to prevent unfair trade practices.			
4	International transparency on non-tariff measures.			
5	Promotion of European standards at international level.			
6	Surveillance on intellectual property rights protection.			
7	External promotion for EU products.			
8	Focus on trade negotiations with emerging countries.			
9	Stricter disciplines on export restrictions on third countries.			
10	Complete negotiations for a partnership with the US.			
11	Complete negotiations for a partnership with Mercosur.			
12	Deeper integration with southern and eastern Mediterranean countries.			

Source: Survey data.

The Bali Package was seen as realistic and pragmatic. The agreements could well be observed as a down-payment or 'early harvest' on a larger set of issues under negotiation as part of the Doha Round. However, **the mini-package can also be seen as a sign of failure in the multilateral system to move towards trade liberalisation**, reflecting in particular the conflict between emerging economies and the OECD trading powers. In fact, **many countries look at bilateral trade negotiations as a more practical road map for integration in the international markets**. The advantage of this approach for the EU is that the regional strategy seems to be an easier way of negotiating standards and 'behind-the-border' barriers.

Box 3. The 'Bali Package'

THE 'BALI PACKAGE'

At the Ninth Ministerial Conference of the WTO held in Bali, Indonesia, from 3-7 December 2013, ministers adopted the 'Bali Package'. The Bali Package is a series of decisions aimed at streamlining trade, giving developing countries more options for providing food security, boosting trade in least-developed countries, and helping development in general. In fact, this package of decisions and declarations of intentions addresses a small subset of the issues which form the agenda for the series of multilateral trade negotiations launched in Doha in 2001. Originally, this series was planned to last for four years and was expected to be concluded in Hong Kong in 2005. However, no agreement was reached at that time, or at subsequent ministerial meetings held since then. Thus, the Bali Package has sometimes been described as the first agreement among WTO members since its formation in 1995. The most significant component of this package for global commerce is trade 'facilitation', which is about cutting red tape and speeding up port clearances. The issue which was most controversial in Bali related to the status in the WTO of public stocks held by governments for public security purposes. A compromise on this issue was eventually reached, making the agreement on the package possible.

In agriculture, two main decisions were adopted: (a) WTO members agreed not to challenge measures, through the WTO Dispute Settlement Mechanism, used by developing countries to support traditional stable (food) crops to facilitate public stockholding programmes for food security purposes; and (b) WTO members must evaluate the allocation of import licences and consider the allocation of new licences when TRQs are under-filled for reasons other than those which would be expected to be followed by a normal commercial operator. For further details, see https://mc9.wto.org.

The EU is actively involved in a series of bilateral fronts, with various types of scopes and regions (von Lampe and Jeong, 2013; Bureau and Jean, 2013; European Commission, 2012c, 2013b, 2013f; European Parliament, 2012b, 2013a). Negotiations with Canada are progressing, with the key issues being GIs and TRQs on meat and dairy. Talks with Japan have already started, while those with India and Thailand are at a more advanced stage. GIs are a key element of negotiations with Vietnam, Malaysia and China, with special attention being paid to wine and alcoholic beverages. The way forward for an FTA with Andean countries has been paved, with Ecuador in the process of joining negotiations. The agreement with Central America has entered into force provisionally. Agreements will be initiated in the coming months with Georgia and Moldova. The process with Armenia and Ukraine has been blocked because of contradictions with the Eurasian Customs Union in the case of the former, and the escalating political crisis in the case of the latter. Negotiations in the ACP region are progressing in certain countries.

Offers in the exchange of market access with Mercosur are expected shortly. Negotiations resumed in 2010 following suspension in 2004 due to substantial differences in the trade section of the agreement. Preparations for the conclusion of the agreement are ongoing (European Commission, 2013b). Agriculture plays an important role in the anticipated

association agreement given that the EU, being a net importer of Mercosur agricultural products, accounts for more than 50 % of Mercosur exports of agricultural products.

The steps taken towards a Transatlantic Trade and Investment Partnership (TTIP) between the US and the EU illustrate the EU's attraction to the regionalism alternative (European Commission, 2013f). The EU enjoys a surplus in agricultural trade with the US, mainly due to beverage exports, and potential gains are expected for US exports related to tariff reductions in the EU. It is clear that the treatment of sensitive products and standards by the EU is crucial for the completion of a successful negotiation (Hansen-Kuhn and Suppan, 2013; European Parliament, 2012b, 2013a). Differing food safety is a key issue in trade negotiations between the US and the EU. Trade disputes within the WTO have involved genetically modified organisms (GMOs) and veterinary growth hormones that are controlled or prohibited in certain Member States. TTIP negotiations could lead to the lowering of EU standards on meat and poultry. In short, **the TTIP risks shifting standards towards the 'lowest common denominator'** (Hansen-Kuhn and Suppan, 2013) or adopting a deregulatory approach whereby specific regulations do not exist. **We believe, instead, that a successful agreement on standards, reflecting EU consumer concerns, is possible**, as the EU and the US have been able to deal with delicate issues in the past. This is reflected by understandings on wine (2006), beef hormones (2009) and organic equivalence (2012). As mentioned in Section 3.5.1, there is a strong concern among the experts consulted over the impact of differing regulations on animal welfare, which are more strict in the EU than in the US and Mercosur.

Box 4. Impact of bilateral agreements on a sensitive meat sector

IMPACT OF BILATERAL AGREEMENTS ON A SENSITIVE MEAT SECTOR

According to an independent study by the Centre for Economic Policy Research (Francois et al. 2013), the Transatlantic Trade And Investment Partnership could bring the EU an economic gain of EUR 119 billion per year once the agreement is fully implemented, and boost the GDP of the EU by 0.5 %. The importance of EU-US trade also relates to agriculture. Let us consider the meat sector, for example. A major issue for TTIP negotiations on beef is sanitary and phytosanitary (SPS) measures. Regarding the exports of beef from the EU to the US, the latter banned EU exports because of the existence of Bovine Spongiform Encephalopathy (BSE). The US recently announced a lift on the ban of EU exports to the US. There are also high expectations from North America to tackle the issues of hormone use and beta-agonist in the TTIP negotiations. If the negotiations are completed successfully, it is expected that they will bring a positive result for European agriculture as a whole; however, for certain meat-producing sectors, the short-term effect could be negative (European Commission, 2013a). In this case, the production systems in Europe that would be most affected are grain-fed beef systems, such as those for Spanish feedlot. Lower quality beef originating from dairy cow herds, which is mostly used for minced meat, would not be competitive for US exports.

Regarding the Mercosur agreement, the impact assessment study prepared for the European Commission (Kirkpatrick and George, 2009), under the full liberalisation scenario of trade between the EU and Mercosur, it is anticipated that increased imports of beef and chicken would mount pressure on EU producers (see also Burrell et al., 2011). According to the Copa-Cogeca Report (2011), direct losses due to increased imports would reach EUR 16 billion, and indirect losses from lower beef prices would reach around EUR 9 billion in the EU beef sector alone. Although these estimates might be exaggerated, according to DG Trade there might be a negative social impact related to the fall in rural employment, particularly in marginalised areas. Furthermore, there are strong environmental concerns given that the significant increase in meat production in Latin American countries would cause adverse land use changes connected to loss in global biodiversity, increased deforestation, and visibly raised levels of emissions.

4. CASE STUDIES

KEY FINDINGS

- The competitiveness of every actor in the value chain is closely linked to that of the others.
- A major driver of future world trade will be the demand for basic products.
- Domestic pressure to strengthen the current tools for safety nets will increase.
- The producer base in most sectors is fragmented, which requires enhanced coordination in the value chain and in consolidation processes among companies.
- The EU will maintain its current privileged position in the world markets by enhancing image and value.

Relevant sectors were investigated (Table 12) with reference to how policies and regulations have been affecting competitiveness. Case studies refer to wine, beef, grains, milk and dairy products, olive oil, and fruit and vegetables, all of which have been influenced by trade regulations and CAP reforms.

Table 12. Case studies

CASE STUDIES	
Sector	**Issues**
Grain (cereals and other animal feed)	Multilateral trade negotiations, biofuels, price volatility, new actors.
Dairy	End of dairy quota, dairy package, animal welfare and standards, role of co-ops.
Fruit and Vegetables	Market access issues, non-tariff measures, producer organisations.
Beef	Mercosur and US negotiations, animal welfare, health issues, environmental standards, coupled support.
Olive oil	Quality standards, promotion, new markets.
Wine	CMO reform, promotion, intellectual property rights, emerging markets.

Source: Authors' elaboration.

4.1. Cereals and cereal-based food chain

4.1.1. EU's international position

Table 13 shows the evolution of EU market shares of extra-EU exports per year between 2002 and 2012 for each Member State and for the EU as a whole. Generally speaking, the year-to-year variability in these market shares is greater than the total variation during this eleven-year period. The EU-28 market share, assessed on a three-year average, increased from 8.1 % to 8.8 % for the total amount of cereals, i.e. a small gain over a long period. For wheat, the market share increased from 11.9 % to 15.8 %, and for barley it declined from 28.2 % to 23.8 %. In this connection, a comprehensive study was conducted for the European Commission in 2012 which provides us with useful

information (cf. LMC International, 2012). It appears that over the 2000-2010 period, total European exports of common wheat increased from 10.60 to 16.35 million tonnes (measured on a four-year average), whereas barley exports declined from 6.02 to 3.40 million tonnes. For maize and for durum wheat, the EU is a net importer. Imports are also growing for maize, having reached 6.76 million tonnes (also measured on a four-year average) at the end of the same period.

These data suggest that **Europe has been able to maintain its international competitiveness for soft wheat at a fairly stable level and that it has lost some ground as regards other cereals**. This conclusion is reinforced by the comparative analysis of production costs for various cereals[58] which suggests that the EU has a production cost advantage over the US for wheat, but that the opposite is true for maize. In the case of barley, Russia and Ukraine seem to have lower production costs, and the same appears to be true for soft wheat, particularly in years when these countries do not face serious drought and have good yields.

Table 13. International Market Shares of the EU-28 for Total Cereals, Wheat and Barley, per Year, 2002-2012

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total Cereals	8.78	9.73	5.66	7.60	7.44	6.92	9.38	8.65	9.89	8.72	7.72
Wheat	12.03	14.30	9.41	11.40	13.59	9.17	16.59	17.90	19.43	15.18	12.69
Barley	29.47	45.49	9.56	35.29	22.04	41.48	21.76	7.24	27.20	24.80	19.36

Note: Intra-EU market is excluded.

Source: Authors' calculations based on Comext and WITS data.

Previous trends can be interpreted as resulting from a set of drivers: growing international demand for soft wheat in the last decade; a strong demand for bio-fuels linked to supporting public policies, in particular in the US and Europe; a strong demand for animal feed in Asia, in particular in China; and finally, the competitiveness of Latin American countries such as Brazil and Argentina in producing maize and soybean, which permits them to supply the bulk of Asian import needs. In addition, Black Sea countries have been able to increase their production and exports of cereals quite significantly, but with major year-to-year variations. European wheat exports are facilitated by the proximity of growing markets, in particular in North Africa and the Middle East, and by generally good export logistics.

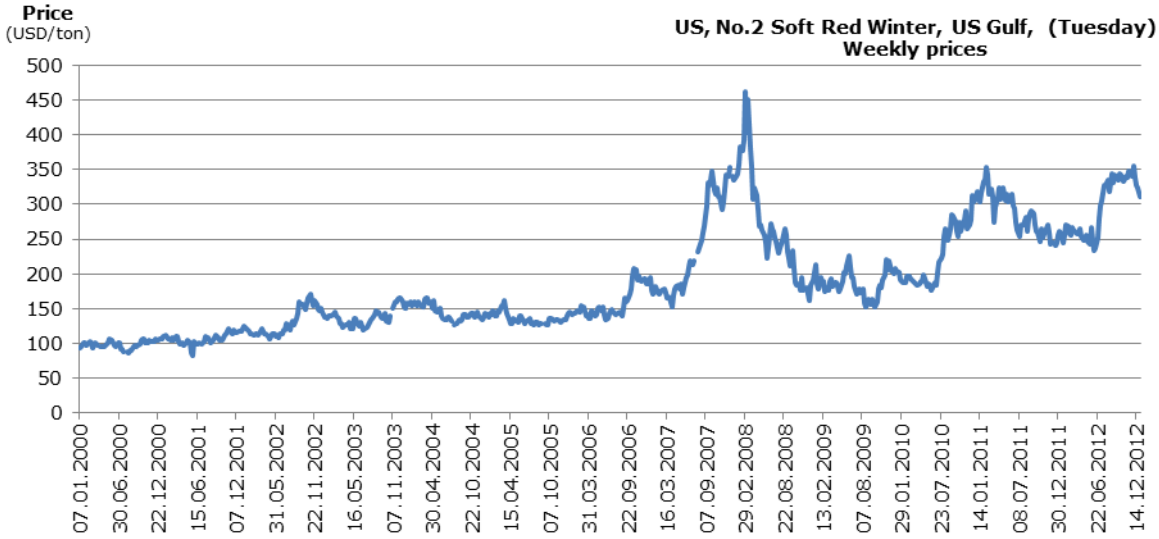
4.1.2. Impact of EU policies

Successive reforms of the CAP since 1992 have brought domestic prices of cereals into line with international prices. This has clearly enhanced the competitiveness of European grains, in particular for the domestic markets of animal feed ingredients. For international markets, this alignment of domestic prices with international prices has greatly reduced, if not eliminated, the need for export refunds. **Coincidentally, international prices for grain have risen sharply since the reform was initiated**. These **prices, however, are highly volatile**, although the general trend is quite clear and significant (Figure 25). European production costs have also increased, but not as much. Therefore, the

[58] See a detailed analysis in the cited LMC International study.

international competitiveness of European cereals has been enhanced since the reform process began. This undoubtedly cushioned the shock of the reform for European cereal farmers, who, in addition, benefited from direct payments.

Figure 25. Evolution of weekly soft wheat international prices, 2000-2012



Source: FAOSTAT database.

Several public policies may have a long-term impact on productivity. This includes better restrictions on the use of GMO seeds and chemical inputs, in particular fertilisers and pesticides. As regards GMOs, many controversies dominate the public debate. **The long-term impact on competitiveness of current regulations is most likely negative**, as illustrated, for instance, by the contrast between the growth in average yields of **maize** in the fertile regions of Europe compared to the growth of yields in the Midwestern United States over the last ten to fifteen years[59]. The impact on **wheat** appears to be less dramatic, as no major competitor seems to have yet developed and adopted GM seeds for this product.

Intervention prices have become less relevant in recent years. Farmers' organisation leaders still view them as safety nets, and their arguments seem persuasive: the very existence of these mechanisms, even if they have not been effective in recent years, reduces risks in the eyes of the cereal growers, and as such, they have an impact on their behaviour. The same is true of insurance schemes, both those which already exist and those which are anticipated. Admittedly, this topic is controversial the world over, as illustrated, for instance, by the current debates in the US, where the issue of public support for insurance schemes represents a central and highly controversial section of the new 'Farm Bill'[60]. There is no doubt that reducing the risks faced by European cereal farmers would enhance their competitiveness, and it would serve to strengthen the comparative advantage of European soft wheat in particular, given that Europe is probably the only major producing region in the world where yields of the crop are consistently high. Year-to-year variations are much less than in other producing

[59] Between 2000 and 2007, US corn (maize) yields grew at approximately five times the rate of those in the (EU-27) Member States. In those seven years, national average corn yields in the US increased by 0.91 metric tonnes per hectare. During the same period, average EU-27 corn yields increased by just 0.18 metric tonnes per hectare (USDA, 2008 and FAOSTAT, 2008).

[60] See:http://www.usda.gov/documents/usda-2014-farm-bill-highlights.pdf
http://www.ers.usda.gov/agricultural-act-of-2014-highlights-and-implications.aspx
http://www.ers.usda.gov/agricultural-act-of-2014-highlights-and-implications/crop-insurance.aspx

regions, where rainfall patterns are erratic and droughts are relatively frequent; a feature that is expected to worsen with global warming.

Prospects in the so-called 'new' Member States of Central Europe are more encouraging. This is particularly true for countries such as Romania, where there is huge potential for increased production. Structural reforms and investments – both public and private – in farming and in the entire value chain will allow for better use to be made of this agronomic potential and to increase production, in particular that of maize and perhaps also soybean, in the Danube basin.

The future of public support for biofuels is uncertain, although, as indicated above, it has served as a major policy instrument in terms of impacting the European cereal market. One can only expect a decline in public support in the future. Just how quickly, and to what extent, this decline will occur will depend mainly on the price of oil in the future and how quickly second-generation technologies emerge and can perform effectively.

Finally, **the challenge posed by designing 'intelligent' measures to protect the environment without significantly penalising productivity is great**. For instance, questions are being posed as to how best to regulate the excessive use of nitrogen fertilisers on wheat without hampering yields and protein content, which is an important quality parameter in many markets. In addition, a variety of social, institutional and political obstacles are slowing down the concentration of farm production units, in particular in Western European countries, thereby preventing them from benefiting from the economies of scale enjoyed by their competitors, in particular in the Black Sea region.

4.1.3. Outlook

The international competitiveness of any value chain depends as much on international developments as it does on domestic parameters. **It is obvious that the increasing demand for cereals throughout the world will be a major driver in this area**. This is true for feed grains, as illustrated by the case of China today. With economic development comes a shift in diets towards greater consumption of livestock products, which increases the demand for animal feed. The international impact of this demand will be magnified if a major share of US maize production continues to be used for biofuel production. The international demand for wheat will also be significant, in particular in North Africa, the Middle East and even sub-Saharan Africa, whereas the prospects for domestic production growth in these regions will continue to be quite restricted, with the situation worsening as a result of global warming.

Among competitors, the greatest potential for growth most likely lies in 'Black Sea' countries. **A major development in this region will be the changes in the relative importance of wheat and maize**. With a likely increase in agricultural investments, in particular in irrigation, maize production will be enhanced and wheat may be restricted to areas which are susceptible to drought. Latin American countries will continue to be major exporters of feed grains, in particular maize and soybeans, for the foreseeable future.

International efforts to reduce price volatility, such as the creation of the AMIS[61], could become significant, in particular if they lead to greater transparency in the levels of stocks. Such efforts would not have a direct effect on the international competitiveness of European cereal producers, but they would certainly represent a highly desirable development.

[61] See: http://www.amis-outlook.org/amis-about/en/

In summary, European cereal and cereal-based value chains have many strengths which can, and should, be nurtured, in particular as regards wheat. These strengths include proximity to growing markets, relative year-to-year stability in production, effective logistics and good average quality. International competitiveness depends, in the long run, on continued productivity increases in all value chains. At the same time, the long-term sustainability of intensive grain farming in Western Europe is at risk, as it has led to excessive crop system simplifications. Agronomists generally recommend longer crop rotations than those currently practiced and a greater diversification of crop portfolios (incorporating, in particular, a minimum presence of leguminous crops).

4.2. Dairy sector

4.2.1. EU's international position

The EU is a leading actor in the global dairy market. Depending on the product, the EU's share of global market trade (excluding intra-EU trade) typically varies between 20 % and 50 %. The most important competitors are New Zealand and the US. Australia, Canada and recently Brazil are also active in the world market. Global market demand is increasing steadily, whereas EU consumption seems to be stagnating. Dairy product demand is increasing, especially in Asia (mainly in China), and in other developing economies. The EU's share in world butter exports is around 25 %, and in powders around 25 % to 30 %[62]. The larger portfolio of European producers, who have a larger share of quality products, also affords them, opportunities in the global market. Therefore, the EU's market share in cheeses – around 50 % – is much higher than that in basic products. Although the EU is a major actor in the world market, intra-EU trade is also important and variations are evident between products. Moreover, **European consumers rely heavily on domestic products, given that the share of imported dairy products is very small**. Compared to milk production in the EU, imports from third countries account for only 0.7 % of the market share. Dairy production is one of the most evenly spread agricultural production sectors in Europe. **In certain less-favoured areas, dairy production is almost the only possible form of production**.

4.2.2. Value chain analysis

Farm structure varies considerably between countries. In Denmark, for example, the average dairy farm has 147 cows, whereas in Latvia and Lithuania, the average farm has fewer than 10 cows. There is also typically huge variation within countries. Most farms also produce a considerable share of the forage they need themselves. The most commonly purchased feeds are protein and grain-based fodder. Full grazing is quite rare, whereas restricted grazing is quite common. Farmers typically have long-term contracts with processors, who usually take care of collection. Due to the perishable nature of the products in question, farmers have often organised themselves into processing cooperatives. The average market share of cooperatives in the dairy sector is nearly 60 %. In several countries, the market share of cooperatives is more than 90 %, whereas in some, in particular the new, Member States, the shares held by cooperatives are very small. Similar to the farm-size structure, the processing structure also varies between countries. Large dairy companies exist which have mainly been created through mergers. Large companies of this type, which rely on economies of scale, exist mostly in the northern and north-western parts of Europe. In Southern Europe, there are also small and medium-sized companies that rely on niche products.[63] **The competitiveness of dairy processors and that of dairy farmers are closely linked**. If processors are

[62] See Milk Market Situation (2014); and Thiele, H. D., Richarts, E. & Burchardi, H. (2013).
[63] See experts' opinion reports (2013).

unable to pay producers a price which makes farming profitable, production decreases and processors lose their market shares, mainly in the global market. Thus, a crucial issue for competitiveness in the European dairy industry is the competitiveness of dairy farms (See Competitiveness of the EU Dairy Industry, 2009).

The average milk yield per cow is highly competitive. In Western Europe, the average yield is around 8 000 kg per cow, which is only slightly less than in the US. The yield in most of the new Member States, although smaller, is still competitive with countries such as New Zealand. Another important strength of the European dairy sector is the **high hygienic quality of raw milk** (See Milk Quality Around the World, 2013). Considering the stringent regulations on animal welfare, the capital cost needed in buildings and machinery is much higher than that in countries where production is more extensive. Moreover, labour costs are typically much higher in Europe than in many other countries. According to the 2013 comparisons made by the International Farm Comparison Network (IFCN), production costs in Oceania (New Zealand and Australia) are more than 20 % less than typical costs in North-Western Europe, where they are about the same as in the US. However, in many European countries the production costs are much higher. Intensive production also means that the share of purchased feed is higher than in extensive production. Even though the price level is competitive, increased price volatility causes problems for dairy farmers. Thus, **greater dependence on purchased feed may weaken the competitiveness of European producers**.

The high quality of raw milk and well organised cold chains represent a good starting point. Moreover, intensive production, the seasonal pricing of raw milk in some Member States, and breeding combine to make it possible to produce nearly the same amount of milk all year round. Large dairy processors (both cooperatives and investor-owned firms) that rely on economies of scale in their business strategy have invested heavily in R&D. Thus, the European dairy sector can be described as being an innovative industry. In the global market, improving product portfolios has been one reason for the ongoing consolidation process in the dairy industry. Another reason is increased concentration in the wholesale and retail sectors.

4.2.3. Impact of European public policies

One of the goals of the Doha Round stated in 2001 was the elimination of export refunds. The 2003 Mid-Term Review of the CAP was successful in decreasing the price gap in dairy products between the EU and the world market. By decreasing the intervention prices of butter and milk powders, the export refunds were almost entirely phased out. A strong international market, coupled with a high spike in prices in 2007, eased the price level adjustment. Although a final agreement is yet to be reached, price integration will most likely have helped in making the final decision on the abolition of export refunds in WTO negotiations.

The losses caused by decreasing producer prices were, at very least, partly mitigated by an increase in direct payments. However, the ability for direct payments to maintain production is weak, in particular in the most vulnerable regions. Coupled support is therefore needed in these regions. Another important decision as regards the CAP was made in the 2008 Health Check. Under the Health Check, the Commission proposed discontinuing the quota system after 2015, and began its efforts to secure the so-called soft landing by increasing the quota by 1 % per year between 2009 and 2013. As a result, quotas no longer appear to be binding in most Member States. It is, however, assumed that producer prices will decrease following the abolition of quotas. Therefore,

production will most likely increase in some of the more competitive Member States, while it is likely to decrease in those that are less competitive.

As part of the adjustment to the abolition of quotas, the so-called Milk Package was designed in 2012, and legally enforced under the most recent reform of the CAP. The package provides for written contracts between milk producers and processors, and for the possibility to negotiate contract terms collectively via producer organisations (POs). It also sets out new specific EU rules for inter-branch organisations, allowing actors in the dairy supply chain to enter into dialogue and carry out specific activities. The package also entails a series of measures which enhance transparency in the market. The instruments offered to producers with the possibility to negotiate on prices and volumes give market power to producers without them having to worry about competition regulation. Although the instruments do not necessarily increase price levels, contract production reduces uncertainty, and thus may work as a tool for reducing volatility. Furthermore, **reduced volatility supports the incentive to invest.**

4.2.4. Outlook

The international demand for dairy products is also set to increase in the future, which will create possibilities for increased exports if processors are competitive on pricing. That said, high international demand has the effect of reducing the level of imports from third countries to the EU market. Oceania and North America will continue to be strong competitors, and Brazil may also play an enhanced role. However, price volatility is also expected to increase. **This situation underlines the need to strengthen the tools currently available, such as the Milk Package** (See Regulation (EU) No 261/2012, OJ 94 of 30.3.2012), **and possibly create new safety nets**, for example through insurance schemes. While structural change at farm level and consolidation in the processing sector support integration in the intra-EU market, this may also lead to possible conflicts between producers in different countries, especially as regards the merging of cooperatives. Enhanced production in north-western Europe, combined with the growth of farms, is leading to increased environmental challenges. Manure management, in particular, will need more attention, and will hopefully be served by new technological innovations.

Increasing demand in the world market and a strong intra-EU market facilitate possibilities for maintaining dairy production in Europe. However, coupled support, along with some kind of safety nets (or insurance schemes) and the strengthening of market power for producers are still needed in order to maintain production. Furthermore, environmental issues require greater attention in order to maintain the sustainability of EU dairy production and the family farm tradition.

4.3. Beef sector

4.3.1. EU international competition position

Traditionally, Argentina, Australia and New Zealand have been ranked as the top net exporters of beef. Whereas Australia managed to maintain the highest ranking over the years, Argentina has seen a decline in net exports compared with its top ranking in the 1960s. Since 2000, the traditional exporters of beef have been faced with increasing competition from Brazil and India. In the 1960s and 1970s, the US was the largest net importer of beef, while after 2000 this position was occupied by Russia, and later by Japan, which is mainly dependent on Australian exports, and more recently on those from the US (USDA, 2013).

An important factor that influences the foreign trade of beef is the evolution of per capita beef consumption. In the OECD countries, consumers eat roughly 15 kg of beef per year, which represents a big gap when compared with developing countries, where the per capita consumption of beef is less than 5 kg on average (See OECD-FAO, 2014). In developed countries, the consumption of beef per capita is experiencing a downward trend, which may be associated with vegetarian diet shifts, concerns about environmental sustainability, mistrust of beef consumption due to health crises, and limited possibilities for ready-to-eat alternatives (Hocquette and Chatellier, 2011). The consumption of beef per capita in the EU is comparably lower than the average for the OECD countries – the average European citizen consumes only 11 kg of beef per year. This is explained by the fact that traditionally, other types of meat, such as pork, enjoy greater preference in many Member States. Being a more luxurious commodity, beef has also suffered to a greater extent from the impact of economic crisis in the EU, resulting in the replacement of beef with the cheaper alternative chicken.

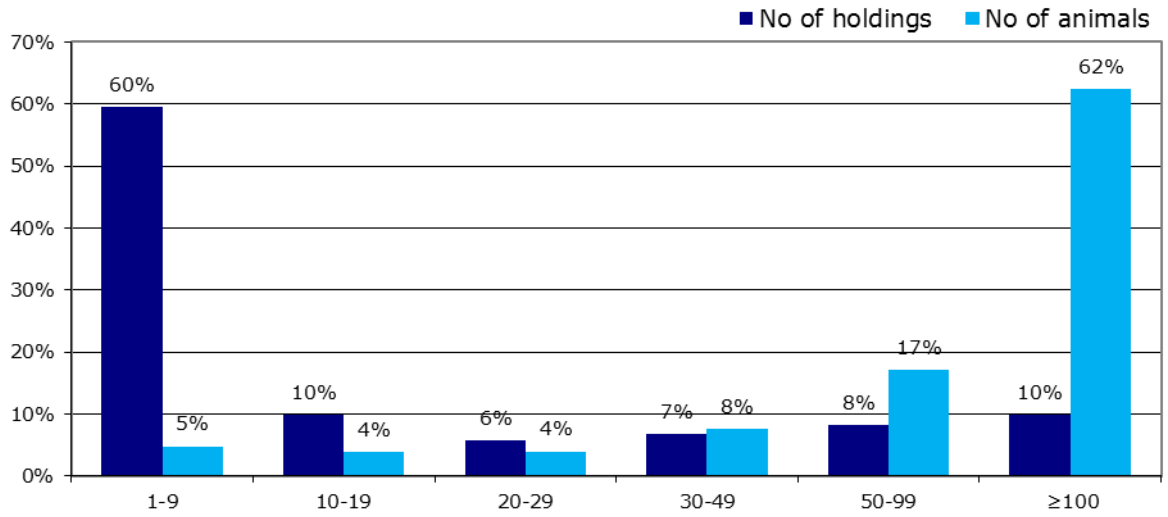
The trade of EU beef is carried out predominantly within the intra-EU market (86 %), with only 14 % being exported to third countries. With regard to external EU trade, the most important territories for the export of beef and veal are Russia and Turkey. However, exports to Turkey fell in 2012 due to restrictions imposed by the Turkish Government on the import of cattle, beef and derivative products. A downward trend has also been detected in the case of Russia, which reacted to rising beef prices in the EU and the depreciation of currencies in Latin American economies. With respect to EU imports, the biggest beef supplier to the European market is Brazil, which accounts for roughly 40 % of total imports. Beef is also imported from Argentina and Uruguay, and to a lesser extent from the USA and Australia. Although Brazilian beef exports to the EU have increased, Brazil has a limited capacity to supply to the EU, as few cattle farms are eligible to export to the European market due to the restrictions imposed on the country in 2007.

4.3.2. Beef and veal value chain

According to Golini and Kalchschmidt (2011), the meat supply chain attracts large societal interest within the agri-food chains owing to the aspects of animal welfare, meat quality and environmental issues which it entails. A recent study by Agribenchmark on the competitiveness of beef compared the production costs of cow-calf production and beef finishing across the EU, the US and Canada (Deblitz, C. and Dhuyvetter, K., 2014). Whereas typical American farms practice feedlot farming, feeding on EU farms is usually silage-based. It has been discovered that production costs in the EU are higher than in the US (in some cases as much as twice as high in the EU).

The producer base of beef in the EU is fragmented (See Figure 26), with concrete examples of this fragmentation being reported in various Member States. In Britain, for instance, there are 63 000 individual producers, a situation which leads to inconsistency as regards the composition of finished animals, and which creates unnecessary costs that are passed on to consumers. On the other side of the supply chain, however, conditions are rather different. According to Francis, M. et al. (2003), the concentration of market power held by food retailers has contributed to an unprecedented structural change in the beef sector. In another study, Rumánková (2012) analysed the price transmission mechanism in place in the Czech meat market and found evidence of flawed competition in the form of oligopsony or oligopoly which confirmed that wholesalers hold a stronger position than farmers.

Figure 26. Structure of cattle production by herd size



Source: European Commission.

There are various arguments in favour of increasing coordination in the value chain of beef. The 2014 study by the Canadian Value Chain Management Centre on the British beef industry revealed that, producer-driven initiatives often have the greatest chance of succeeding over processors and retailer-led initiatives, as they often focus on price ahead of other factors. An example of the success of the British value chain initiative for beef is the blade farming model, which ensures that beef is produced in conformity with consumer requirements, thereby benefiting all actors in the chain.

4.3.3. Impact of European public policies

The beef sector represents one of the most heavily regulated sectors (Meat Industry Ireland, 2010). One of the most important regulations concerning beef production is the **Regulation on Traceability** (Regulation (EC) No 178/2002), which was drafted and adopted as a result of the BSE scare that highlighted deficiencies in traceability systems and European law (Safefood, 2008). Along with establishing requirements for traceability, the Commission also demands proper **labelling standards**. In 2000, the EU introduced the Beef Labelling Regulation (Regulation (EC) No 1760/2000), which gives detailed instructions on the labelling of meat which originates in both the EU and third countries, as well as on that which is sold over the counter or in restaurants. With regard to **animal welfare**, EU farmers must follow the general requirements of Directive 98/58/EC, which governs the welfare of farm animals, and the legislation and codes of practice in the countries in which they are based. As well as being obliged to comply with the regulation which sets out obligations for all actors in the beef supply chain, farmers are also required to comply with **cross-compliance rules**, which can generate additional production costs. In Roest, K. et al. (2008), the authors examine the impact of the Nitrate Directive and the identification and registration of cattle on the competitiveness of the EU beef sector. Calculations show that 100 % compliance with both standards would increase production costs and lead to a 3.7 % decline in EU exports, which would primarily be of benefit to Brazil.

The quality of beef is ensured by the regulatory system which imposes traceability and labelling standards. Furthermore, there are various optional instruments for guaranteeing quality, such as the EU quality schemes of PDO, PGI and TSG. However, as pointed out in Hocquette and Chatellier (2011), **consumers may feel overwhelmed by information**

with so many official quality signs. There is general consensus that the most advanced system for guaranteeing the quality of beef is the Meat Standards Australia System, which predicts the palatability of individual muscles and identifies specific cooking methods, and is therefore consumer-oriented. In contrast, Verbeke, W. et al. (2010) point out that reliable quality guarantee systems for consumption are still lacking in Europe despite individual efforts. Verbeke, W. et al. (2010) further highlight the fact that **European consumers seem to be more interested in the direct indication of beef condition and quality than in traceability** and origin information.

Developments in the beef sector are, to a large extent, affected by the CAP. Evidence shows that the **decoupling of direct payments from the number of animals slaughtered has had a negative impact on production profitability**. Rezitis and Stavroopoulos (2009) identified negative effects on production in the case of Greece, and pointed to a decline in profitability in Ireland. The 2012 study by Ihle, R. et al. found that the 2003 reforms of the CAP significantly impacted upon price relationships in the Member States and led to a decrease in the price of calves. The decoupling brought about as part of these reforms has also had an indirect negative effect on beef production through the decline in dairy cow numbers. Regarding the situation of dairy production, the previously mentioned Irish report highlights the problem of cross subsidisation of beef to the dairy herd, stating that 'the price differential between beef from the suckler and dairy herds is regarded too small and does not sufficiently reward farmers for producing quality leaner carcases'. The fear of a drastic decline in suckler cow herd numbers under the decoupling has led to the exemption of suckling cows from decoupling for this specific type of production which the Member States will be able to opt for in the new reform applicable as from 2013. With respect to the future development of the CAP, the abolition of milk quotas in 2015 may stimulate milk production in areas that are competitive in terms of beef production, such as Ireland (Hocquette and Chatellier (2011)).

4.3.4. Outlook

Given the fact that the EU beef market is heavily protected by both tariff and non-tariff measures, further liberalisation will lead to open competition with third countries, which would pose a serious threat to the competitiveness of domestic beef. This would mainly be of relevance to the Mercosur Association Agreement, because production costs for beef are higher in the EU than in Latin American countries. As for the US, the threat is lower owing to the increased costs in producing beef without the use of hormones and beta-agonists.

According to McAlpine et al. (2009), **beef consumption is a major driver of regional and global warming**. With increasing globalisation, tropical forests are being replaced by grazing land in Brazil and other parts of Latin America, which contributes significantly to greenhouse gas (GHG) emissions and a loss of biodiversity. Therefore, in order to achieve sustainable beef production, further research should be conducted to reduce GHGs, for instance by minimising waste and by means of carbon sequestration.

Beef is a competitor of milk and grains, and in the context of the abolition of milk quotas, **it is expected that producers will be motivated to orient themselves towards milk production, at the expense of the beef sector**. The above-mentioned threats suggest that it is important to better target direct payments to beef producers given the low profitability of production in the EU. As regards sustainability concerns, it is important to maintain the focus for support on environmental and territorial services.

4.4. Fruits and vegetables

4.4.1. Drivers in the EU value chain

Owing to the perishable nature of fruit and vegetable (F&V) products and their high susceptibility to changes in the weather, the F&V sector holds a particularly unique position on the agro-food scene, which has largely justified the development of specific tools for the EU F&V sector. A study by the European Parliament (European Parliament (2011c)) has shown that trends in the European F&V sector are significantly affected by long-term changes related to: (a) **increasing demands by consumers for services**, including as regards convenience in the purchase and preparation of food, taste, variety, and food safety and quality; (b) **sales controlled by fewer and fewer retailers** with growing bargaining power, which in turn encourages the tendency towards concentrating and consolidating efforts in the upper levels of supply chains; (c) the **increasingly significant role of the WTO and bilateral trade negotiations** in stimulating greater competition; and (d) the expansion of the activities undertaken by the **multinational agribusiness** as a result of the upgrade of communications, information technology and transport.

Nevertheless, the F&V sector is still key to EU agriculture, with a share of approximately 18 % of EU agricultural production and a heavily concentrated geographic spread: the two main countries of production – Italy and Spain – account for 40 % of vegetable production and over 50 % of fruit (including citrus) production in the EU. In terms of trends, producer prices also demonstrate a general pattern, which is that prices are either stable or slightly declining. In the short term, the picture is quite different, as producer prices have always been rather volatile for fresh F&V, with sharp declines in prices that usually follow phases of growth in production and which are indicative of a downturn.

The major effects of the emergence of food retailers in global F&V supply chains manifest themselves via the procurement of large volumes of F&V products from suppliers. Competition from both small retail shops and other forms of retail (e.g. food away from home, farmers' markets, street sellers, etc.) offers incentives for cutting costs and increasing quality and diversity. Concentration and consolidation processes driven by large retailers also affect the upper levels of F&V supply chains. Large retailers build up long-term relationships with key suppliers (either producers or wholesalers) who are capable of meeting the requirements necessary to respond to increased consumer interests. Suppliers are in turn required to make larger investments deemed worthwhile if they can get on a retail chain procurement list. **The asymmetry in bargaining power puts upstream actors under difficulties** (European Commission, 2012b).

Increased openness to external trade allows for an enhanced flow of supplies from non-EU operators, who are capable of meeting the retail requirements which stem from globalised supply chains. Non-EU vegetable suppliers in the EU market come mainly from the Mediterranean area, as well as from Central and South America and some African countries; Central and South America dominate in terms of fruit exports to the EU, while Mediterranean countries play a significant role in the supply of other products such as fresh tomatoes and citrus fruits. The survival of traditional marketing channels in the EU market, the structural backwardness of non-EU suppliers, and EU trade policy instruments converge to give rise to a relatively slow pace of inclusion for external F&V suppliers in EU supply chains (European Parliament, 2011c).

4.4.2. Impact of EU policy promoting POs

Up until 1996, specific market measures (withdrawals, entry-price schemes and export refunds) guaranteed a certain degree of stability for prices and income in the F&V market. Since the 1996 reform of the CMO, POs have played a key role in contributing to the improvement of adapting supply to demand and producers' margins. Nevertheless, the sector experiences recurring market crises, which is reflected in the provision of a wider range of crisis management tools to POs through the 2007 reform of the CMO. The latest reform also provided for the integration of the F&V sector into the single-payment scheme and further oriented the sector towards the market, with increased exposure to market fluctuations. A wider range of tools was made available to enable POs to prevent and manage market crises. A number of incentives were also created to encourage mergers between POs, associations of POs (APOs) and transnational cooperation. Furthermore, the 2007 reform also eliminated export refunds in the sector and decoupled aid for fruit intended for processing.

In the context of the post-2013 CAP, the EU agreed to maintain the existing support framework based upon POs and operational programmes in the new Single CMO regulation. An additional survey of POs was part of a larger project carried out for the European Parliament (European Parliament (2011c)). The survey provided some first-hand evidence of the impact of the 2007 reform and a map of issues for plausible improvements. The survey was conducted in Italy, Spain and France[64], with a questionnaire covering themes such as the impact of CMO measures, trade policy and the new aid schemes for the sector.

4.4.3. Outlook

The POs which were surveyed were widely in favour of continuing with the various support instruments for F&V in the post-2013 CAP. This favourable judgment was strongly indicated in most evaluations under the National Strategies for Sustainable Operational Programmes[65] carried out in Member States, and was recently endorsed by the European Commission in a report (European Commission, 2014b). Almost all POs considered operational programmes to be an essential instrument for favouring growth processes in the sector, as well as being 'the sole effective instrument of concentration able to guarantee the competitiveness of the F&V sector'. At the same time, POs also considered it necessary to maintain or increase the additional support currently in place for mergers of POs and APOs in those regions with a particularly weak supply concentration. However, the percentage of POs which requested that crisis prevention and management measures be retained (and strengthened) was very high (80 % in Italy, and 100 % in Spain and France), although it was stated that it is necessary to consider the improvement of crisis prevention and management tools. **Answers to questions regarding the direct payment schemes revealed a sense of scepticism about the impact of crisis prevention and management measures**. Concerns were raised about possible negative impacts on the adjustment of production and farm structures, which would include, in particular, a lack of motivation to achieve product quality. Furthermore, both the simplification and securing of the legal framework

[64] The survey is part of a wider project carried out for the European Parliament Parliament in 2011. In Italy the survey takes into account quite a representative sample of 74 POs, situated in all relevant areas of F&V production. The sample was chosen taking into account the sizes of POs (large, medium, small) and their geographic location. In Spain the survey focuses on the region of Valencia (where 30 % of Spanish POs are located and in which there is a high concentration of citrus fruits), with nine interviews being conducted of an APO of relevance to the citrus fruit trade at EU level and POs of different sizes. The focus in France saw two large APOs in the Loire region being interviewed.

[65] http://ec.europa.eu/agriculture/fruit-and-vegetables/country-files/index_en.htm

would appear to be priorities for the post-2013 CAP, while operational programmes should also make a greater contribution towards reaching key objectives. As is argued in the aforementioned Commission report, these considerations support the continuation of operational programmes to raise the degree of organisation in the sector and improve the position of producers in the value chain.

4.5. Olive oil[66]

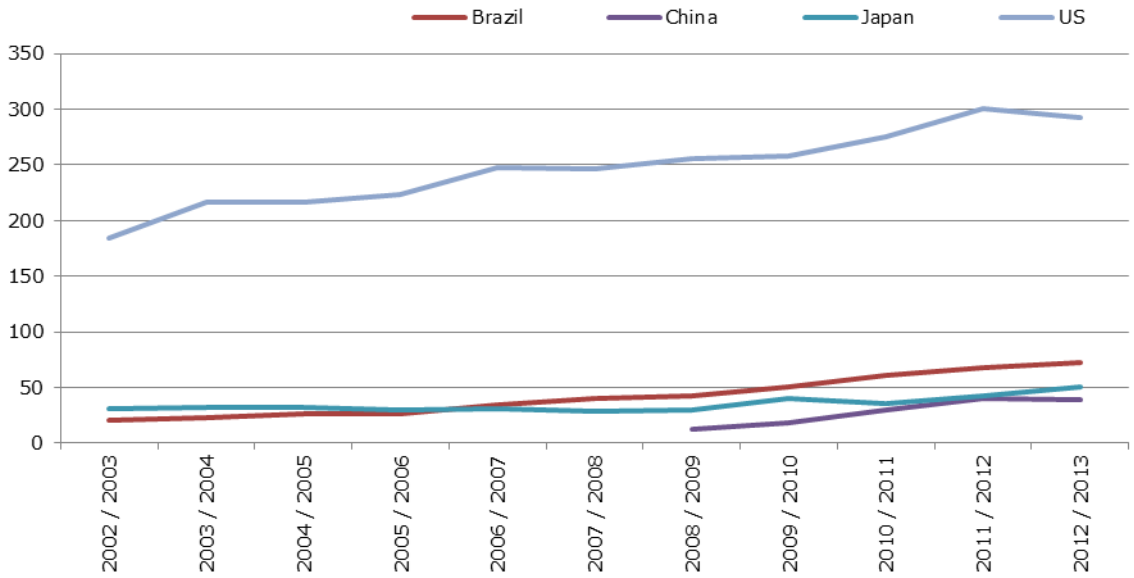
4.5.1. The EU's international position

The EU is by far the most prominent actor in the world market for olive oil. Nowadays it accounts for 60 % of world production and consumption. The three main places of production of olive oil globally are in the EU: Bari in Italy, Heraklion in Greece and Jaén in Spain. While the EU is a major actor in world markets, its share of domestic consumption of olive oil is even more significant. The share of olive oil exported to third countries represents between 20 % and 30 % of domestic production, depending on the year. Imports account for about 10 % of olive oil consumption in the EU. In the past, the production of olive oil was based around the Mediterranean Sea, involving Southern Mediterranean Countries (SMCs), such as Tunisia, Syria and Turkey. Nowadays, non-traditional producers, such as Argentina, Australia, Chile and the US, are emerging. Similarly, a clear distinction between traditional (i.e. Mediterranean) and non-traditional countries can be made regarding the consumption of olive oil. In countries which traditionally have consumed olive oil, the quantity consumed has generally stagnated. On the other hand, **consumption is increasing in non-traditional countries**, both within the EU (e.g. Germany and the UK) and outside, with the main markets outside the EU being Australia, Brazil, Canada, China, Japan, Russia and the US. The reason for this increase in consumption is that olive oil is one of the main ingredients in the 'Mediterranean diet', and its health properties differentiate it from cheaper vegetable oils. Figure 27 depicts the evolution of the consumption of olive oil in some non-traditional markets outside the EU.

Within the EU, Spain accounts for about 55-60 % of EU production, followed by Italy with over 25 % and Greece with about 15 %. Much smaller quantities are produced in other Member States, such as Portugal. The dynamics of production also differ between countries: while production in Spain has been growing considerably since the 1980s, production in both Italy and Greece has either stagnated or seen a slight reduction. It should be noted, in this connection, that production can vary sharply from one year to another owing to the alternate bearing pattern of the olive tree. Outside the EU, a good share of exports from SMCs have the EU as their destination, and are quite often duty-free under the inward processing relief traffic scheme. Production, as well as quality, is increasing in some countries, such as Tunisia.

[66] For further details, see Anania and Pupo (2011), European Commission (2012), Herrero (2011), Lazzeri (2011), Mili (2006) and Niklis et al. (2014).

Figure 27. Consumption of olive oil in selected markets: 2002-2003 to 2012-2013 (in thousand tonnes)



Source: International Olive Council (IOC).

These are two crucial fields for the future development of the olive oil chain. On the one hand, **negotiated quality parameters and trade standards can facilitate trade**; to give a recent example, the US is currently conducting a study on the implementation of a marketing order for olive oils as a new quality parameter. Some EU exporters claim that these new procedures can substantially increase costs per consignment and delay border-control procedures, with the result that products may lose some of their organoleptic and nutritional properties. It is the role of multilateral forums, such as the International Olive Council (IOC), the Codex Alimentarius Commission and even the WTO, to discuss appropriate standards, tests and border-control procedures in order to ensure protection for consumers in a way that will have a minimal effect on trade.

The evolution of dietary patterns indicates that there is further opportunity to increase consumption in non-traditional countries, both inside and outside the EU. **Fostering consumption and consumer awareness on the health aspects and culinary features of olive oil will result in stronger demand** for the product, which would be beneficial for EU exports.

4.5.2. Value chain analysis

There are about 1.9 million farms in the EU dedicated entirely or partially to olive production. Olive oil in the EU is produced mainly on small and medium-sized farms, usually using the rainfed system. Intensive and highly intensive cultivation systems are growing in terms of number of hectares, as is the case in particular in Spain. Although intensive farming systems still represent a low share of EU production, their production potential is expected to be achieved within the next decade. The degree to which producers associate themselves with organisations varies across Member States. In Spain, about 70 % of producers belong to organisations, while in Greece this figure stands 60 %, and in Italy it is less than 10 %. However, **producers generally have little market power when faced with industry and retailers**. According to FADN data, labour is the most costly factor in olive growing, typically accounting for over 50 % of total costs. With regard to the industrialisation of oil, mills in Europe have undergone

technical developments in recent decades so that high quality oils can now be obtained. Nevertheless, **some experts argue that innovations in terms of organisation and management have been lagging behind**. Certain first- or second-tier producer cooperatives are transforming themselves into strong milling companies. Within the EU, even in the more traditional consumer countries, retail brands are gaining in their market share, in some cases using olive oil as a 'hook' product. Certain milling companies have adopted collaborative long-term strategies with vast food distribution processes.

4.5.3. Impact of European policies

In the past, the CAP supported the sector with incentives for production, exports and storage. Export refunds have not been used in the past decade. Private storage was not proved to be effective against price drops, owing to a very low reference threshold price level and a lack of timeliness in the use thereof[67]. Decoupled support was initially thought to cause a decrease in production that has not yet occurred, as data indicates. The new intensive cultivation systems are not eligible for the new first pillar payments, while requirements for green payment have been significantly flexible (permanent trees are not counted towards the fulfilment of the greening conditions for crop diversification, or towards meeting the provisions of the Ecological Focus Area).

Specific provisions to support olive oil featured in the CAP reform agreement of June 2013, including the finance of producer organisations in market follow-up and management, the improvement of the environmental impact of olive cultivation, the improvement of the competitiveness of olive cultivation through modernisation, the improvement of the production quality of olive oil, the monitoring of the quality of olive oils sold, and the dissemination of information on measures carried out to improve quality. In the new programming period, the actions that are likely to be taken could stem from sub-programmes for olive oil in the rural development programmes, and could include measures that would adapt to olive oil systems, mainly located in less-favoured areas. Other assistance measures take into consideration the strengthening of producer organisations and increasing vertical coordination, for example via inter-branch organisations. In addition, the CAP provides for promotional measures that, as has been proven in the past, can be successfully used by the olive oil sector to boost consumption and enhance product reputation.

Another key element related to EU policies has to do with the inward processing relief traffic scheme, which allows duty-free exportation into the EU provided that the product in question is further processed inside the EU and then re-exported. Certain EU processors have arranged long-term contracts with SMC producers in light of this regime. The regime is helpful to EU industry in terms of the global strategies employed by these SMC producers, while it is not necessarily negative for EU producers, in that the quality of domestic production is improved, and EU exporters are able to keep foreign marketing channels open.

4.5.4. Outlook

Production in the EU takes place in less-favoured areas, creates jobs both in production and in the processing stages, and has beneficial effects on the environment. If the EU wishes to maintain its current privileged position in the global market, a set of key points must be taken into account. First, the unique health properties of olive oil should be

[67] The European Parliament called for an increase in the threshold reference price on 13 March 2013 in the debates on the recent CAP reform. Nevertheless, the reference price for private storage was not changed under the new CMO regulation (Regulation (EU) No 1308/2013, OJ L 347, 20.12.2013, p. 671).

highlighted and advertised. In markets such as China, public relations and marketing efforts can be crucial. The market success of the product could be further improved upon by clarifying the concepts of quality standards, country of origin, terroir, and designation of origin. Some proposals recommend a generic 'EU origin label' along with a secondary 'terroir-country of origin' denomination.

Second, the role of the IOC should be supported as the multilateral forum for standardisation, quality parameters, border inspections, and even retail denominations. Unfair distortions to trade could be prevented by facilitating a clear framework for access to emerging markets[68]. Efforts to incorporate the IOC in other countries, such as the US, Japan and China, could serve to strengthen the leadership role of the organisation.

Third, enhancing the production of quality olive oils right through from the fields to the processing stage is possible with the tools that are currently available. Also, current experiences among strong producer organisations prove that it is possible to coordinate the interests of all actors in the sector.

4.6. Wine

4.6.1. World markets and the EU's international position

The EU is currently the leading economic player in the world market for wine. It is the top exporter (with a 65 % share of the export market), top producer (58.9 %), and top consumer (49.7 %), and it is also home to the greatest proportion of the world's vineyards, with 47.2 % being located in the EU-27 in 2010. The leading wine producing and exporting countries are also located in the EU, and these include: Italy (the top exporter in terms of volume), Spain (home to the first 'world vineyard') and France (the leading producer and leading exporter in terms of value, and also having the strongest domestic market). Furthermore the highest export prices (EUR 5.32 per litre) are to be found in one of the Member States, France. In addition, two Member States – Germany and the United Kingdom – are among the three biggest importers of wine. The strength of the EU's position in international markets is reflected by the number of leading European companies in the global wine (and spirits) industry. The top companies include the GCF Group, Castel, Pernod-Ricard, Lanson-BCC, Rémy Cointreau, Maison Burtin, Campari, and Moët Hennessy. As regards the EU's external trade, wine constitutes a major sector, and in 2012 the EU wine sector contributed a surplus of EUR 6.4 billion to the EU's trade balance.

The evolution of the EU wine industry in the 21st century shows some signs of weakness. The surface area of European vineyards has decreased for all major producers: According to the International Organisation of Vine and Wine (OIV), Spain saw a decrease of 16 % between 2000 and 2011, while France has suffered a decrease of 11 %, with reductions of 15 % and 2 % also being experienced in Italy and Portugal respectively. More importantly, with regard to competitiveness, the share in world exports of the five leading EU exporters (France, Italy, Spain, Germany and Portugal) decreased from an average of 78.8 % during the period 1986-1990 to an average of 62.1 % during the period 2006-2010. This share in the world markets lost by the EU has been occupied by 'new-world' producers and exporters. Behind the top three EU exporters (France, Italy and Spain), are the next 'new-world' stars: Chile, Australia, and the US. Among the top-11 world exporters, 6 are in the 'new-world' category, and these include: New Zealand, Argentina and South Africa. Finally, the three largest wine companies globally

[68] The current IOC agreement will remain in force until the end of December 2014.

(Constellation Brands, are from the US: Constellation, E. & J. Gallo Winery and the Wine Group.

With the domestic markets of the biggest producers declining – with the exception of those in the US – exporting to international markets has become the main way of increasing wine business for most players in the industry. As a result, international competition within the wine industry has increased. Fortunately, it seems that the wine sector in the EU has been successful in stopping the decline it had been experiencing in world markets in recent years (see Table 14).

Table 14. International wine trade: world market share (%)[69]

5 leading EU exporters (France, Italy, Spain, Germany and Portugal)	
Avg. 1986-1990	78.8
Avg. 1991-1995	75.5
Avg. 1996-2000	71.2
Avg. 2001-2005	65.2
Avg. 2006-2010	62.1
2010	62.0
2011 (provisional)	65.4
2012 (forecast)	62.3

Source: OIV, State of The Vitiviniculture World Market (March 2013)[70].

4.6.2. Value chain analysis

One characteristic of the EU's wine value chains is the extremely fragmented nature of the industry, the heterogeneity of the companies, and the multiplicity of wine styles, which come from very diverse regions. In Europe, the structure of the wine industry is represented by a majority of grape growers, many of whom send their grapes to co-operative wineries, small businesses and larger wineries with a market share that is not significantly high[71].

Small companies and micro-companies coexist with large operators. The bigger wineries are able to exploit economies of scale and scope, as well as develop specialty products driven by marketing and branding. They play an important role in the international market, maintaining relations with major national and international retailers and supermarkets, as well as with wholesalers that supply to specialist wine cellars and the hotel, restaurant and cafe sector (horeca)[72]. Smaller companies base their business in the domestic market, which often has a regional focus, with enotourism developing in scenic areas or near areas with larger populations.

[69] The world market accounts for total exports from all countries.

[70] http://www.oiv.int/oiv/info/enstatistiquessecteurvitivinicole#secteur

[71] In France, 87 400 grape growers concentrated in 9 main regions make up the French wine-growing industry, and in 2012 Castel Frères was by far the leader, with a volume share of 9 %. In Italy, there are almost 400 000 winemakers, and in 2012 the top three companies accounted for just 10 % of total sales volumes. In Spain, the largest company accounts for just 11 % of total sales volumes.

[72] In recent years, it has been viewed as important that larger wineries be placed under corporate ownership. Most larger wineries have a broad portfolio of wine brands complemented by beer, spirits and other alcoholic beverage products. These can also include global companies, many of which are located in other producer countries.

Such heterogeneity produces different wine value chains, with different competitive strategies being employed by different companies. The two main strategies are territory- or supply-driven production and demand- or brand-driven production. The first, linked to the quality model based on origin, promotes vertical integration or bilateral contracts to coordinate the supply and distribution chain vertically and maintain control over the product[73]. The second promotes organisational networks for horizontal cooperation among producers which hold similar market shares and which produce similar products. The increasing concentration of economic powers among distributors – which leads to the development of exclusive distributor agreements in many regions – has created a need for EU policies to play a role in the promotion of domestic and transnational networks in an increasingly competitive environment.
The fragmentation that characterises all European producer countries has two opposing effects. First, it is an obstacle for family-run businesses to achieving the critical mass and bargaining power required to compete in the global market. Second, it allows for a wide variety of techniques and practices that help to prevent homogenisation, which is occurring with other global products and facilitating tradition, variety, and choice[74].

4.6.3. EU institutional framework

The current regulation comes from the 2008 reform of the wine CMO, and its main objectives are to avoid surplus and improve market orientation and competitiveness in the EU wine sector. The two main instruments to this end are the gradual phasing-out or softening of the more stringent intervention measures of the former CMO (distillation, grubbing-up, and the prohibition of planting)[75], and the pluriannual national support programmes (NSPs), whereby Member States have the possibility of assisting their wine sectors through a range of measures that best fit their needs. Since 2009, greater flexibility and rules on transparency have existed for winemaking practices, geographical indication (GI) quality signals, and labelling, and for the purposes of facilitating differentiation strategies. The current CAP reform for the period 2014-2020 reinforces the different focuses and tools of the 2008 wine reform. As a result, current support for European wines is weak, amounting to roughly EUR 1.4 billion per year.

4.6.4. Outlook

Competition between 'old' and 'new' worlds has become the main driver in international wine markets. For most global consumers, the terms 'new world' and 'old world' still represent different styles of wine or wine-making practices. Old-world wines are linked to tradition, a romantic vision of agriculture, heritage, terroir, origin and nature. These factors are seen as determinants of wine quality and as a competitive advantage for Member States. New-world wines are seen as boasting greater variety and being more fruity, modern, and technology-intensive, and are produced by wineries that are oriented towards branding and marketing. In the last two decades, the new-world-wine model has greatly appealed to new emerging wine markets.

A second driver comes from regulation incentives. In the new world, very few restrictions exist, and winemakers are free to plant whatever grape varieties they wish and produce

[73] Wine is the leading agri-product in terms of quality public and private strategies in the EU.
[74] For instance, in Italy alone there are about 2 000 indigenous varieties of grape. In the EU, the number of registered GI names for wine stands at 1 560 (867 for agricultural and food products, 337 for spirits and 4 for aromatised wines) (Michael ERHART, European Flour Millers Conference 2013, Brussels, 16 May 2013).
[75] In 2016 a new temporary framework for vine planting will replace the current planting rights system by individual non-transferable authorisations for new vine planting, allocated by a given Member State, according to criteria that must be objective and non-discriminatory. This will put an end to the former prohibitionist approach. The new scheme aims to allow for the structured growth of EU vineyards in order to match the dynamic evolution of the market.

wine in whatever way they deem appropriate, with the State providing support mainly for coordination and external promotion. Even if winemakers participate in a quality scheme, there are still fewer restrictions in place in the new world. In contrast, every EU designation of origin and geographical indication must adhere to a detailed set of rules that govern what can be planted, planting density, training and pruning methods, minimum ripeness at harvest, maximum yields, winemaking techniques and the use of oak. Some producers today complain that the rules are too restrictive, and they maintain that changes in climate and viticulture, and advances in winemaking necessitate greater flexibility as regards rules.

The third driver is consumer demand. In most countries, sales of relatively expensive and relatively cheap wines are growing the fastest, with demand for wine being determined by quality. This is mainly associated with the place of cultivation of the grapes. In the context of the current consolidation process, larger wineries are buying smaller ones, in part to improve their bargaining positions with retailers. If this trend prevails, it will diminish the place of mid-sized wineries that are being forced to sell their wines via intermediaries who, in some cases, hold considerable market power.

The fourth driver deals with national and regional strategies. The cases of France and Spain in the last decade present two different strategies. France is suffering from a decline in export volumes and market share (in all categories except sparkling wines) but is seeing an increase in export values and premium prices, while the opposite is true of the situation in Spain. Spanish wine dominates the vast majority of markets, with lower prices globally. In this context, the Spanish wine industry has made great advances in improving its image and value, but the rich heritage and variety of indigenous Spanish grapes are seen as more of an obstacle than an advantage.

Export markets are the greatest driver of the industry, with success in the Asia-Pacific market determining the future of the chain. This makes promotional aids one of the key measures as regards EU regulation. EU trade policy must promote the expansion of the international wine trade and prevent or remove discriminatory or disproportionate regulations and standards for EU exports to third-world countries. For this reason, the EU underlines the importance of market access in multilateral trade negotiations (with the WTO) and in bilateral negotiations for both specific wine agreements and broader free trade agreements (FTAs). In the context of the current economic situation there is a risk of creating barriers to trade in markets through unilateral protectionist measures.

5. SUMMARY OF CONCLUSIONS AND STRATEGIC RECOMMENDATIONS

KEY FINDINGS

- There are imbalances within the EU that undermine the future competitiveness of the single market.
- The share of EU agri-food exports in the world markets will decrease in the medium term, with differences among products.
- Preserving the limits of social and territorial cohesion, as well as sustainability, should be part of a strategy to enhance the competitiveness of agri-food.
- An adequate balance between effective and non-burdensome regulations is needed.
- The impact of Pillar I on competitiveness is still unclear and Pillar II is not sufficiently effective.
- The EU trade strategy should focus on quality and value-added products, without jeopardising global public goods.
- A new R&D&I partnership model will open up new opportunities for public and private stakeholders.

5.1. Imbalances in general economic performance

As far as the **general economy** is concerned, the issue of competitiveness has two interrelated aspects, one external and the other internal. Concerning the external – after comparing the EU with other large economic blocks such as the US, Japan, Canada, Brazil, Russia, India and China – there are three points that must be highlighted: (a) Europe has a lower but more balanced ranking than that of the US, Japan and Canada[76]; (b) the comparative competitiveness profiles of the BRIC economies are similar to those of the Member States that joined the EU as part of recent enlargements (World Economic Forum, 2012); and (c) since the mid-1990s there has been a major redistribution of the market share between emerging and developed countries and among developed countries themselves, but the EU has maintained a significant market share in many key sectors (Curran and Zignano, 2009), **in spite of the many challenges that have arisen from the rapid emergence of highly competitive new economic operators.**

The EU has been able to upgrade the quality of its products, and its companies are able to sell products at premium prices as a result of quality, branding and related services[77]. In fact, when comparing the EU's export performance on the world market with that of its key competitors, it appears that the EU has performed particularly well as regards more upmarket products in expensive and high-tech levels of the market. The issue is that domestic productivity growth – already low in recent years – seems to be falling further. **This imbalance (i.e. weak performance at home but strong abroad) should be targeted by EU policies**.

[76] According to the World Economic Forum (2010), the global competitiveness index (GCI) score for the US for the period 2010-2011 is 5.43 points, compared to 5.37 points for Japan and 4.53 points for the EU-27 (Paraskevaidis, 2011).

[77] http://trade.ec.europa.eu/doclib/docs/2008/october/tradoc_141196.pdf

Regarding the internal aspect of the issue of competitiveness, large disparities exist among Member States, with some performing much better than others and well above the EU average or that of other OECD economies. The problem with competitiveness experienced by weaker countries is largely due to deeply rooted structural problems, the varying degrees of integration in the world economy and the export structure by market segment (Curran and Zignano, 2009). Indeed, the lack of competitiveness of several of Member States is among the causes of the current difficulties being experienced in the euro zone. In all economies where competitiveness is still lacking there is a problem with maintaining levels of prosperity, with unsustainable imbalances that exacerbate social and political tensions.

Conclusion 1: In the general economy, the EU is performing relatively well despite unprecedented competitive challenges. However, imbalances still persist in terms of external and internal competitiveness among European countries and regions.

5.2. Agri-food competitiveness

The EU's position in international agri-food markets is ambiguous. On the one hand, having generally been a net importer in the past and having a trade deficit in agricultural products in the years of recession (2007-2009), the EU has been a growing net exporter of agricultural products since 2010. Both the EU and the US have been the leading agricultural exporters in recent years, with the other top exporters – Brazil, China and Argentina – growing at quite an impressive rate. Overall, the EU's performance in terms of food exports has been positive, even with a strong euro.

The EU's greatest strength in terms of agricultural competitiveness is that it is specialised in the export of final products. The bulk of the EU's agri-trade exports (66.1 %) comprises final consumer-ready products – both processed and unprocessed – many of which are of an increasingly high value, while in 2013 only 49.7 % of EU imports were final consumer-ready products, with 30 % being intermediate products, and 18.6 % commodities.

This performance reflects steady growth in demand for EU food and agricultural exports (in particular in developing countries), with export markets performing far better in recent years than in the weaker EU national markets. A growing trade surplus is emerging despite the fact that the EU remains by far the world's largest importer of agricultural goods; in 2012 imports to the EU amounted to EUR 102 billion, compared to the US, where imports totalled EUR 85 billion (European Commission, 2013c).

Despite the success of exports, the EU agri-food sector is losing part of its share of the global export market. According to figures from FoodDrinkEurope, the EU's share of the global food and drink export market shrank from 24.6 % in 1998 to 20.5 % in 2002, to 17.5% in 2008, and again to 16.5 % in 2011. The EU's main competitor, the US, has experienced similar losses due to growing competition from emerging markets like Brazil, China, Argentina, Thailand, Indonesia and Malaysia.

This report has carried out an in-depth analysis of this general trend, with careful consideration being given to specific sectors and Member States. The weakening position of the EU agri-food industry has already been highlighted by the High Level Forum for a Better Functioning Food Supply Chain (European Commission, 2012b), which points to a variety of aspects, such as fierce competition from Brazil, China and other emerging markets, the trade barriers imposed on third-country markets, and insufficient access to

cheap raw materials. The forum proposed concrete actions and a timetable for policymakers and private stakeholders.

Conclusion 2: The share of EU agri-food exports in the world is decreasing in the medium term, with differences to be noted among products. However, the EU has been able to improve its external agricultural balance, even with a strong euro. The need to react to the economic downturn in domestic markets could be one of the reasons for this improvement (PACMAN, 2013)[78] [79].

5.3. EU political position on global competitiveness

Even if the single market project – and its corollary, the Economic and Monetary Union (EMU) – now forms the core of EU integration (Monti, 2010), and even if the EU institutions possess soft power for driving the strategic policies of Europe, **the EU should defend a vision of competitiveness that is consistent with European values, heritage and its own commitments**. In these difficult times for the EU and the world, such action is of the utmost importance (Schiek, 2013; Dennison et al., 2013). Europe as a whole, looking beyond its diversity, must develop a model, which could be its global competitive advantage over other economic blocks, such as the US or China.

The essence of the European model is a social and economic balance between growth, efficiency, justice, cohesion and sustainability. To ignore this equilibrium is dangerous, not only for the identity of the EU, but also for its future (Gill and Raiser, 2012; Stone, 2013). Indeed, this model plays a key role in legitimising the EU institutions (Jepsen and Serrano, 2005 and 2006). The current crisis should serve as an indication of the risks of asymmetric integration and the challenges that remain (Directorate-General for Economic and Financial Affairs of the European Commission, 2008; Goodliffe, 2013). Initiatives such as the Charter of Fundamental Rights of the European Union (2000) and the ten-year Europe 2020 strategy are, in theory, a step towards achieving that balance[80]. In this framework, the European rural and agricultural model must be seen as a part of the European social and economic model[81].

Conclusion 3: In the race for external trade competitiveness, the EU should preserve the limits of social and territorial cohesion and sustainability. Defending the European rural and agricultural model is a way of defending the European social and economic model.

5.4. The need for balanced regulation

Regulation is one the factors linked to competitiveness and sustainable growth (OECD, 2010). Rules have many direct and indirect effects on companies (e.g. causing global increases in production costs, thus reducing levels of output productivity) and in terms of market performance, where they can create entry barriers and other market hindrances (Swedish Agency for Growth Policy Analysis; OECD, 2012). Nevertheless, **rules are needed to reduce companies' transaction costs and to create stability. They can also be justified in order to ensure the supply of goods or services with large positive externalities, and features of public goods that would otherwise not be**

[78] An EU rescue package softened crisis impacts in the milk and dairy sector (Petrick and Kloss, 2013). http://www.pacmanproject.eu/page/newsletters/pdf/newsletter_13_2013.pdf

[79] http://ageconsearch.umn.edu/bitstream/151496/2/cmsarticle_297Exposure.pdf

[80] European institutions proclaimed adherence to the Charter of Fundamental Rights of the European Union (2000).

[81] The basics of the European Model of Agriculture (EMA) and the guidelines for future CAP reforms were adopted in the Council Conclusions of November 1997 (document 12509/97).

achieved (Golini and Kalchschmidt, 2011). However, **regulations are a burden for the efficiency of both businesses and society**. Such burdens arise when regulations protect companies from competition and prevent them from growing and exploiting new markets, generate excessively high compliance costs for both companies and government actors, and provide for assistance to companies which are less capable of adapting to technological change or consumer needs. In the business arena, regulation matters because it sets boundaries for business within the supply chain (Hofwegen et al., 2005).

In the domain of the agri-food chain, there are many domestic policies – some transversal and others specific – that can affect micro-competitiveness. Included in specific policies are particular concerns regarding competition policy, research and technology policy, trade policy, food safety standards and regulations, plant and animal health, mandatory traceability, quality and minimum standards, food labelling, environmental plans, incentives for private investment, the environment, organisation of the supply chain, grading, plant licensing, and of course, agricultural policies in a general sense (e.g. market intervention, public support, socio-structural measures, etc.). This makes agricultural regulation a core issue for the competitiveness of agri-food, and not only in the EU[82]. In the agri-food sector, where most companies are SMEs, it is more important to strike an adequate balance for rules in order to support the EU model of agriculture and society.

Conclusion 4: Smart regulation is crucial to maintaining the equilibrium between efficiency and equity, and addressing social concerns without creating excessive burdens for companies and administrations. A holistic framework is needed in the agri-food sector, given the large number of rules involved in competitiveness.

5.5. A balanced and ambitious CAP

The current CAP is much more open and market-oriented than ever before. The new CAP for the period 2014-2020 upholds the guidelines from previous reforms, responding to a more balanced concept of competitiveness which includes the three dimensions of sustainability: environmental, social and economic.

The relationship between the CAP and the competitiveness of the European agricultural sector must be assessed while taking into account both CAP pillars. Pillar I has general, indirect and relatively untargeted effects, while Pillar II is directly oriented towards promoting sustainability, competitiveness and innovation (Dwyer et al., 2012).

As for Pillar I, the recent reform of the CAP moves towards a greener policy and a greater convergence of basic payments, representing a positive step towards enhanced legitimacy for support policies, but also continues to provide basic income support programmes, of which the impact on competitiveness is unclear. The new system involves conditionalities that would undermine competitiveness, while the basic payment continues to be relatively untargeted. Upstream players in the food chain are usually worst positioned to take environmental actions that would work to the advantage of the whole food chain. This calls for public incentives, advice and training, the transfer of research and innovation knowledge to

[82] Recent important programmes and initiatives from other major agricultural actors which are focused in the same way include: the coalition's policy for a competitive agriculture sector, the white paper on agricultural competitiveness in Australia, the Canadian agricultural trade policy and competitiveness research network, and the white paper by the Chicago Council entitled 'US agriculture and nutrition policy statement: transforming American food and agriculture policy'.

farm level, and a reduction of the administrative burden, for instance, as regards critical tasks carried out by farmers, such as adjusting to and mitigating climate change or improving water efficiency. The coupled support for certain sectors, such as those of extensive grain systems and cattle production, or for less-favoured areas is necessary to sustain agricultural activity in weaker territories in the long term.

Retailers and, to a lesser extent, processors are currently responsible for defining product requirements and markets for agricultural primary producers. Increasing producers' market power is one of the most controversial elements of the discussion surrounding a better functioning food chain and the role of the CMO. **To this end, supporting POs is a major policy measure and the question remains as to what specific provisions would help to avoid any conflict between competition rules and POs** (Del Cont et al., 2013).

The legislative proposals to develop and open up new internal markets for European agricultural products and to increase consumer awareness on the quality thereof can contribute to strengthening the competitiveness of European agriculture.

As for Pillar II, the rural development regulation for the period 2014-2020 represents a positive shift towards adapting rural areas to the competitiveness needs of European agri-food chains, although the weaker economic regions will continue to face challenges in financing their rural development plans (RDPs). The strongest aspects of Pillar II include greater flexibility for Member States to choose measures, the new model for the European Innovation Partnership (EIP) and operational groups to resolve producer issues, and a broader scope for Leader methodology and local development groups. **The new programming period represents an excellent opportunity to improve the coherence of RDPs**, improve targeting and guarantee additionality. RDPs need a strategic vision, incorporating the best practices for participatory approaches, knowledge exchange and networking, innovation policies and support for the integration of environmental objectives (as well as climate change mitigation) in the design of rural policies.

Further efforts should be made to guarantee coherence and complementarity between the two pillars – Pillar I for agricultural public goods support and Pillar II for structural reforms – and to prevent the flexibility given to Member States as regards the levels of direct payments from becoming a source of internal market distortion. Overall, the road towards full convergence must be paved in the near future.

Conclusion 5: The CAP is adopting an approach that is more oriented towards sustainable competitiveness. However, the impact of Pillar I is unclear and Pillar II is not sufficiently effective, in particular in economically weaker and less competitive countries and regions that are facing budgetary problems when transferring funds from direct support to rural development. Three kinds of incentive should be reinforced: (i) those which address structural adjustment, consolidation and concentration in the EU food chain; (ii) those for quality differentiation; and (iii) those for the transfer of best practices for competitiveness.

5.6. Trade policies

Trade policies have a major impact on competitiveness. A toolbox of measures can help Member States to address their various competitiveness needs according to the specific features of their agri-food sectors. In our survey, experts were asked to suggest three

areas where EU trade policies need to be strengthened. The list of policy tools included activities related to export enhancement and areas on which to focus multilateral and regional trade negotiations. The responses given by the experts clearly indicated five areas that are in need of further support in the external agenda:

- Ensuring a level playing field with third countries.
- Promoting EU standards at international level.
- Enabling better access for SMEs to global markets.
- Monitoring imports to prevent unfair trade practices.
- Stressing the need for international transparency as regards non-tariff measures.

European organisations, including farmers, seem to be less worried about multilateral trade negotiations than they were ten or fifteen years ago. Admittedly, they have fewer reasons to be concerned now that the domestic price of most farm products in Europe is close to the international price. The possible elimination of export refunds is not even controversial. In fact, this elimination will be formalised only after an overall Doha Round agreement. Such an agreement would also include areas covering other export competition instruments such as export guarantees, the aggressive use of food aid, and the abusive monopoly power of state trading. Such instruments would be used by competitors of European operators and would therefore enhance the international competitiveness of European value chains. Another positive element that would arise from a comprehensive WTO agreement is the slight improvement in market access for European products in some emerging economies. Realistically speaking, however, no drastic changes should be expected.

In our survey, little enthusiasm was shown for trade negotiations with third countries, which is consistent with the poor results of the Doha Round, and calls attention to the sensitive issues of bilateral trade negotiations.

Given the slow pace of multilateral trade negotiations, and the insufficient support for the regional arrangement with the US, Mercosur, and other areas, we believe that the EU needs to pursue bilateral negotiations to keep up with processes in the rest of the world.

What should be the priority of such negotiations? **The promotion of standards should be considered crucial and a top priority for trade negotiations**. In addition, the steps taken towards a more ambitious promotion policy must fill the market windows for EU products which are quality-driven, and advocate the characteristics of European agri-food products. In the legislative proposals for a more ambitious and better targeted information and promotion policy[83], the Commission proposes a significant increase in the aid allocated to information and promotion initiatives, and the establishment of a European promotion strategy, which will provide a better focus for these measures. This strategy should lead to an increase in the number of programmes targeted at third countries and multicountry programmes.

[83] See http://ec.europa.eu/agriculture/promotion/policy/index_en.htm

Conclusion 6: Trade policy should be seen, in multilateral and bilateral agreements, as the main method of levelling the playing field between the EU and other global partners. The EU's trade strategy should focus on quality and value-added products (e.g. GIs) and on pursuing its own interests (taking account of social and environmental concerns) without jeopardising global public goods.

5.7. Innovation challenges

There is huge consensus on the urgent need for the EU to increase R&D investments in order to support innovation and promote a shift towards higher value-added food production.

'Horizon 2020', which brings together all EU innovation and research funding for basic and applied research, will dedicate a considerable amount of support to agricultural research and innovation[84], an effort which should be welcomed. There are strong reasons why the EU should continue supporting agricultural research to enhance the competitiveness of the agri-food sector and the recent new measures to support competitiveness in agriculture. The research programme will be implemented through instruments such as public-private partnerships, public-public partnerships (e.g. ERA-NET),[85] joint programming initiatives, coordination with Member States, and the EIP, which has a programme on agricultural productivity and sustainability (EIP-A), co-funded under Pillar II of the CAP on rural development policy as a new tool for fostering innovation by linking existing policies and instruments.

However, there are some risks. In order to fully exploit the benefits of increased research spending, major tasks will include **(a) defining the contents of the research programmes and the distribution of funding for the EIP-A[86]; (b) developing the capability of countries and regions to promote applied research projects, cross-border and cluster initiatives, innovation centres, EIP operational groups and EIP network facilities among all stakeholders in a bottom-up and interactive innovation model, as well as using a multi-actor approach; and (c) coordinating research and innovation activities**.

Regarding contents and targeting, it will be necessary for programmes to be open to all technological systems and the consequences thereof, from agri-ecological approaches to industrial farming and bioeconomy models. In some cases, programmes may prioritise research into sustainability and improving productivity. For instance, in the case of new Member States, increasing productivity should be the main priority. It has been shown that there is still great scope for improving yields in individual Member States. An ongoing lobbying battle for control of the funds is expected to arise, while the future diversity of agriculture in Europe is at stake.

Regarding the ability for countries to use new tools for R&D&I, some major differences will arise due to culture, history, human and social capital, and institutional strengths.

[84] One of the social challenges included in Horizon 2020 is 'food security, sustainable agriculture, marine and maritime and inland water research and the bio-economy', the specific objective of which is to secure sufficient supplies of safe and high-quality food and other bio-based products, by developing productive and resource-efficient primary production systems, fostering related ecosystem services, alongside competitive and low-carbon supply chains. This will accelerate the transition to a sustainable European bio-economy.

[85] Scheme that develops and strengthens the coordination of national and regional research programmes under the European Research Area (see http://ec.europa.eu/research/era/era-net-cofund-h2020-infoday2014.htm).

[86] Operational groups can be funded by 'Horizon 2020', Rural Development, ERDF and Private Funds.

The new interactive and bottom-up innovation approach is not easy to implement because in certain places there are problems with collective action, weaknesses in initiatives where farmers are older and lack training and professionalism, and where researchers lack incentives to participate in operational groups.

Coordination implies shared responsibilities between agriculture and research directorates, as well as coordination between the EU and national research programmes. **Apart from this, the EU's policy should aim towards greater involvement by the private sector in agricultural research**. Another recommendation relates to farm advisory systems. Given that existing farm advisory systems have proved successful in increasing awareness on management practices among farmers, this knowledge transfer could be further exploited by extending the scope beyond cross-compliance requirements. Future farm advisory services should be designed to strengthen the EIP's agricultural productivity and sustainability programme in order to improve innovation support systems for farmers, and to facilitate the adoption of new and relevant technologies on farms. Finally, the EU should also invest in the better monitoring of R&D&I expenditure across Member States to properly evaluate policy benefits.

Conclusion 7: Horizon 2020 and the EIP's agricultural productivity and sustainability create a strong framework for R&D&I policy within the agri-food sector. More funds and a new R&D&I partnership model provide new opportunities for public and private stakeholders. However, given the interest in implementing this complex and sophisticated approach, and considering the associated difficulties, the European Commission and Member States should give priority to this tool from a fair and broad perspective.

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ANNEXES

LIST OF TABLES

LIST OF FIGURES

ANNEX I. GENERAL INDICATORS

Table I.1. Harmonized System chapters, two-digit level

02	Meat	**15**	Animal or vegetable fats
04	Dairy produce	**16**	Preparations of meat or fish
07	Edible vegetables	**17**	Sugar and sugar confectionery
08	Edible fruits and nuts	**18**	Cocoa and its preparations
09	Coffee, tea, mate and spices	**19**	Preparations of cereals
10	Cereals	**20**	Preparations of vegetables
11	Products of the milling industry	**21**	Miscellaneous edible preparations
12	Oil seeds and oleaginous fruits	**22**	Beverages, spirits and vinegar

Source: Eurostat.

Table I.2. World Exports *(million EUR)*. 2002-2012

Product (HS2)	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	ΔWorld Exp. (%)	ΔWorld Exp.	Average World Exp.
02	23 004	22 052	23 384	27 648	28 388	29 828	35 554	33 295	41 036	49 173	54 338	136	31 334	33 427
04	12 361	11 493	12 804	14 116	15 013	18 158	21 313	17 220	24 474	29 040	31 013	151	18 652	18 818
07	11 215	11 134	11 912	13 277	15 830	16 300	16 934	18 741	24 975	26 913	25 648	129	14 432	17 534
08	14 787	17 366	18 618	22 615	24 399	25 026	27 069	28 881	36 484	40 984	45 733	209	30 947	27 451
09	6 930	7 881	9 404	11 525	13 495	14 691	15 876	15 945	22 029	28 805	24 955	260	18 025	15 594
10	26 390	25 540	27 855	27 064	30 868	41 973	58 527	44 999	51 734	69 086	74 536	182	48 146	43 507
11	4 155	3 998	4 310	4 555	4 969	5 770	7 243	6 529	7 380	9 015	9 137	120	4 982	6 097
12	17 045	19 499	19 003	19 592	20 425	25 425	36 023	35 416	43 627	49 679	61 688	262	44 643	31 584
15	14 730	16 399	17 654	17 346	19 520	24 784	35 240	26 449	47 671	62 571	64 296	337	49 566	31 514
16	10 553	9 937	10 750	12 717	14 572	14 464	15 878	14 593	17 804	20 955	23 663	124	13 110	15 081
17	9 582	9 715	9 527	12 186	16 083	13 071	13 326	16 146	24 457	28 171	28 343	196	18 761	16 419
18	4 759	6 918	7 702	8 158	8 962	9 452	10 933	13 012	16 981	18 788	20 852	338	16 094	11 502
19	9 162	9 156	9 853	11 257	12 536	13 127	15 133	15 667	19 334	22 185	24 823	171	15 661	14 748
20	11 690	11 457	11 994	13 581	15 564	17 745	18 387	17 385	20 804	24 054	26 008	122	14 318	17 152
21	11 427	11 432	12 374	14 088	15 524	15 789	16 921	17 313	21 093	24 123	26 969	136	15 542	17 005
22	23 535	23 003	24 135	26 857	31 467	32 953	34 810	31 454	38 070	45 161	50 878	116	27 342	32 938
TOTAL	211 326	216 981	231 281	256 581	287 617	318 556	379 167	353 045	457 952	548 700	592 880	181	381 554	350 371

Source: Authors' calculations based on WITS and Comext databases.

Table I.3. Extra-EU28 Exports *(million EUR)* - 2002-2012

Product (HS2)	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	ΔExp. (%)	ΔExp.	Average Exp.
02	3 423	3 037	3 557	3 451	3 641	3 716	4 997	4 316	5 727	7 701	8 249	141	4 826	4 711
04	5 007	4 946	5 117	5 143	4 992	6 170	6 523	5 448	7 447	8 446	9 150	83	4 143	6 217
07	1 525	1 461	1 348	1 336	1 667	1 868	2 044	1 862	2 378	2 632	2 751	80	1 226	1 897
08	1 341	1 347	1 363	1 569	1 928	2 235	2 427	2 273	2 816	3 151	3 833	186	2 492	2 208
09	725	772	812	873	997	1 049	1 132	1 074	1 286	1 607	1 701	135	976	1 094
10	2 317	2 485	1 577	2 058	2 297	2 904	5 490	3 891	5 116	6 026	5 751	148	3 434	3 628
11	1 776	1 692	1 771	1 507	1 526	1 753	1 990	1 790	1 903	2 141	2 370	33	594	1 838
12	954	878	964	1 053	1 185	1 501	1 824	1 585	1 847	2 260	2 419	154	1 465	1 497
15	2 451	2 314	2 431	2 507	2 569	2 629	3 166	2 735	3 152	3 939	4 704	92	2 253	2 964
16	990	917	898	950	991	1 047	1 165	1 112	1 190	1 382	1 576	59	586	1 111
17	1 990	1 823	1 617	2 152	2 729	1 521	1 414	1 523	2 031	1 930	2 393	20	403	1 920
18	1 714	1 796	1 827	1 833	2 120	2 359	2 564	2 688	3 606	3 877	4 315	152	2 601	2 609
19	3 374	3 262	3 341	3 608	3 964	4 353	4 906	4 871	5 577	6 563	7 748	130	4 374	4 688
20	2 454	2 238	2 296	2 408	2 664	2 961	3 011	2 865	3 299	3 679	4 170	70	1 716	2 913
21	3 344	3 358	3 664	3 992	4 487	4 839	4 941	4 751	5 462	6 199	6 791	103	3 447	4 712
22	13 214	13 062	12 976	13 948	16 334	17 282	16 906	15 298	18 455	21 713	24 962	89	11 749	16 741
TOTAL EU-28	46 600	45 386	45 558	48 388	54 090	58 187	64 501	58 082	71 291	83 247	92 885	99	46 285	60 747

Source: Source: Authors' calculations based on Comext databases.

Table I.4. Extra-EU28 Imports *(million EUR)* - 2002-2012

Product (HS2)	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	ΔImp. (%)	ΔImp.	Average Imp.
02	2 817	2 770	2 904	3 402	3 598	3 833	3 673	3 422	3 524	3 962	3 701	31	885	3 419
04	984	1 022	991	852	889	917	973	896	972	1 008	1 063	8	79	961
07	2 482	2 351	2 690	2 821	3 054	3 859	3 624	3 268	3 635	3 769	3 667	48	1 185	3 202
08	9 174	9 584	10 131	11 493	11 795	12 537	13 194	12 071	12 908	13 534	13 930	52	4 756	11 850
09	3 888	3 712	3 708	4 640	5 355	5 891	6 751	6 393	7 979	11 019	10 746	176	6 858	6 371
10	2 769	2 364	2 506	1 919	2 032	4 569	5 657	2 717	2 586	4 352	4 640	68	1 871	3 283
11	71	62	77	78	91	134	108	96	112	162	155	117	84	104
12	5 883	5 751	5 385	4 897	4 795	5 942	8 452	6 954	7 413	8 631	9 999	70	4 116	6 737
15	2 915	2 970	3 507	3 976	5 105	5 700	8 076	5 736	7 006	8 898	9 478	225	6 563	5 761
16	2 891	2 897	2 952	3 413	3 716	4 026	4 812	4 474	4 645	5 126	5 641	95	2 750	4 054
17	1 719	1 576	1 758	1 804	1 928	1 914	2 067	1 806	1 784	3 012	2 770	61	1 051	2 013
18	3 012	3 532	2 966	3 140	3 022	3 491	3 994	4 668	5 340	5 816	4 949	64	1 937	3 994
19	592	629	695	723	759	847	953	963	1 045	1 141	1 193	101	600	867
20	3 186	3 126	3 275	3 549	3 840	4 152	4 405	3 880	4 166	4 695	4 912	54	1 726	3 926
21	1 417	1 353	1 377	1 458	1 659	1 886	2 008	2 045	2 132	2 334	2 538	79	1 120	1 837
22	3 518	3 455	3 859	4 014	4 419	5 094	5 141	4 796	4 771	4 929	5 334	52	1 816	4 485
TOTAL EU-28	47 320	47 154	48 781	52 179	56 057	64 792	73 888	64 184	70 018	82 387	84 716	79	37 396	62 862

Source: Authors' calculations based on Comext databases.

Table I.5. Extra-EU28 Countries' Exports *(million EUR)* - 2002-2012.

Country	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	ΔExp. (%)	ΔExp.	Average Exp.
Austria	697	776	981	1 245	1 593	1 546	1 517	1 328	1 556	1 832	2 036	192	1 339	1 373
Belgium	2 063	2 000	2 191	2 498	2 773	3 091	3 485	2 790	3 311	3 610	3 922	90	1 860	2 885
Bulgaria	255	234	294	385	348	339	658	376	456	521	566	122	311	403
Croatia	202	216	234	260	289	371	413	423	452	485	536	166	335	353
Cyprus	37	32	31	34	35	39	47	39	50	60	71	93	34	43
Czech Republic	188	205	211	293	258	261	271	239	272	301	391	108	203	263
Denmark	2 990	2 844	2 904	2 833	2 806	3 020	3 096	2 881	3 413	3 754	3 996	34	1 006	3 140
Estonia	64	51	51	75	131	226	193	128	203	220	278	333	214	147
Finland	424	379	360	373	455	538	581	490	591	686	708	67	284	508
France	9 546	9 385	8 874	9 342	10 423	10 947	12 318	10 941	14 090	17 107	17 578	84	8 032	11 868
Germany	4 648	4 416	4 291	4 621	5 616	6 091	7 504	7 179	8 674	10 092	11 311	143	6 663	6 768
Greece	586	446	466	515	599	667	720	681	792	809	1 009	72	423	663
Hungary	669	617	581	633	691	624	738	512	679	765	880	32	211	672
Ireland	1 406	1 375	1 378	1 513	1 791	1 776	1 391	1 107	1 438	1 744	2 053	46	647	1 543
Italy	5 341	5 226	5 365	5 710	6 298	6 629	7 240	6 723	7 699	8 754	9 668	81	4 327	6 787
Latvia	77	76	89	133	181	236	396	323	437	542	943	1 120	866	312
Lithuania	160	216	191	230	439	620	948	658	933	1 191	1 743	991	1 584	666
Luxembourg	7	5	4	8	9	9	9	9	13	21	24	222	16	11
Malta	44	42	39	44	46	41	44	47	56	64	86	97	43	50
Netherlands	6 513	6 274	6 346	6 245	7 037	7 866	8 393	7 901	9 539	10 577	11 638	79	5 125	8 030
Poland	990	1 083	1 135	1 410	1 492	1 605	1 790	1 773	2 318	2 817	3 643	268	2 653	1 823
Portugal	493	481	509	549	695	825	976	904	1 039	1 306	1 448	193	954	839
Romania	112	84	120	144	207	236	660	423	705	954	989	782	877	421
Slovak Republic	51	60	54	78	85	52	64	41	51	73	80	56	29	63
Slovenia	200	174	150	142	154	171	228	211	228	246	262	31	62	197
Spain	3 112	3 120	3 182	3 265	3 673	4 272	4 570	4 187	5 151	6 332	7 498	141	4 386	4 396
Sweden	1 049	1 045	1 087	1 165	1 171	1 206	1 346	1 121	1 350	1 444	1 677	60	628	1 242
United Kingdom	4 678	4 522	4 443	4 645	4 796	4 881	4 906	4 647	5 797	6 941	7 851	68	3 173	5 282
EU-28	46 600	45 386	45 558	48 388	54 090	58 187	64 501	58 082	71 291	83 247	92 885	99	46 285	60 747

Source: Own calculations based on Comext databases.

Table I.6. Extra-EU28 Countries' Imports *(million EUR)* - 2002-2012.

Country	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	ΔImp. (%)	ΔImp.	Average Imp.
Austria	470	498	554	660	880	1 088	1 168	1 156	1 268	1 328	1 373	192	903	949
Belgium	3 626	3 672	3 873	4 067	4 563	5 145	5 839	5 112	5 192	6 060	6 218	71	2 591	4 852
Bulgaria	184	197	253	263	332	265	345	341	301	341	285	55	101	282
Croatia	215	229	241	280	315	385	448	398	411	476	505	135	290	355
Cyprus	119	116	96	90	99	117	192	112	117	123	116	-3	- 3	118
Czech Republic	378	434	322	277	184	223	265	244	269	335	344	-9	- 34	298
Denmark	695	728	880	953	1 007	1 162	1 336	978	1 095	1 265	1 301	87	606	1 036
Estonia	67	78	60	47	47	60	74	70	62	69	68	2	2	64
Finland	297	297	309	358	382	418	516	579	735	772	744	151	448	492
France	4 484	4 448	4 277	4 547	4 616	5 395	6 459	5 838	6 183	7 116	7 216	61	2 732	5 507
Germany	6 984	7 061	7 175	7 976	8 974	10 170	11 424	10 074	11 429	14 381	14 028	101	7 044	9 971
Greece	751	688	795	766	803	1 010	1 153	852	850	1 011	948	26	197	875
Hungary	223	240	219	188	171	216	231	184	219	275	313	40	90	225
Ireland	293	275	302	351	375	469	393	406	417	485	454	55	160	384
Italy	4 167	4 154	4 771	5 054	5 572	6 083	7 009	6 319	6 809	8 028	7 841	88	3 674	5 982
Latvia	69	60	66	75	96	118	147	110	117	148	203	192	133	110
Lithuania	117	152	114	124	174	175	277	196	193	267	304	160	187	190
Luxembourg	39	45	53	69	62	59	51	64	89	85	75	91	36	63
Malta	68	65	52	42	38	50	63	36	39	45	64	-5	- 3	51
Netherlands	8 135	8 311	8 016	8 851	9 407	11 304	13 917	12 197	13 430	15 708	16 927	108	8 792	11 473
Poland	806	797	657	664	753	824	981	747	904	1 148	1 295	61	489	870
Portugal	901	837	877	889	902	1 288	1 565	1 103	1 216	1 558	1 398	55	497	1 139
Romania	372	496	615	689	827	706	649	485	482	618	624	68	252	597
Slovak Republic	143	151	122	89	74	71	75	67	78	88	90	-38	- 54	95
Slovenia	99	108	100	105	129	175	229	216	341	425	356	260	257	208
Spain	3 855	3 824	4 195	4 511	4 551	6 303	7 208	5 325	6 069	7 526	8 278	115	4 424	5 604
Sweden	851	789	852	1 003	1 128	1 223	1 347	1 212	1 401	1 600	1 602	88	751	1 183
United Kingdom	8 914	8 407	8 937	9 190	9 597	10 289	10 528	9 765	10 302	11 107	11 747	32	2 834	9 889
TOTAL EU-28	47 320	47 154	48 781	52 179	56 057	64 792	73 888	64 184	70 018	82 387	84 716	79	37 396	62 862

Source: Authors' calculations based on Comext databases.

Table I.7. EU-28 Export Market Share (%) - 2002-2012

Product (HS2)	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	ΔEMS (%)	ΔEMS	Average EMS
02	14.9	13.8	15.2	12.5	12.8	12.5	14.1	13.0	14.0	15.7	15.2	2.0	0.3	14.1
04	40.5	43.0	40.0	36.4	33.3	34.0	30.6	31.6	30.4	29.1	29.5	-27.2	-11.0	33.0
07	13.6	13.1	11.3	10.1	10.5	11.5	12.1	9.9	9.5	9.8	10.7	-21.1	-2.9	10.8
08	9.1	7.8	7.3	6.9	7.9	8.9	9.0	7.9	7.7	7.7	8.4	-7.6	-0.7	8.0
09	10.5	9.8	8.6	7.6	7.4	7.1	7.1	6.7	5.8	5.6	6.8	-34.9	-3.6	7.0
10	8.8	9.7	5.7	7.6	7.4	6.9	9.4	8.6	9.9	8.7	7.7	-12.1	-1.1	8.3
11	42.7	42.3	41.1	33.1	30.7	30.4	27.5	27.4	25.8	23.8	25.9	-39.3	-16.8	30.1
12	5.6	4.5	5.1	5.4	5.8	5.9	5.1	4.5	4.2	4.5	3.9	-29.9	-1.7	4.7
15	16.6	14.1	13.8	14.5	13.2	10.6	9.0	10.3	6.6	6.3	7.3	-56.0	-9.3	9.4
16	9.4	9.2	8.4	7.5	6.8	7.2	7.3	7.6	6.7	6.6	6.7	-29.0	-2.7	7.4
17	20.8	18.8	17.0	17.7	17.0	11.6	10.6	9.4	8.3	6.9	8.4	-59.3	-12.3	11.7
18	36.0	26.0	23.7	22.5	23.7	25.0	23.5	20.7	21.2	20.6	20.7	-42.5	-15.3	22.7
19	36.8	35.6	33.9	32.0	31.6	33.2	32.4	31.1	28.8	29.6	31.2	-15.2	-5.6	31.8
20	21.0	19.5	19.1	17.7	17.1	16.7	16.4	16.5	15.9	15.3	16.0	-23.6	-5.0	17.0
21	29.3	29.4	29.6	28.3	28.9	30.7	29.2	27.4	25.9	25.7	25.2	-14.0	-4.1	27.7
22	56.1	56.8	53.8	51.9	51.9	52.4	48.6	48.6	48.5	48.1	49.1	-12.6	-7.1	50.8
TOTAL EU-28	22.1	20.9	19.7	18.9	18.8	18.3	17.0	16.5	15.6	15.2	15.7	-29.0	-6.4	17.3

Source: Authors' calculations based on WITS and Comext databases.

Table I.8. Countries Export Market Share (%) - 2002-2012

Country	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	ΔEMS (%)	ΔEMS	Average EMS
Austria	0.33	0.36	0.42	0.49	0.55	0.49	0.40	0.38	0.34	0.33	0.34	4	0.01	0.39
Belgium	0.98	0.92	0.95	0.97	0.96	0.97	0.92	0.79	0.72	0.66	0.66	-32	-0.31	0.82
Bulgaria	0.12	0.11	0.13	0.15	0.12	0.11	0.17	0.11	0.10	0.09	0.10	-21	-0.03	0.11
Croatia	0.10	0.10	0.10	0.10	0.10	0.12	0.11	0.12	0.10	0.09	0.09	-5	0.00	0.10
Cyprus	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-31	-0.01	0.01
Czech Republic	0.09	0.09	0.09	0.11	0.09	0.08	0.07	0.07	0.06	0.05	0.07	-26	-0.02	0.07
Denmark	1.41	1.31	1.26	1.10	0.98	0.95	0.82	0.82	0.75	0.68	0.67	-52	-0.74	0.90
Estonia	0.03	0.02	0.02	0.03	0.05	0.07	0.05	0.04	0.04	0.04	0.05	54	0.02	0.04
Finland	0.20	0.17	0.16	0.15	0.16	0.17	0.15	0.14	0.13	0.13	0.12	-40	-0.08	0.14
France	4.52	4.33	3.84	3.64	3.62	3.44	3.25	3.10	3.08	3.12	2.96	-34	-1.55	3.39
Germany	2.20	2.04	1.86	1.80	1.95	1.91	1.98	2.03	1.89	1.84	1.91	-13	-0.29	1.93
Greece	0.28	0.21	0.20	0.20	0.21	0.21	0.19	0.19	0.17	0.15	0.17	-39	-0.11	0.19
Hungary	0.32	0.28	0.25	0.25	0.24	0.20	0.19	0.15	0.15	0.14	0.15	-53	-0.17	0.19
Ireland	0.67	0.63	0.60	0.59	0.62	0.56	0.37	0.31	0.31	0.32	0.35	-48	-0.32	0.44
Italy	2.53	2.41	2.32	2.23	2.19	2.08	1.91	1.90	1.68	1.60	1.63	-35	-0.90	1.94
Latvia	0.04	0.04	0.04	0.05	0.06	0.07	0.10	0.09	0.10	0.10	0.16	335	0.12	0.09
Lithuania	0.08	0.10	0.08	0.09	0.15	0.19	0.25	0.19	0.20	0.22	0.29	289	0.22	0.19
Luxembourg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15	0.00	0.00
Malta	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	-30	-0.01	0.01
Netherlands	3.08	2.89	2.74	2.43	2.45	2.47	2.21	2.24	2.08	1.93	1.96	-36	-1.12	2.29
Poland	0.47	0.50	0.49	0.55	0.52	0.50	0.47	0.50	0.51	0.51	0.61	31	0.15	0.52
Portugal	0.23	0.22	0.22	0.21	0.24	0.26	0.26	0.26	0.23	0.24	0.24	5	0.01	0.24
Romania	0.05	0.04	0.05	0.06	0.07	0.07	0.17	0.12	0.15	0.17	0.17	214	0.11	0.12
Slovak Republic	0.02	0.03	0.02	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01	-44	-0.01	0.02
Slovenia	0.09	0.08	0.06	0.06	0.05	0.05	0.06	0.06	0.05	0.04	0.04	-53	-0.05	0.06
Spain	1.47	1.44	1.38	1.27	1.28	1.34	1.21	1.19	1.12	1.15	1.26	-14	-0.21	1.25
Sweden	0.50	0.48	0.47	0.45	0.41	0.38	0.35	0.32	0.29	0.26	0.28	-43	-0.21	0.35
United Kingdom	2.21	2.08	1.92	1.81	1.67	1.53	1.29	1.32	1.27	1.27	1.32	-40	-0.89	1.51
TOTAL EU28	22.05	20.92	19.70	18.86	18.81	18.27	17.01	16.45	15.57	15.17	15.67	-28.953	-6.38	17.3

Source: Authors' calculations based on WITS and Comext databases.

Table I.9. EU-28 Net Export Index - 2002-2012

Product (HS2)	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	ΔNEI (%)	ΔNEI	Average NEI
02	0.097	0.046	0.101	0.007	0.006	-0.015	0.153	0.116	0.238	0.321	0.381	291.6	0.283	0.159
04	0.672	0.657	0.676	0.716	0.698	0.741	0.740	0.718	0.769	0.787	0.792	17.9	0.120	0.732
07	-0.239	-0.234	-0.332	-0.357	-0.294	-0.348	-0.279	-0.274	-0.209	-0.178	-0.143	40.3	0.096	-0.256
08	-0.745	-0.753	-0.763	-0.760	-0.719	-0.697	-0.689	-0.683	-0.642	-0.622	-0.568	23.7	0.177	-0.686
09	-0.686	-0.656	-0.641	-0.683	-0.686	-0.698	-0.713	-0.712	-0.722	-0.745	-0.727	-6.0	-0.041	-0.707
10	-0.089	0.025	-0.228	0.035	0.061	-0.223	-0.015	0.178	0.329	0.161	0.107	220.4	0.196	0.050
11	0.923	0.929	0.916	0.902	0.888	0.858	0.897	0.898	0.888	0.860	0.877	-4.9	-0.046	0.893
12	-0.721	-0.735	-0.696	-0.646	-0.604	-0.597	-0.645	-0.629	-0.601	-0.585	-0.610	15.3	0.110	-0.636
15	-0.086	-0.124	-0.181	-0.226	-0.330	-0.369	-0.437	-0.354	-0.379	-0.386	-0.337	-289.1	-0.250	-0.321
16	-0.490	-0.519	-0.534	-0.564	-0.579	-0.587	-0.610	-0.602	-0.592	-0.575	-0.563	-15.0	-0.073	-0.570
17	0.073	0.073	-0.042	0.088	0.172	-0.115	-0.187	-0.085	0.065	-0.219	-0.073	-199.8	-0.146	-0.023
18	-0.275	-0.326	-0.238	-0.263	-0.176	-0.193	-0.218	-0.269	-0.194	-0.200	-0.069	75.1	0.206	-0.210
19	0.701	0.677	0.656	0.666	0.679	0.674	0.675	0.670	0.684	0.704	0.733	4.6	0.032	0.688
20	-0.130	-0.166	-0.176	-0.192	-0.181	-0.167	-0.188	-0.150	-0.116	-0.121	-0.082	37.0	0.048	-0.148
21	0.405	0.426	0.454	0.465	0.460	0.439	0.422	0.398	0.439	0.453	0.456	12.7	0.051	0.439
22	0.579	0.582	0.542	0.553	0.574	0.545	0.534	0.523	0.589	0.630	0.648	11.8	0.068	0.577
TOTAL EU-28	-0.008	-0.019	-0.034	-0.038	-0.018	-0.054	-0.068	-0.050	0.009	0.005	0.046	700.3	0.054	-0.017

Source: Authors' calculations based on WITS and Comext databases.

Table I.10. Countries Net Export Index -- 2002-2012

Country	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	ΔNEI (%)	ΔNEI	Average NEI
Austria	0.194	0.219	0.278	0.307	0.288	0.174	0.130	0.069	0.102	0.159	0.195	0.1	0.000	0.183
Belgium	-0.275	-0.295	-0.277	-0.239	-0.244	-0.249	-0.252	-0.294	-0.221	-0.253	-0.226	17.6	0.049	-0.254
Bulgaria	0.161	0.085	0.076	0.188	0.023	0.123	0.313	0.048	0.204	0.209	0.330	104.8	0.169	0.176
Croatia	-0.032	-0.030	-0.013	-0.038	-0.043	-0.019	-0.041	0.031	0.048	0.010	0.030	196.5	0.062	-0.003
Cyprus	-0.529	-0.572	-0.511	-0.455	-0.478	-0.496	-0.607	-0.484	-0.400	-0.347	-0.241	54.4	0.287	-0.465
Czech Republic	-0.337	-0.358	-0.207	0.028	0.167	0.081	0.011	-0.011	0.005	-0.054	0.064	119.0	0.400	-0.062
Denmark	0.623	0.593	0.535	0.496	0.472	0.444	0.397	0.493	0.514	0.496	0.509	-18.3	-0.114	0.504
Estonia	-0.017	-0.213	-0.080	0.233	0.474	0.582	0.443	0.296	0.534	0.523	0.607	3 685.7	0.624	0.396
Finland	0.176	0.122	0.076	0.021	0.088	0.125	0.059	-0.083	-0.109	-0.059	-0.025	-114.3	-0.201	0.016
France	0.361	0.357	0.350	0.345	0.386	0.340	0.312	0.304	0.390	0.412	0.418	15.8	0.057	0.366
Germany	-0.201	-0.230	-0.251	-0.266	-0.230	-0.251	-0.207	-0.168	-0.137	-0.175	-0.107	46.6	0.094	-0.191
Greece	-0.123	-0.213	-0.261	-0.196	-0.145	-0.204	-0.232	-0.111	-0.036	-0.111	0.031	125.3	0.154	-0.138
Hungary	0.500	0.440	0.452	0.542	0.603	0.485	0.524	0.472	0.511	0.470	0.475	-5.0	-0.025	0.497
Ireland	0.655	0.667	0.640	0.624	0.653	0.582	0.559	0.464	0.551	0.565	0.638	-2.6	-0.017	0.602
Italy	0.123	0.114	0.059	0.061	0.061	0.043	0.016	0.031	0.061	0.043	0.104	-15.5	-0.019	0.063
Latvia	0.054	0.117	0.148	0.279	0.305	0.332	0.460	0.491	0.576	0.572	0.646	1 106.1	0.592	0.479
Lithuania	0.155	0.174	0.252	0.299	0.432	0.559	0.548	0.541	0.658	0.634	0.703	352.5	0.548	0.556
Luxembourg	-0.684	-0.794	-0.858	-0.802	-0.758	-0.731	-0.703	-0.756	-0.752	-0.595	-0.520	23.9	0.164	-0.709
Malta	-0.213	-0.208	-0.147	0.023	0.095	-0.099	-0.185	0.138	0.185	0.171	0.147	169.3	0.360	-0.007
Netherlands	-0.111	-0.140	-0.116	-0.173	-0.144	-0.179	-0.248	-0.214	-0.169	-0.195	-0.185	-67.2	-0.074	-0.177
Poland	0.103	0.153	0.267	0.360	0.329	0.321	0.292	0.407	0.439	0.421	0.476	363.6	0.373	0.354
Portugal	-0.292	-0.269	-0.266	-0.236	-0.130	-0.219	-0.232	-0.099	-0.078	-0.088	0.017	105.9	0.310	-0.152
Romania	-0.536	-0.712	-0.674	-0.654	-0.600	-0.499	0.008	-0.068	0.188	0.214	0.226	142.2	0.763	-0.172
Slovak Republic	-0.471	-0.431	-0.386	-0.068	0.070	-0.154	-0.075	-0.242	-0.209	-0.094	-0.055	88.4	0.417	-0.206
Slovenia	0.337	0.233	0.200	0.149	0.088	-0.010	-0.004	-0.011	-0.198	-0.268	-0.152	-145.1	-0.489	-0.027
Spain	-0.107	-0.101	-0.137	-0.160	-0.107	-0.192	-0.224	-0.120	-0.082	-0.086	-0.049	53.6	0.057	-0.121
Sweden	0.105	0.140	0.121	0.075	0.019	-0.007	0.000	-0.039	-0.019	-0.051	0.023	-78.1	-0.082	0.024
United Kingdom	-0.312	-0.301	-0.336	-0.329	-0.334	-0.356	-0.364	-0.355	-0.280	-0.231	-0.199	36.2	0.113	-0.304
TOTAL EU-28	-0.008	-0.019	-0.034	-0.038	-0.018	-0.054	-0.068	-0.050	0.009	0.005	0.046	700.3	0.054	-0.017

Source: Authors' calculations based on WITS and Comext databases.

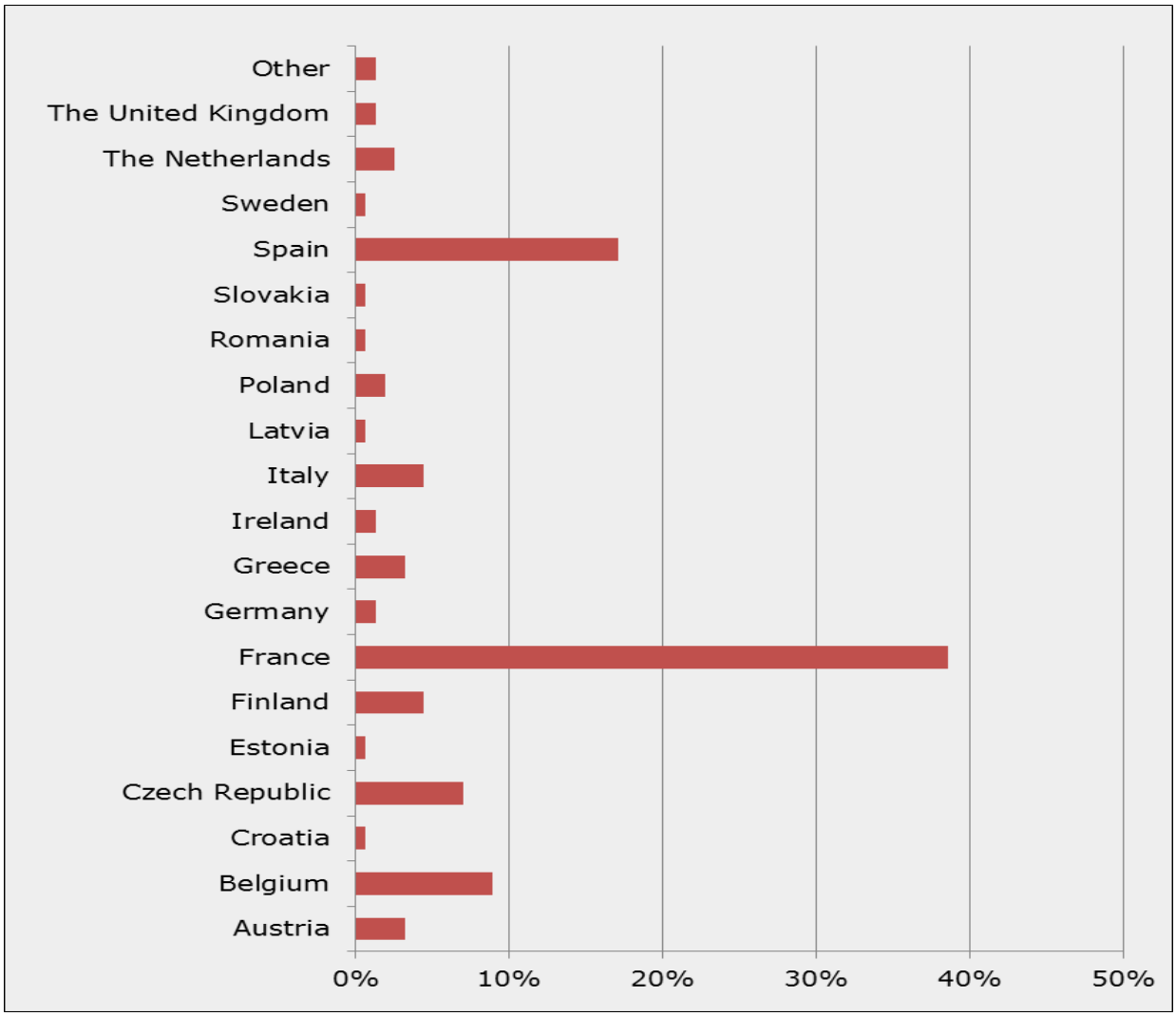
ANNEX II. SURVEY TABLES AND FIGURES

Table II.1. Organisations country

COUNTRY	No. of responses	% of responses
Austria	5	3.2
Belgium	14	8.9
Croatia	1	0.6
Czech Republic	11	7.0
Estonia	1	0.6
Finland	7	4.4
France	61	38.6
Germany	2	1.3
Greece	5	3.2
Ireland	2	1.3
Italy	7	4.4
Latvia	1	0.6
Poland	3	1.9
Romania	1	0.6
Slovakia	1	0.6
Spain	27	17.1
Sweden	1	0.6
The Netherlands	4	2.5
The United Kingdom	2	1.3
Other	2	1.3
TOTAL	**158**	**100**

Source: Survey data.

Figure II.1. Organisations country



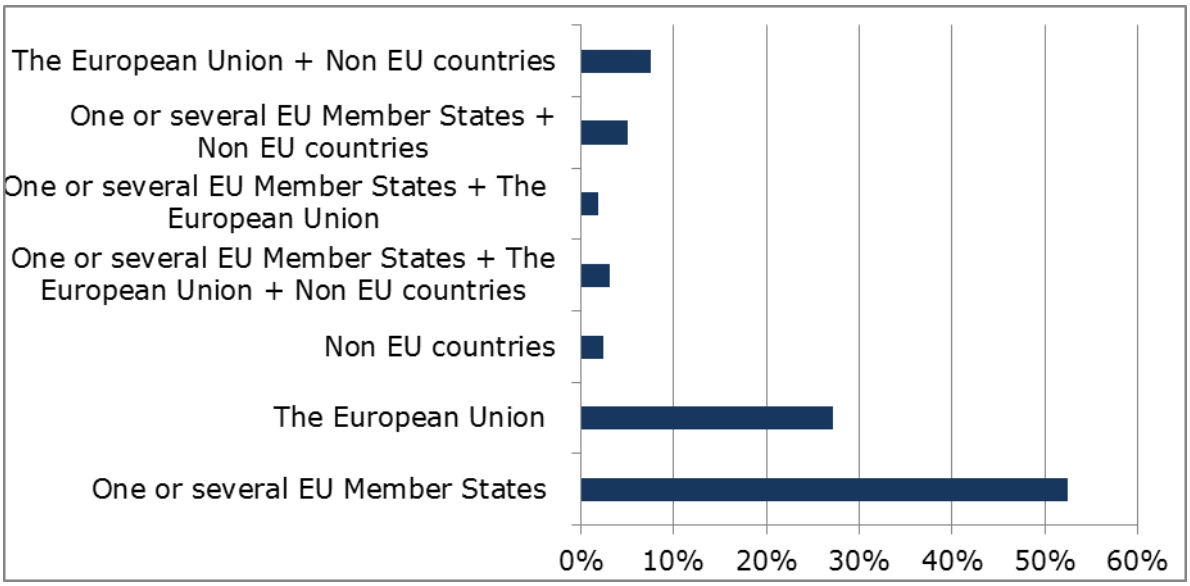
Source: Survey data.

Table II.2. Organisations geographical scope

No.	%	
83	52.5	One or several EU Member States
43	27.2	The European Union
4	2.5	Non EU countries
5	3.2	One or several EU Member States + The European Union + Non EU countries
3	1.9	One or several EU Member States + The European Union
8	5.1	One or several EU Member States + Non EU countries
12	7.6	The European Union + Non EU countries
158	**100**	

Source: Survey data.

Figure II.2. Organisations geographical scope



Source: Survey data.

Table II.3. Experts previous knowledge

	No. responses	% responses*
Grains	61	38.6
Fruits and Vegetables	36	22.8
Wine and spirits	17	10.8
Olive Oil	20	12.7
Sugar	17	10.8
Milk and dairy products	45	28.5
Bovine	28	17.7
Sheep and goats	7	4.4
Pigs and pork	19	12.0
Poultry (included eggs)	14	8.9
Other animals	1	0.6
Other vegetable products	12	7.6
Total agro-food sector	51	32.3
Others (please specify)	20	12.7
Total	**158**	

Source: Survey data.

*** Categories are not exclusive so the total sum exceeds 100%**

Table II.4. Organisation represents

	No. responses	% responses*
Farmers	45	28.5
Processors	23	14.6
Retailers	7	4.4
Wholesalers and traders	7	4.4
Consumers	2	1.3
Interprofessional Organisation	8	5.1
Researchers	54	34.2
National Public Administration	20	12.7
EU Public Administration	9	5.7
Other	28	17.7

Source: Survey data.

*** Categories are not exclusive so the total sum exceeds 100%**

Table II.5. General trends statements

STATEMENTS		1. Not likely	2	3	4	5	6	7. Very likely	Average	Responses
The EU agro-food sector will be an engine for economic growth.	Abs. Freq.	4	14	17	15	40	40	28	**4.93**	158
	Rel. Freq.	2.5%	8.9%	10.8%	9.5%	25.3%	25.3%	17.7%		
The EU agro-food production will be more sustainable.	Abs. Freq.	2	6	8	27	55	40	20	**5.07**	158
	Rel. Freq.	1.3%	3.8%	5.1%	17.1%	34.8%	25.3%	12.7%		
The EU agro-food sector will increase employment opportunities in rural areas.	Abs. Freq.	7	13	18	37	36	28	19	**4.53**	158
	Rel. Freq.	4.4%	8.2%	11.4%	23.4%	22.8%	17.7%	12.0%		
Fairer practices will spread within the European food chain.	Abs. Freq.	7	12	32	47	38	13	6	**4.03**	155
	Rel. Freq.	4.5%	7.7%	20.6%	30.3%	24.5%	8.4%	3.9%		
Consumption patterns will shift towards the purchase of cheaper products.	Abs. Freq.	3	8	35	42	28	26	13	**4.38**	155
	Rel. Freq.	1.9%	5.2%	22.6%	27.1%	18.1%	16.8%	8.4%		
Consumption patterns will shift towards the purchase of quality products.	Abs. Freq.	1	1	12	39	58	31	14	**4.93**	156
	Rel. Freq.	0.6%	0.6%	7.7%	25.0%	37.2%	19.9%	9.0%		
Consumption patterns will shift towards the purchase of local products.	Abs. Freq.	3	5	15	31	59	27	13	**4.77**	153
	Rel. Freq.	2.0%	3.3%	9.8%	20.3%	38.6%	17.6%	8.5%		

Source: Survey data.

Table II.6. General trends statements – Groups averages

	Country Aggregations		Geographical Scope		Organisation Represents					Sector Groups			
	EU-15	EU-13	UE wide	Rest of sample	Farmers	Researchers	Traders	Processors	Public officers	Mediterranean crops	Livestock	Other arable crops	Sample Average
1	5.16*	3.42**	5.17*	4.77**	5.24	4.52**	5.33	5.52	4.86	5.02	4.92	4.87	**4.93**
2	5.18*	4.32**	4.98	5.13	5.27	4.80	5.67	5.61	4.96	4.94	5.06	5.11	**5.07**
3	4.65*	3.74**	4.46	4.58	4.93	4.28	4.92	5.04	4.46	4.90*	4.46	4.49	**4.53**
4	4.02	4.28*	3.97	4.08	3.95	4.20	4.33	3.83	4.15	3.84**	3.92	4.03	**4.03**
5	4.46	3.83**	4.32	4.42	4.53	4.43	4.33	4.87	4.22	4.55	4.49	4.41	**4.38**
6	4.95	4.89	4.94	4.93	4.96	4.83	5.25	4.91	5.07	4.96	4.84	4.95	**4.93**
7	4.78	4.72	4.60**	4.89	4.75	4.77	4.92	4.09**	5.04	4.92	4.58**	4.76	**4.77**
8	5.16*	3.42**	5.17*	4.77**	5.24	4.52**	5.33	5.52	4.86	5.02	4.92	4.87	**4.93**

1	The EU agro-food sector will be an engine for economic growth.
2	The EU agro-food production will be more sustainable.
3	The EU agro-food sector will increase employment opportunities in rural areas.
4	Fairer practices will spread within the European food chain.
5	Consumption patterns will shift towards the purchase of cheaper products.
6	Consumption patterns will shift towards the purchase of quality products.
7	Consumption patterns will shift towards the purchase of local products.

*** Four upper values, maximum distance from sample average**

**** Four lower values, maximum distance from sample average**

Source: Survey data.

Table II.7. Competitive trends statements

		1. Not likely	2	3	4	5	6	7. Very likely	Average	Responses
The EU trade surplus will keep growing in broad terms.	Abs. Freq.	9	21	33	40	29	19	7	**3.91**	158
	Rel. Freq.	5.7%	13.3%	20.9%	25.3%	18.4%	12.0%	4.4%		
The EU negative trade balance will continue in significant subsectors.	Abs. Freq.	4	3	19	22	48	37	25	**5.01**	158
	Rel. Freq.	2.5%	1.9%	12.0%	13.9%	30.4%	23.4%	15.8%		
EU agro-food products will rely more on foreign demand.	Abs. Freq.	3	7	30	45	30	30	12	**4.46**	157
	Rel. Freq.	1.9%	4.5%	19.1%	28.7%	19.1%	19.1%	7.6%		
R&D&i will be a source of competitive advantage for EU products.	Abs. Freq.	1	5	9	27	39	50	25	**5.23**	156
	Rel. Freq.	0.6%	3.2%	5.8%	17.3%	25.0%	32.1%	16.0%		
Quality will be a source of competitive advantage for EU products.	Abs. Freq.	1	2	6	18	38	59	32	**5.53**	156
	Rel. Freq.	0.6%	1.3%	3.8%	11.5%	24.4%	37.8%	20.5%		
The EU will be lagging behind productivity levels of third countries.	Abs. Freq.	3	17	25	30	27	34	17	**4.51**	153
	Rel. Freq.	2.0%	11.1%	16.3%	19.6%	17.6%	22.2%	11.1%		
Differences in socio-environmental regulations and standards will hinder the competitiveness of EU products.	Abs. Freq.	1	6	22	21	30	38	36	**5.15**	154
	Rel. Freq.	0.6%	3.9%	14.3%	13.6%	19.5%	24.7%	23.4%		
The small size of most EU companies will hinder their international competitiveness.	Abs. Freq.	5	18	24	32	32	34	11	**4.37**	156
	Rel. Freq.	3.2%	11.5%	15.4%	20.5%	20.5%	21.8%	7.1%		

Source: Survey data.

Table II.8. Competitive trends statements – Groups averages

	Country Aggregations		Geographical Scope		Organisation Represents					Sector Groups			
	EU-15	EU-13	UE wide	Rest of sample	Farmers	Researchers	Traders	Processors	Public officers	Mediterranean crops	Livestock	Other arable crops	Sample Average
1	3.93	3.79	3.98	3.86	3.98	3.81	3.83	3.70	4.14	4.00	3.96	3.89	**3.91**
2	5.07	4.58	4.95	5.05	5.11	5.13	5.83*	5.26	4.96	5.14	5.08	5.20	**5.01**
3	4.54	3.95	4.60*	4.37	4.49	4.17	4.75	5.13*	4.32	4.43	4.50	4.61	**4.46**
4	5.27	5.06	5.29	5.19	5.11	5.30	6.08*	5.52	5.41	5.47*	5.12	5.05	**5.23**
5	5.54	5.50	5.58	5.50	5.40	5.69	5.83	5.57	5.70	5.51	5.44	5.39	**5.53**
6	4.57	4.00	4.28**	4.66*	4.50	4.36	4.42	4.91	4.12**	4.28**	4.60	4.95*	**4.51**
7	5.16	5.00	4.87**	5.34*	5.66	4.85	5.25	5.73	4.33**	5.10	5.33	5.25	**5.15**
8	4.37	4.39	4.31	4.41	4.41	4.30	5.00*	4.43	4.04	4.73*	4.08**	4.46	**4.37**

1	The EU trade surplus will keep growing in broad terms.
2	The EU negative trade balance will continue in significant subsectors.
3	EU agro-food products will rely more on foreign demand.
4	R&D&i will be a source of competitive advantage for EU products.
5	Quality will be a source of competitive advantage for EU products.
6	The EU will be lagging behind productivity levels of third countries.
7	Differences in socio-environmental regulations and standards will hinder the competitiveness of EU products.
8	The small size of most EU companies will hinder their international competitiveness.

*** Four upper values, maximum distance from sample average**

**** Four lower values, maximum distance from sample average**

Source: Survey data.

Table II.9. Expected improvement in sectors

SECTOR	No. responses	Percentage*
Milk and dairy products	68	45.0
Fruits and Vegetables	52	34.4
Wine and spirits	51	33.8
Grains	42	27.8
Olive Oil	35	23.2
Pigs and pork	28	18.5
Bovine	27	17.9
Poultry (included eggs)	25	16.6
Sugar	21	13.9
Other vegetable products	18	11.9
Other agro-food sectors[1]	16	10.6
Sheep and goats	9	6.0
Other animals	2	1.3

Source: Survey data.

*** Categories are not exclusive so the total sum exceeds 100%**

[1] Shown in the next table

Table II.10. Expected improvement in sectors - Groups averages 1

	Country Aggregations		Geographical Scope		
	EU-15	EU-13	UE wide	Rest of sample	Sample Percentage
Grains	24.43	44.44*	28.57	27.27	**27.81**
Fruits and Vegetables	35.11	33.33	36.51	32.95	**34.44**
Wine and spirits	32.82	33.33	34.92	32.95	**33.77**
Olive Oil	25.95	5.56**	26.98*	20.45**	**23.18**
Sugar	14.50	11.11	15.87	12.50	**13.91**
Milk and dairy products	39.69**	77.78*	44.44	45.45	**45.03**
Bovine	20.61	0.00**	14.29**	20.45	**17.88**
Sheep and goats	5.34	11.11*	1.59**	9.09*	**5.96**
Pigs and pork	17.56	27.78*	22.22*	15.91	**18.54**
Poultry (included eggs)	18.32	5.56**	12.70**	19.32*	**16.56**
Other animals	1.53	0.00	1.59	1.14	**1.32**
Other vegetable products	11.45	16.67	12.70	11.36	**11.92**
Other agro-food sectors	11.45	5.56	11.11	10.23	**10.60**

*** Four upper values, maximum distance from sample average** **Source:** Survey data.

**** Four lower values, maximum distance from sample average**

Table II.11. Expected improvement in sectors - Groups averages 2

	Organisation Represents					
	Farmers	Researchers	Traders	Processors	Public officers	Sample Percentage
Grains	28.57	26.92	36.36	27.27	23.08	**27.81**
Fruits and Vegetables	40.48	28.85	27.27	13.64**	30.77	**34.44**
Wine and spirits	21.43**	36.54	54.55*	36.36	34.62	**33.77**
Olive Oil	16.67	23.08	36.36*	27.27	23.08	**23.18**
Sugar	14.29	9.62	18.18	22.73	23.08	**13.91**
Milk and dairy products	30.95**	55.77	36.36	27.27**	53.85	**45.03**
Bovine	21.43	21.15	9.09	22.73	11.54	**17.88**
Sheep and goats	4.76	11.54	0.00	0.00	0.00	**5.96**
Pigs and pork	23.81	11.54	27.27	40.91*	7.69	**18.54**
Poultry (included eggs)	19.05	19.23	18.18	27.27	19.23	**16.56**
Other animals	0.00	1.92	0.00	0.00	3.85	**1.32**
Other vegetable products	14.29	11.54	0.00	0.00	7.69	**11.92**
Other agro-food sectors	9.52	9.62	0.00	9.09	23.08*	**10.60**

*** Four upper values, maximum distance from sample average** **Source:** Survey data.

**** Four lower values, maximum distance from sample average**

Table II.12. Expected improvement in sectors - Groups averages 3

	Sector Groups			
	Mediterranean crops	Livestock	Other arable crops	Sample Percentage
Grains	17.02	33.33	50.00*	**27.81**
Fruits and Vegetables	55.32*	22.92	26.67	**34.44**
Wine and spirits	48.94*	20.83**	25.00	**33.77**
Olive Oil	38.30*	6.25**	13.33	**23.18**
Sugar	12.77	6.25	25.00	**13.91**
Milk and dairy products	38.30	58.33	31.67**	**45.03**
Bovine	8.51	27.08	23.33	**17.88**
Sheep and goats	4.26	10.42	11.67	**5.96**
Pigs and pork	8.51	31.25	15.00	**18.54**
Poultry (included eggs)	4.26**	25.00	23.33	**16.56**
Other animals	4.26	0.00	1.67	**1.32**
Other vegetable products	12.77	8.33	8.33	**11.92**
Other agro-food sectors	6.38	12.50	8.33	**10.60**

*** Four upper values, maximum distance from sample average**

**** Four lower values, maximum distance from sample average**

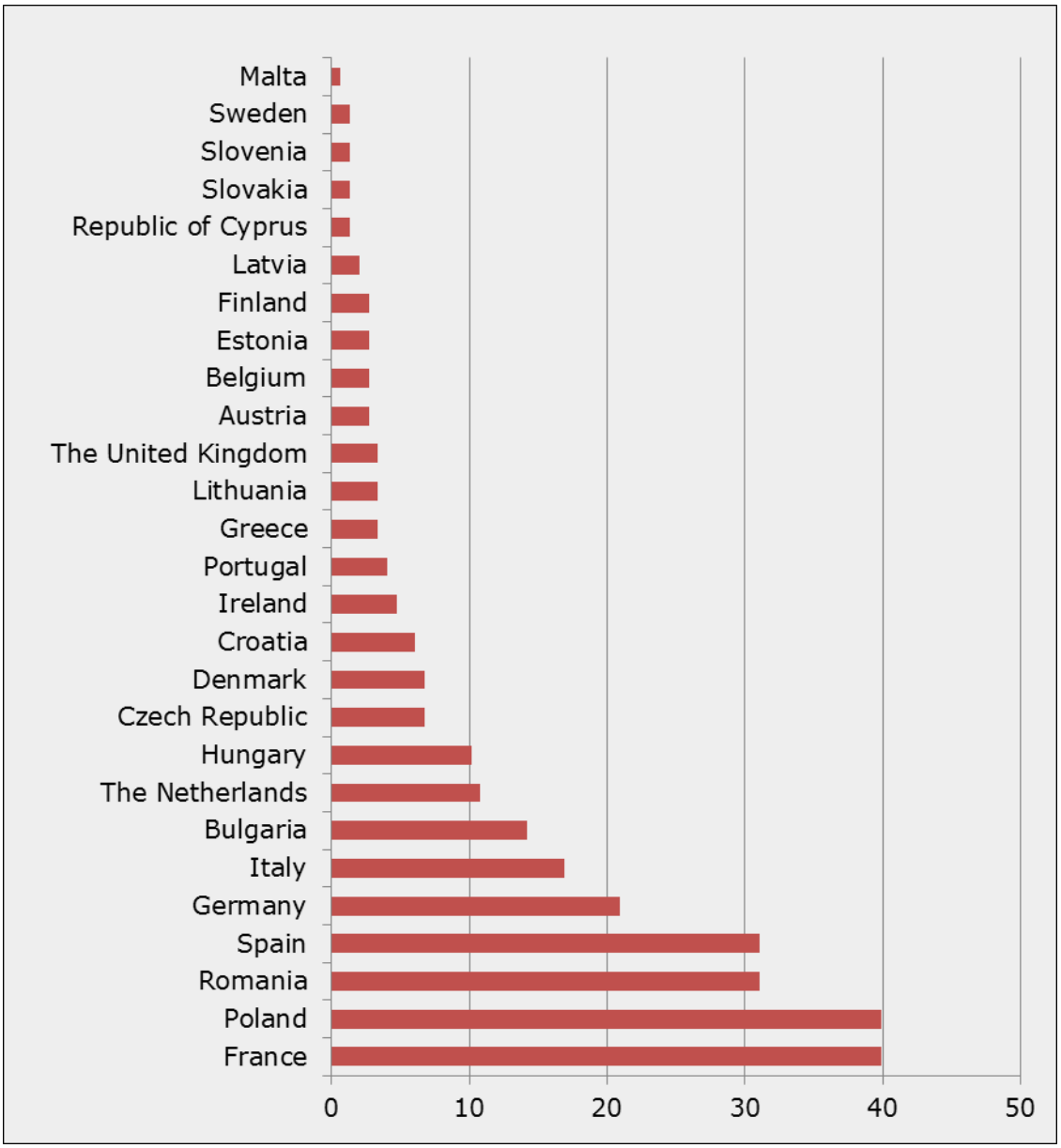
Source: Survey data.

Table II.13. Expected improvement in Member States

COUNTRY	No. responses	Percentage
Austria	4	2.7
Belgium	4	2.7
Bulgaria	21	14.2
Croatia	9	6.1
Czech Republic	10	6.8
Denmark	10	6.8
Estonia	4	2.7
Finland	4	2.7
France	59	39.9
Germany	31	20.9
Greece	5	3.4
Hungary	15	10.1
Ireland	7	4.7
Italy	25	16.9
Latvia	3	2.0
Lithuania	5	3.4
Luxembourg	0	0.0
Malta	1	0.7
Poland	59	39.9
Portugal	6	4.1
Republic of Cyprus	2	1.4
Romania	46	31.1
Slovakia	2	1.4
Slovenia	2	1.4
Spain	46	31.1
Sweden	2	1.4
The Netherlands	16	10.8
The United Kingdom	5	3.4

Source: Survey data.

Figure II.3. Expected improvement in Member States



Source: Survey data.

Table II.14. Expected improvement in Member States - Groups averages 1

	Country Aggregations		Geographical Scope		
	EU-15	EU-13	UE wide	Rest of sample	Sample Percentage
Austria	3.1	0.0	1.7	3.4	**2.70**
Belgium	2.4	5.3	0.0	4.5	**2.70**
Bulgaria	13.4	21.1	15.0	13.6	**14.19**
Croatia	6.3	5.3	8.3	4.5	**6.08**
Czech Republic	4.7	21.1*	5.0	8.0	**6.76**
Denmark	6.3	5.3	13.3*	2.3**	**6.76**
Estonia	2.4	5.3	3.3	2.3	**2.70**
Finland	3.1	0.0	3.3	2.3	**2.70**
France	42.5	21.1**	31.7**	45.5*	**39.86**
Germany	18.9	31.6*	25.0	18.2	**20.95**
Greece	3.9	0.0	3.3	3.4	**3.38**
Hungary	10.2	10.5	13.3	8.0	**10.14**
Ireland	5.5	0.0	5.0	4.5	**4.73**
Italy	19.7	0.0**	21.7*	13.6**	**16.89**
Latvia	1.6	5.3	3.3	1.1	**2.03**
Lithuania	3.1	5.3	5.0	2.3	**3.38**
Luxembourg	0.0	0.0	0.0	0.0	**0.00**
Malta	0.0	5.3	0.0	1.1	**0.68**
Poland	37.8	52.6*	36.7	42.0	**39.86**
Portugal	4.7	0.0	3.3	4.5	**4.05**
Republic of Cyprus	1.6	0.0	1.7	1.1	**1.35**
Romania	31.5	26.3**	28.3	33.0	**31.08**
Slovakia	0.8	5.3	1.7	1.1	**1.35**
Slovenia	1.6	0.0	3.3	0.0	**1.35**
Spain	34.6	10.5**	40.0*	25.0**	**31.08**
Sweden	1.6	0.0	0.0	2.3	**1.35**
The Netherlands	9.4	21.1*	15.0	8.0	**10.81**
The United Kingdom	3.1	0.0	3.3	3.4	**3.38**

*** Four upper values, maximum distance from sample average**

**** Four lower values, maximum distance from sample average**

Source: Survey data.

Table II.15. Expected improvement in Member States - Groups averages 2

	Organisation Represents					
	Farmers	Researchers	Traders	Processors	Public officers	Sample Percentage
Austria	2.4	6.0	27.3*	0.0	0.0	**2.70**
Belgium	2.4	0.0	0.0	0.0	4.0	**2.70**
Bulgaria	12.2	16.0	18.2	4.8	8.0	**14.19**
Croatia	2.4	4.0	9.1	4.8	12.0	**6.08**
Czech Republic	7.3	6.0	9.1	4.8	12.0	**6.76**
Denmark	4.9	6.0	0.0	4.8	12.0	**6.76**
Estonia	4.9	0.0	0.0	4.8	4.0	**2.70**
Finland	4.9	2.0	0.0	9.5	0.0	**2.70**
France	41.5	42.0	27.3	52.4*	32.0	**39.86**
Germany	17.1	26.0	0.0**	23.8	24.0	**20.95**
Greece	4.9	4.0	0.0	0.0	8.0	**3.38**
Hungary	4.9	18.0	18.2	4.8	8.0	**10.14**
Ireland	2.4	0.0	0.0	9.5	8.0	**4.73**
Italy	22.0	14.0	0.0**	19.0	12.0	**16.89**
Latvia	4.9	0.0	9.1	0.0	4.0	**2.03**
Lithuania	9.8	0.0	9.1	0.0	4.0	**3.38**
Luxembourg	0.0	0.0	0.0	0.0	0.0	**0.00**
Malta	0.0	0.0	9.1	0.0	0.0	**0.68**
Poland	31.7	48.0	9.1**	23.8**	40.0	**39.86**
Portugal	4.9	8.0	0.0	0.0	4.0	**4.05**
Republic of Cyprus	2.4	2.0	0.0	0.0	0.0	**1.35**
Romania	41.5*	34.0	27.3	28.6	28.0	**31.08**
Slovakia	2.4	2.0	9.1	4.8	0.0	**1.35**
Slovenia	2.4	2.0	9.1	4.8	0.0	**1.35**
Spain	26.8	24.0	36.4	33.3	40.0	**31.08**
Sweden	2.4	0.0	9.1	4.8	4.0	**1.35**
The Netherlands	4.9	10.0	0.0	9.5	20.0*	**10.81**
The United Kingdom	4.9	0.0	9.1	9.5	4.0	**3.38**

*** Four upper values, maximum distance from sample average**

**** Four lower values, maximum distance from sample average**

Source: Survey data.

Table II.16. Expected improvement in Member States - Groups averages 3

	Sector Groups			
	Mediterranean crops	Livestock	Other arable crops	Sample Percentage
Austria	4.3	2.1	5.3	**2.70**
Belgium	4.3	2.1	1.8	**2.70**
Bulgaria	13.0	10.4	21.1	**14.19**
Croatia	8.7	4.2	7.0	**6.08**
Czech Republic	6.5	10.4	5.3	**6.76**
Denmark	8.7	10.4	3.5	**6.76**
Estonia	0.0	2.1	3.5	**2.70**
Finland	2.2	2.1	3.5	**2.70**
France	30.4**	45.8	50.9*	**39.86**
Germany	8.7**	27.1	15.8	**20.95**
Greece	8.7	2.1	1.8	**3.38**
Hungary	13.0	6.3	14.0	**10.14**
Ireland	2.2	8.3	1.8	**4.73**
Italy	28.3*	12.5	8.8	**16.89**
Latvia	2.2	0.0	3.5	**2.03**
Lithuania	4.3	0.0	3.5	**3.38**
Luxembourg	0.0	0.0	0.0	**0.00**
Malta	0.0	2.1	0.0	**0.68**
Poland	34.8	45.8	42.1	**39.86**
Portugal	8.7	0.0	1.8	**4.05**
Republic of Cyprus	4.3	0.0	1.8	**1.35**
Romania	32.6	33.3	40.4*	**31.08**
Slovakia	0.0	2.1	1.8	**1.35**
Slovenia	0.0	0.0	1.8	**1.35**
Spain	43.5*	20.8**	21.1**	**31.08**
Sweden	2.2	0.0	1.8	**1.35**
The Netherlands	13.0	10.4	3.5	**10.81**
The United Kingdom	2.2	2.1	3.5	**3.38**

*** Four upper values. maximum distance from sample average Source:** Survey data.

**** Four lower values. maximum distance from sample average**

Table II.17. Impact of policies on the competitiveness – Group averages

	Country Aggregations		Geographical Scope		Organisation Represents					Sector Groups			
	EU-15	EU-13	UE wide	Rest of sample	Farmers	Researchers	Traders	Processors	Public officers	Mediterranean crops	Livestock	Other arable crops	Sample Average
1	4.16	4.47*	4.00**	4.33*	3.78	4.50	3.80	3.75	4.48	4.17	4.27	4.28	
2	3.82	3.63**	3.70	3.86	3.60	4.29*	3.60	3.40	3.67	3.85	4.00	3.59	
3	4.50	4.26**	4.36**	4.53	4.56	4.42	4.60	4.84*	4.46	4.63	4.32	4.50	
4	4.53	4.50	4.42	4.58	4.26	4.67	4.18	4.29	4.59	4.53	4.84*	4.15**	
5	4.56	4.50	4.70*	4.45**	4.10	4.69	3.82**	3.62**	4.93*	5.04*	4.63	3.98**	
6	5.10	5.33*	5.05	5.16	4.95	5.40	4.45**	4.50	5.31	5.40	4.98	5.18	
7	5.77	5.89	5.73	5.82	5.96	5.80	6.09	5.95	5.65	6.00	5.74	5.78	
8	4.20	4.22	4.25	4.16	4.16	4.41	3.91	3.55**	4.15	4.60*	4.28	3.93**	
9	5.95	5.83	5.81**	6.01*	5.82	6.07	5.92	6.09	5.74	5.90	6.08	5.97	
10	4.79	4.33**	4.65	4.81	4.69	4.96	4.55	4.76	4.62	4.81	4.94	4.62	
11	3.60	4.00*	3.76*	3.55	3.30	4.06*	3.40	3.05	3.73	3.67	3.69	3.31**	
12	4.71	5.22*	4.85	4.73	4.55	5.04	4.73	4.18	5.04	4.98	4.76	4.52	
13	5.03	4.89**	5.07	4.98	4.77	5.33	4.55	4.55	5.08	5.33*	4.94	4.93	

1	Decoupled support - basic payment.	8	Agro-environmental – climate payments.
2	Green payments.	9	Research and innovation instruments.
3	Coupled support.	10	The new Community framework to balance the food chain.
4	Payments to less-favoured areas.	11	Animal welfare regulation.
5	Organic farming.	12	Local markets promotion.
6	Producer organisations.	13	Geographical indications normative framework.
7	Farm restructuring – investment – modernization.		

*** Four upper values, maximum distance from sample average** Source: Survey data.

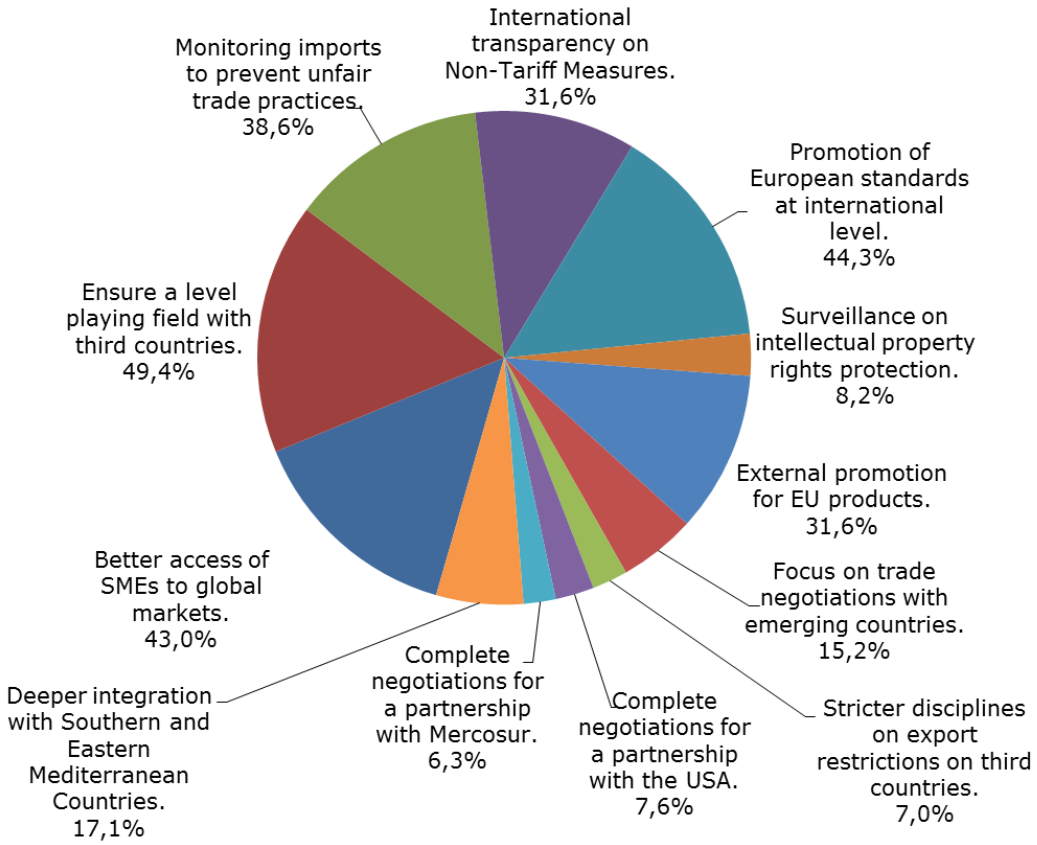
**** Four lower values, maximum distance from sample average**

Table II.18. Policy recommendations

	No. responses	Percentage
Better access of SMEs to global markets.	68	43.0
Ensure a level-playing field with third countries.	78	49.4
Monitoring imports to prevent unfair trade practices.	61	38.6
International transparency on Non-Tariff Measures.	50	31.6
Promotion of European standards at international level.	70	44.3
Surveillance on intellectual property rights protection.	13	8.2
External promotion for EU products.	50	31.6
Focus on trade negotiations with emerging countries.	24	15.2
Stricter disciplines on export restrictions on third countries.	11	7.0
Complete negotiations for a partnership with the US.	12	7.6
Complete negotiations for a partnership with Mercosur.	10	6.3
Deeper integration with Southern and Eastern Mediterranean countries.	27	17.1
TOTAL	158	

Source: Survey data.

Figure II.4. Policy recommendations



Source: Survey data.

ANNEX III. LIST OF CONTRIBUTING ORGANISATIONS IN THE SURVEY

Table III.1. List of contributing organisations

COUNTRY	COMPANY/INSTITUTION:
Austria	Federal Institute for Less-Favoured and Mountainous Areas
	BABF
Belgium	Commission Européenne
	EDA
	SpiritsEUROPE
	CEETTAR
Croatia	Agrokor d.d.
Czech Republic	Ministry of Agriculture CZECH REPUBLIC
	El Centro Technologico
	CULS Prague
	Institute of Agricultural Economics and Information
	Zemědělské obchodní družstvo AGRISPOL Mořice
	Holstein Association
	Institute of Agricultural Economics and Information
	ÚZEI Prague
Finland	MTT agrifood Research Finland
	MTK
	Valio Ltd
	Ministry of Agriculture and Forestry
	SLC
	Österbottens Kött
France	Scea des 4 monts
	Cerfrance 53-72
	DUC
	Groupe Dauphinoise
	Agropolis International
	FNA
	ITAVI
	GEM
	AGPB
	PONAN
	INRA
	Agrosupdijon
	Académie d'agriculture de France
	Marché du porc breton
	Valfrance
	Crédit Agricole Normandie-Seine
	VIVESCIA
	Tirard Expert UE Agriculturev et IAA
	Pôle IAR
	UME Metafor/VetAgro SUp
	CNE
	Franceagrimer
	Institut de l'Elevage
	CIRAD

COUNTRY	COMPANY/INSTITUTION:
	AREA
	AREPO
	UMR MOISA
	IAMM
	AAF
Greece	ETAM SA
	Mediterranean Agronomic Institute of Chania
	Dept. of Economics/University of Patras
Italy	Mediterranean University Reggio Calabria
	ASSICA
	University of Bologna
	Department of Agricultural and Food Sciences
Latvia	NGO Farmers Parliament
Poland	Warsaw University of Life Sciences
	IERiGZ-PIB
	Warsaw University Of Life Sciences – SGGW
Romania	University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca. Romania
Spain	Acorex S.Coop. Ltda
	Coop Agricola San Bernardo - valencia
	Cooperativa Agrícola Virgen del Oreto
	Surinver Hortofruticola, S.COOP.
	Cooperativas Agroalimentarias CLM
	Cooperativas Agro-alimentarias
	Feceració Cooperatives Agroalimentaries Com. Valenciana
	COHOCA. COOP.V.
	ASEDAS
	Mercadona
	AVA-ASAJA
	European Cimmission. JRC
	Public University of Navarra
	OEMV
	FIAB
	UPV
	GCVera
Sweden	Dairy Sweden
The Netherlands	Raymond Tans - PUBLIC AFFAIRS STRATEGIES
The United Kingdom	University of Reading

ANNEX IV. SURVEY

LANGUAGE SELECTED: ENGLISH

1. In which country is your organisation based?

Austria	France	Lithuania	Slovakia
Belgium	Germany	Luxembourg	Slovenia
Bulgaria	Greece	Malta	Spain
Croatia	Hungary	Poland	Sweden
Czech Republic	Ireland	Portugal	The Netherlands
Denmark	Italy	Republic of Cyprus	The United Kingdom
Estonia	Latvia	Romania	Other
Finland			

2. The geographical scope of your organisation is:
- One or several EU Member States
- The European Union
- Non EU countries

3. Mark up to three sectors for which you have previous knowledge.
- Grains
- Fruits and Vegetables
- Wine and spirits
- Olive Oil
- Sugar
- Milk and dairy products
- Bovine
- Sheep and goats
- Pigs and pork
- Poultry (included eggs)
- Other animals
- Other vegetable products
- Total agro-food sector
- Other (please specify)

4. Your organisation represents:
- Farmers
- Processors
- Retailers
- Wholesalers and traders
- Consumers
- Interprofessional Organisation
- Researchers
- National Public Administration
- EU Public Administration
- NGO
- Others (please specify)

5. The "**EU 2020" Strategy** recognises that "*a sustainable productive and competitive agricultural sector will make an important contribution to the new strategy, considering the growth and employment potential of rural areas while ensuring fair competition*".
We ask you to evaluate the following trends concerning the situation of the EU agro-food sector (from 1 = not likely to 7 = very likely).
By 2020…

1. The EU agro-food sector will be an engine for economic growth.
2. The EU agro-food production will be more sustainable.
3. The EU agro-food sector will increase employment opportunities in rural areas.
4. Fairer practices will spread in the European food chain.
5. Consumers will shift towards the purchase of cheaper products.
6. Consumers will shift towards the purchase of quality products.
7. Consumers will shift towards the purchase of local products.

6. We ask you to assess how the **competitive position of the agro-food sector in the EU Member States will be evolving in the next decade, compared with the main world players** (US, Canada, China, India, Australia, South Africa, Russia, Brazil, Argentina).
Evaluate the likelihood of the following trends, related to the agro-food sector in the EU Member States (from 1 = not likely to 7 = very likely).
By 2020…

1. The EU trade surplus will keep growing in broad terms.
2. The EU negative trade balance will continue in significant subsectors.
3. EU agro-food products will rely more on foreign demand.
4. R&D&I will be a source of competitive advantage for EU products.
5. Quality will be a source of competitive advantage for EU products.
6. The EU will be lagging behind productivity levels of third countries.
7. Differences in socio-environmental regulations and standards will hinder the competitiveness of EU products.
8. The small size of most EU companies will hinder their international competitiveness.

7. Mark **up to three sectors** where the EU competitiveness is expected to improve:

- Grains
- Fruits and Vegetables
- Wine and spirits
- Olive Oil
- Sugar
- Milk and dairy products
- Bovine
- Sheep and goats
- Pigs and pork
- Poultry (included eggs)
- Other animals
- Other vegetable products
- Other agro-food sectors (please specify)

8. Mark **up to three EU Member States** where agro-food competitiveness is expected to improve.

Austria	France	Lithuania	Slovakia
Belgium	Germany	Luxembourg	Slovenia
Bulgaria	Greece	Malta	Spain
Croatia	Hungary	Poland	Sweden
Czech Republic	Ireland	Portugal	The Netherlands
Denmark	Italy	Republic of Cyprus	The United Kingdom
Estonia	Latvia	Romania	
Finland			

9. While income support policies (CAP Pillar I) have an impact on farmers' activities, rural development (CAP Pillar II) contains some actions and resources dedicated to European agriculture and food industry. Besides, other policy regulations may influence the sector.
Please mark your opinion about the influence of the following tools on the competitiveness of EU agro-food products (from 1 = very negative to 7 = very positive, 4 = neutral).

1. Decoupled support - basic payment.
2. Green payments.
3. Coupled support.
4. Payments to less-favoured areas.
5. Organic farming.
6. Producer organisations.
7. Farm restructuring – investment – modernization.
8. Agro-environmental – climate payments.
9. Research and innovation instruments.
10. The new Community framework to balance the food chain.
11. Animal welfare regulation.
12. Local markets promotion.
13. Geographical indications normative framework.

10. A toolbox of measures could help the EU Member States **to address the different competitiveness needs** according to the specific features of their agro-food sector.
Could you suggest **three areas** where the EU policies need to be strengthened?

- Better access of SMEs to global markets.
- Ensure a level-playing field with third countries.
- Monitoring imports to prevent unfair trade practices.
- International transparency on Non-Tariff Measures.
- Promotion of European standards at international level.
- Surveillance on intellectual property rights protection.
- External promotion for EU products.
- Focus on trade negotiations with emerging countries.
- Stricter disciplines on export restrictions on third countries.
- Complete negotiations for a partnership with the US.
- Complete negotiations for a partnership with Mercosur.
- Deeper integration with Southern and Eastern Mediterranean countries.

11. Indicate other policy needs not listed before.

12. If you want you can add the following information. We will keep you informed about the survey findings:

Company/Institution:
Email Address:

LANGUAGE SELECTED: FRANÇAIS

1. Dans quels pays se situe le siège de votre organisation?

Autriche	France	Lituanie	Slovaquie
Belgique	Allemagne	Luxembourg	Slovénie
Bulgarie	Grèce	Malte	Espagne
Croatie	Hongrie	Pologne	Suède
RépubliqueTchèque	Irlande	Portugal	Pays-Bas
Danemark	Italie	République de Chypre	Royaume-Uni
Estonie	Lettonie	Roumanie	Autre
Finlande			

2. Le champ d'action géographique de votre organisation est:
- Un ou plusieurs Etats membre(s) de l'UE
- L'Union européenne
- Pays non membres de l'UE

3. Marquer jusqu'à trois industries pour lesquelles vous avez des connaissances préalables:
- Céréales
- Fruits et légumes
- Vins et spiritueux
- Huiled'olive
- Sucre
- Lait et produitslaitiers
- Viande bovine
- Moutons et chèvres
- Cochons et porc
- Volaille (en incluant la production d'oeufs)
- Autres animaux
- Autres produits végétaux
- Totalité du secteur agro-alimentaire
- Autre (merci de spécifier)

4. Votre organisation représente:
- Des agriculteurs
- Des transformateurs de matière première
- Des distributeurs
- Des grossistes et négociants
- Des consommateurs
- Une organisation interprofessionnelle
- Des chercheurs
- L'Administration Publique
- L'Administration Publique de l'UE
- Des ONG
- Autre (merci de spécifier)

5. La **Stratégie** "**EU 2020"** reconnaît qu'*"un secteur agricole productif et compétitif permettra une importante contribution à la nouvelle stratégie en considérant la croissance et l'emploi possible dans les zones rurales tout en assurant une concurrence juste".*
Nous vous demandons de bien vouloir évaluer les tendances suivantes concernant la situation du secteur agro-alimentaire dans l'UE (de 1= pas probable à 7 =tout à fait probable).
D'ici à 2020…

1. Le secteur agro-alimentaire de l'UE sera un moteur pour la croissance économique.
2. La production agro-alimentaire de l'UE sera plus durable.
3. Le secteur agro-alimentaire de l'UE augmentera les possibilités d'emploi dans les zones rurales.
4. Des pratiques plus justes seront développées au sein de la chaîne de production alimentaire européenne.
5. Les consommateurs se tourneront plus vers la recherche de produits meilleur marché.
6. Les consommateurs se tourneront vers la recherche de produits de qualité.
7. Les consommateurs se tourneront vers la recherche de produits locaux.

6. Nous vous demandons de bien vouloir évaluer de quelle façon évoluera dans la prochaine décennie **la position concurrentielle du secteur agro-alimentaire dans les pays membres de l'UE comparé aux principaux acteurs mondiaux** (US, Canada, Chine, Inde, Australie, Afrique du Sud, Russie, Brésil, Argentine).
Evaluez la probabilité des tendances suivantes qui liées au secteur agro-alimentaire dans les Etats membres de l'UE, (de1 = pas probable à 7 =tout à fait probable).
D'ici à 2020…

1. Le surplus commerciaux de l'UE continuera à s'accroître de façon générale.
2. La balance commerciale de l'UEcontinuera à être négative dans des sous-secteurs importants.
3. Les produits agro-alimentaires de l'UE dépendront plus de la demande étrangère.
4. La recherché, le développement et l'innovation donneront un avantage compétitif aux produits de l'UE.
5. La qualité sera un avantage compétitif pour les produits de l'UE.
6. L'UE se fera distancer par les niveaux de productivité des pays tiers.
7. Les différences de normes et régulations socio-environnementales feront obstacle à la compétitivité des products de l'UE.
8. La petite taille de la plupart des entreprises de l'UE fera obstacle à leur compétitivité à niveau international.

7. Notez **jusqu'à trois secteurs** dans lesquels on attend que l'UE s'améliore:

- Céréales
- Fruits et légumes
- Vins et spiritueux
- Huile d'olive
- Sucre
- Lait et produits laitiers
- Viande bovine
- Moutons et chèvres
- Cochons et porc
- Volaille (en incluant la production d'oeufs)
- Autres animaux
- Autres produits végétaux
- Autre secteur agro-alimentaire (merci de spécifier)

8. Notez jusqu'à trois Etats membres de l'UE où on attend que la compétitivité agro-alimentaire s'améliore.

Allemagne	Estonie	Lettonie	République de Chypre
Autriche	Finlande	Lituanie	RépubliqueTchèque
Belgique	France	Luxembourg	Roumanie
Bulgarie	Grèce	Malte	Royaume-Uni
Croatie	Hongrie	Pays-Bas	Slovaquie
Danemark	Irlande	Pologne	Slovénie
Espagne	Italie	Portugal	Suède

9. Alors que les politiques de soutien au revenu (1er pilier de la PAC) ont un impact sur les activités des agriculteurs, le développement rural (2ème pilier de la PAC) possède des actions et met en place des ressources consacrées à l'agriculture européenne et à l'industrie alimentaire. Par ailleurs, d'autres politiques de regulations pourraient influencer le secteur.
Merci de bien vouloir noter votre opinion concernant l'influence des outils suivants sur la compétitivité des produits agro-alimentaires de l'UE, (de 1 = très négatif à 7 = très positif, 4 = neutre).

1. Aides découplées – Paiements de base.
2. Paiements verts.
3. Aides couplées.
4. Paiements destinées aux zones les moins favorisées.
5. Agriculture biologique.
6. Organisation de producteurs.
7. Restructuration des fermes – investissement – modernisation.
8. Paiements agro-environnementaux
9. Instruments pour la recherche et l'innovation.
10. Nouveau cadre communautaire qui permettra d'équilibrer la chaîne alimentaire.
11. Régulation concernant le bien-être animal.
12. Promotion de marches locaux.
13. Cadre normatif concernant les appelations d'origine contrôlée.

10. Une boîte à outils de mesures pourrait aider les Etats membres de l'UE **à adresser leurs différents besoins en termes de compétitivité** selon les différentes caractéristiques de leur secteur agro-alimentaire.
Pourriez-vous suggérer trois secteurs dans lesquels les politiques de l'UE auraient besoind'être renforcées?

- Meilleur accès des Petites et Moyennes Entreprises (PME) aux marchés mondiaux.
- Assurer des règles du jeu équitables avec les pays tiers.
- Contrôler les imports afin de prévenir des pratiques commerciales injustes.
- Transparence internationale sur les mesures non-tarifaires.
- Promotion des standards européens à niveau international.
- Surveillance de la protection des droits de propriété intellectuelle.
- Promotion externe des produits de l'UE.
- Nécessité de négociations commerciales avec les pays émergents.
- Disciplines plus strictes concernant les restrictions à l'export sur les pays tiers.
- Achever les négociations pour un partenariat avec les US.
- Achever les négociations pour un partenariat avec le Mercosur.
- Plus grande intégration des pays du sud et de l'est méditerranéen.

11. Indiquez d'autres besoins politiques non-indiqués précédemment.

12. Si vous le désirez, vous pouvez ajouter les informations suivantes. Nous vous tiendrons informés des résultats du sondage.

Entreprise/Institution:

E-mail:

LANGUAGE SELECTED: ESPAÑOL

1. ¿Dónde se encuentra la sede de su organización?

Alemania	España	Italia	Portugal
Austria	Estonia	Letonia	Reino Unido
Bélgica	Finlandia	Lituania	República Checa
Bulgaria	Francia	Luxemburgo	República de Chipre
Croacia	Grecia	Malta	Rumanía
Dinamarca	Hungría	Países Bajos	Suecia
Eslovaquia	Irlanda	Polonia	Otro
Eslovenia			

2. El ámbito geográfico de actuación de su organización es:
- Uno o varios Estados Miembros
- La Unión Europea
- País o países no UE

3. Señale hasta tres sectores en los que posee conocimiento previo:
- Granos
- Frutas y verduras
- Vinos y licores
- Aceite de oliva
- Azúcar
- Leche y productos lácteos
- Bovino
- Ovino y caprino
- Porcino y carne de cerdo
- Aves de corral (incluye huevos)
- Otros animales
- Otros productos vegetales
- Sector agroalimentario en su totalidad
- Otros (por favor, especifique)

4. Su organización representa a:
- Agricultores
- Transformadores
- Minoristas
- Mayoristas y comerciantes
- Consumidores
- Organización Interprofesional
- Investigadores
- Administración Pública de ámbito nacional
- Administración Pública de ámbito comunitario
- ONG
- Otros (especificar)

5. La **Estrategia "Europa 2020"** reconoce que *"Un sector agrícola sostenible, productivo y competitivo contribuirá de forma importante a la nueva estrategia, teniendo en cuenta el potencial de crecimiento y empleo de las zonas rurales, al tiempo que garantiza la competencia leal."*
Por favor, evalúe las siguientes tendencias relativas a la situación del sector agroalimentario europeo (desde 1 = poco probable hasta 7 = muy probable).
Hacia el año 2020…

1. El sector agroalimentario europeo será un motor de crecimiento económico.
2. La producción agroalimentaria europea será más sostenible.
3. El sector agroalimentario europeo incrementará las oportunidades de empleo en las zonas rurales.
4. Habrá prácticas más justas en las cadenas agroalimentarias europeas.
5. Los consumidores adquirirán en mayor medida productos más baratos.
6. Los consumidores adquirirán en mayor medida productos de calidad.
7. Los consumidores adquirirán en mayor medida productos locales.

6. Por favor, evalúe **qué evolución mostrará la posición competitiva del sector agroalimentario europeo durante la siguiente década, comparada con la evolución de los principales actores mundiales** (EE.UU, Canadá, China, India, Australia, Sudáfrica, Rusia, Brasil, Argentina).
Evalúe la probabilidad de las siguientes tendencias, relacionadas con el sector agroalimentario en los Estados miembros de la UE (desde 1 = muy poco probable hasta 7 = muy probable)
Hacia el año 2020…

1. En términos generales, los excedentes comerciales comunitarios seguirán creciendo.
2. El balance comercial comunitario continuará siendo negativo en ciertos subsectores significativos.
3. Los productos comunitarios dependerán cada vez más de la demanda externa.
4. La I+D+i será una fuente de ventaja competitiva para los productos comunitarios.
5. La calidad será una fuente de ventaja competitiva para los productos comunitarios.
6. Los niveles de productividad en la UE quedarán por detrás de los niveles de países terceros.
7. Las diferencias en materia de regulación ambiental y estándares obstaculizarán la competitividad de los productos comunitarios.
8. La dimensión reducida de las compañías europeas obstaculizará su competitividad internacional.

8. Señale **hasta tres sectores** donde la competitividad europea se verá incrementada.

- Granos
- Frutas y verduras
- Vinos y licores
- Aceite de oliva
- Azúcar
- Leche y productos lácteos
- Bovino
- Ovino y caprino
- Porcino y carne de cerdo
- Aves de corral (incluye huevos)
- Otros animales
- Otros productos vegetales
- Otros sectores agroalimentarios (por favor, especifique)

9. Señale **hasta tres Estados miembros** donde la competitividad del sector agroalimentario se verá incrementada.

Alemania	Eslovenia	Irlanda	Polonia
Austria	España	Italia	Portugal
Bélgica	Estonia	Letonia	Reino Unido
Bulgaria	Finlandia	Lituania	República Checa
Croacia	Francia	Luxemburgo	República de Chipre
Dinamarca	Grecia	Malta	Rumanía
Eslovaquia	Hungría	Países Bajos	Suecia

10. Mientras que las políticas de apoyo (1er Pilar) tienen un impacto directo en la actividad de los productores agrarios, el desarrollo rural (2º Pilar) contiene algunas acciones y recursos dedicados a la agricultura europea y la industria alimentaria. Además, otras regulaciones pueden ejercer influencia sobre el sector.
Por favor, señale su opinión sobre la influencia que las siguientes herramientas ejercen sobre la competitividad de los productos agroalimentarios de la UE (desde 1 = muy negativa hasta 7 = muy positiva, 4 = neutral).

1. Pagos desacoplados – pago básico
2. Pagos verdes
3. Pagos directos acoplados
4. Ayudas para zonas desfavorecidas.
5. Agricultura ecológica.
6. Organizaciones de Productores
7. Restructuración agraria – inversiones – modernización.
8. Pagos agroambientales
9. Instrumentos para la investigación e innovación.
10. Nuevo marco comunitario para el equilibrio de la cadena de valor
11. Regulación sobre bienestar animal.
12. Promoción de mercados locales.
13. Marco normativo para las producciones con Indicación Geográfica.

11. Un conjunto de medidas podría ayudar a los Estados miembros **a hacer frente a las diferentes necesidades competitivas**, de acuerdo a las características específicas de sus sectores agroalimentarios. ¿Podría sugerir **tres áreas** donde las políticas comunitarias necesitan ser fortalecidas?

- Mejor acceso de las PYMES a los mercados internacionales.
- Asegurar la igualdad de condiciones respecto a terceros países.
- Seguimiento de las importaciones con objeto de prevenir las prácticas comerciales desleales.
- Transparencia internacional sobre Medidas No Arancelarias.
- Promoción a escala internacional de los estándares europeos.
- Vigilancia sobre la protección de los derechos de propiedad intelectual.
- Promoción exterior de productos europeos.
- Reforzar las negociaciones comerciales con los países emergentes.
- Disciplinas más estrictas respecto a las restricciones a la exportación por parte de países terceros.
- Completar las negociaciones para la asociación con EE.UU.
- Completar las negociaciones para la asociación con Mercosur.
- Profundizar la integración con Países del Sur y del Este del Mediterráneo.

12. Indique otras necesidades en materias políticas no indicadas en la lista anterior.

13. Si lo desea puede añadir la siguiente información. Le mantendremos informado sobre los resultados de la encuesta.

Empresa/Institución:

Correo electrónico:

EUROPEAN PARLIAMENT

CATALOGUE QA-02-14-953-EN-N

DIRECTORATE-GENERAL FOR INTERNAL POLICIES

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STRUCTURAL AND COHESION POLICIES

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ISBN 978-92-823-6009-5
doi: 10.2861/6974

Publications Office