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Market policy and risk and crisis management instruments in the post-2013 CAP

Vincent Chatellier

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DIRECTORATE-GENERAL FOR INTERNAL POLICIES

POLICY DEPARTMENT B: STRUCTURAL AND COHESION POLICIES

AGRICULTURE AND RURAL DEVELOPMENT

**MARKET POLICY AND RISK AND CRISIS
MANAGEMENT INSTRUMENTS
IN THE POST-2013 CAP**

NOTE

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CONTENTS

LIST OF ABBREVIATIONS	1
SUMMARY	2
INTRODUCTION	6
1. REFLECTIONS ON THE REFORM OF THE CAP POST-2013	8
1.1 CAP-WTO compatibility is a less central issue	8
1.2 The future budget and the redirection of support	9
1.3 The second pillar of the CAP faced with big ambitions	11
1.4 The redistribution and improved targeting of SFP	12
2. MARKET REGULATION AND RISK MANAGEMENT TOOLS	17
2.1 Price volatility, the CAP and international coordination	17
2.1.1. Price volatility accentuates the hunger problem	17
2.1.2. The factors underlying the volatility of agricultural prices	18
2.1.3. A priority: the agricultural development of developing countries	20
2.1.4. Supply, trade, biofuels and stocks	21
2.1.5. The governance of the agricultural markets and speculation	23
2.2. The CAP, regulation and risk management	25
2.2.1. Protection at the borders and export refunds	25
2.2.2. The inter-annual flexibility of the CAP budget	28
2.2.3. Intervention and safety nets	28
2.2.4. Risk and crisis management instruments	30
2.2.5. The case of milk: from quotas to contractual relations	34
CONCLUSION	41
BIBLIOGRAPHY	42

LIST OF ABBREVIATIONS

URAA:	Uruguay Round Agreement on Agriculture
NAFTA:	North American Free Trade Agreement
PDO:	Protected Designation of Origin
DG-AGRI:	Directorate-General for Agriculture and Rural Development
DFI:	Deduction for Investment
SFP:	Single Payment Payment
FAO:	Food and Agriculture Organization of the United Nations
FAPRI:	Food and Agricultural Policy Research Institute
EAFRD:	European Agricultural Fund for Rural Development
EAGF:	European Agricultural Guarantee Fund
CAPH:	Compensatory Allowance for Permanent Natural Handicaps
IGO/PGI:	Indication of Geographical Origin / Protected Geographical Indication
OECD:	Organisation for Economic Cooperation and Development
CMO:	Common Market Organisation
CAP:	Common Agricultural Policy
WFP:	World Food Programme
LDCs:	Least Developed Countries
TSG:	Traditional Speciality Guaranteed
EU:	European Union

SUMMARY

This report offers a reflection (free, open and non-exhaustive) on the European Commission's proposals of 18 November 2010 on the future reform of the common agricultural policy (CAP). While noting the work carried out at the same time in the European Parliament, and at times using examples from the French situation, this report seeks to highlight how the prospective measures may or may not serve the ambitions expressed for European agriculture. At the current stage, the European Commission's proposals are still not sufficiently precise (level of budget transfers, thresholds and criteria agreed, etc.) to enable rigorous economic analyses to be conducted and/or for the expected impacts on particular Member States and categories of farmers to be quantified. This means that we have to remain cautious in our interpretations, focus the analysis on the direction of the recommended guidelines and remember that the time for debate on the practicalities will come during later stages.

The first part of this report offers some reflections on the compatibility of the reform's proposals with the multilateral WTO negotiations, the future financing of the CAP, its two-pillar structure and the early redistribution of support (and increased targeting of support). Several of the points covered are worthy of mention here:

- The measures envisaged as part of this reform should not constitute a further obstacle to the smooth integration of the CAP within the multilateral negotiation process of the Doha Round. The prevailing approach is to propose instruments that are acceptable in the WTO partner countries: reorienting decoupled support to give it a stronger connection to non-market services provided falls well within the initial recommendations of the green box; the potential creation of a tool such as income insurance is also envisaged, taking into account the degrees of freedom offered by the Uruguay Round Agreement on Agriculture (URAA); the future withdrawal of export refunds and keeping the security nets (intervention prices) at a low level also demonstrates this intention. The EU authorities must, however, be mindful of the following two aspects: it is not enough to take into account non-commercial concerns (environment, land, quality of products, social standards); developing countries and net importers of agricultural products (especially those from Africa) must have the opportunity to apply the necessary customs protection to make it possible for their own agricultural production to develop.
- The budgetary negotiations on the CAP must be conducted while bearing in mind, firstly, that the expenditure allocated to European agriculture has been kept under control for several years (it is even decreasing in proportion to EU wealth), and secondly, that the numerous ambitions stated by the European Commission with regard to the future CAP can only be satisfied if an 'appropriate' level of public financing is obtained. This is particularly true given that agricultural production costs are rising, productivity gains are at times drying up in some sectors and the proportion of household budgets allocated to food is constantly declining. Without a satisfactory budget, agriculture will inevitably adapt, but will do so in a different way to that hoped for in the European Commission text.

- The proposal to keep the original two-pillar CAP structure has the advantage of being in line with the wishes expressed by numerous players in prior debates. Given the diversity of the objectives set out under the second pillar of the CAP, along with the (potential and subsidiary) introduction of a new risk management tool (income insurance), there will need to be a major diversion of funds from the first pillar. Such a conceptual change in the second pillar also implies that the issue of the required levels of co-financing be revisited. The boundaries that had gradually been established between the two pillars of the CAP therefore become more blurred. Farmers in less-favoured areas could thus benefit from additional direct decoupled aid under the first pillar, while the compensatory allowance for natural handicaps would remain in the second pillar. The choices available should be clarified in order to prevent the risk of subsequent poor appropriation of the content of the two pillars.
- The most striking, but also the most encouraging, innovation in the reform proposals surely lies in the fact that the European Commission intends to redistribute public support and to better target it towards payment for non-market services provided by farmers. The European Commission also rightly says how important it is that this reorientation is approached with a strong degree of pragmatism. Direct aid plays a decisive role in shaping the incomes of many European farmers. What certainly needs to be done is to make changes to the current mechanism, which is difficult for citizens and taxpayers to understand (and therefore fragile in the long term from a budgetary point of view), but to do so by taking a path that would not have too serious economic and social consequences for certain regions and/or production systems. We are all aware that, on this specific issue, 'the devil will be in the detail'. Judgments will need to be made, first and foremost on the basis that the method of awarding public support to agriculture must be better justified within each Member State. The high level of price volatility means that decoupled support is not always necessarily allocated to the farmers that are in the greatest financial need; it is also not always directed towards the most environmentally-friendly production systems. In order to prevent EU debates from getting bogged down on this serious issue, this aim needs to be properly detached from the aim of distributing the CAP budget between the Member States in a different way. Establishing a system of ceilings on aid (taking into account family labour and employees) would send a strong message to those who wish to see a future CAP that is fairer in social terms. It would also be useful to specify under what circumstances senior agricultural landowners may (or may not) benefit from public support; the phenomenon of the capitalisation of SFPs in land ownership has pernicious effects (Latruffe and Le Mouël, 2009).

The second part of this report concerns the tools for regulating the agricultural markets and risk and crisis management instruments. There are two complementary sections: the first deals with the factors underlying the volatility of agricultural prices, the effects of this on an international scale and ways of better managing it through enhanced international coordination of policies associated with agriculture; the second focuses on the European tools that could be mobilised to accompany and support the envisaged strategies on a more global scale. The following is a selection of the points that arise from that reflection:

- The increasing volatility of agricultural prices (and their upward trend since 2007) is a particularly crucial phenomenon in that it contributes to accentuating the problems associated with hunger in the world. In a context in which nearly a billion human beings are already malnourished, this issue is not limited to the restricted framework of the CAP instruments. Above all it must lead to better international coordination of the public policies concerned. The desire to move towards greater fluidity in international trade (the WTO's aim) should also not run counter to an urgent strategy to develop agricultural supply in the poorest countries.
- As the agricultural markets are naturally unstable, regulation instruments (public, but also private) need to be maintained. The volatility of prices is maintained by the intrinsic characteristics of agricultural goods: despite technical progress, supply remains fairly sensitive to the vagaries of the climate (especially as some major exporting countries are in areas where the climate is difficult); supply is inflexible in the short term, due to the length of production cycles; agricultural goods are often perishable, therefore storage is difficult; demand is not very flexible in relation to prices; international prices are essentially determined by the portion of goods that are traded, which often represents a small proportion of global supply. The price volatility of energy, the development of biofuels, changes in stocks and some speculative behaviour also help to increase that volatility.
- For some agricultural products, keeping customs protection at a high level on imported goods is not such a central issue as it was before. In cereals, for example, the EU price is now close to the global price; in the pork and dairy sectors, European imports are marginal compared with domestic consumption; for soya, duty is historically non-existent, etc. For other products, such as beef, maintaining high duty is necessary in so far as the price differential with the exporting Mercosur countries is still very large. For this sector, which is already in deficit within the EU, it is important for the EU authorities to argue for a special status ('sensitive products') within the WTO. Although it is not very competitive (European beef exports represent less than 2% of supply), the beefmeat sector makes a helpful contribution to maintaining European agricultural land, particularly in less-favoured areas where there is little prospect of substituting production.
- Given the high volatility of prices, it would seem necessary to consider the possibility of having a CAP budget that is more flexible from one year to the next. The fact that it is too inflexible makes it difficult for public funds to adapt to economic realities. Another means of achieving this (if this route is deemed to be too complex) could be to give European farmers the opportunity to make the necessary adjustments themselves (or to strengthen the mechanisms where they already exist). Depending on the economic climate, they could have the option to transfer part of their income to the following year in their accounts (or all or part of their direct aid). This transfer would be considered to be exempt from social insurance contributions and taxes. The following year, the corresponding amounts would be taken into account when calculating the annual income. While such a system could contribute to combating the undesirable effects of volatility, it obviously does not have any impact on the long-term trends of a market.

- Maintaining security nets based on setting intervention prices at a low level is justified (at least in the short term) in order to prevent possible crisis situations and to reassure farmers that a minimum level of protection is in place. As the remaining instruments (which could be extended to other products) currently stand, we should not, however, expect them to have a major influence on the future income levels of European farmers. These intervention prices will also not have a significant impact on production choices, in so far as these price levels are, for a large number of farmers, often lower than production costs. In order to support farmers' income during a crisis situation (especially if it is a lengthy one), it is more effective to grant direct aid than to support the markets through intervention.
- In the context of the future CAP, the EU authorities must implement other measures alongside risk management instruments; these instruments must be considered as complementing (rather than replacing) the other regulation tools: customs duties, contractual relationships as a framework for supply, maintaining safety nets, direct aid, etc. In addition to the existing instruments, such as futures and mutual funds, there needs to be a particular focus on income insurance. In accordance with the WTO rules and in the light of the Canadian experience, the establishment of an income insurance mechanism could mitigate the negative effects of high price volatility. The indicators and criteria should, however, be carefully selected so that the budgetary cost of this instrument remains compatible with the appropriations earmarked (EU funds and national funds).
- The abolition of milk quotas is a significant change to the CAP, particularly in countries where they have been used for a quarter of a century to ensure a balanced geographical distribution of milk production. The quota system had the advantage of being effective in controlling supply and being inexpensive for the authorities. It will be abolished because the European Commission no longer wishes to intervene so directly in regulating supply (especially as other intervention tools have been limited: refunds have been lowered, storage has been limited, etc.); moreover, the northern EU countries have always been against this instrument on the grounds that it generates profits (which are a barrier to entering the sector) it prevents optimum allocation of resources and it contributes to increasing production costs (as the quotas are marketable). The abolition of milk quotas could, on the one hand, contribute to increased concentration of production in the more competitive areas and, on the other hand, to enhanced restructuring of dairy farms. It should also result in a decrease in the average price of milk in so far as supply will become more difficult to control in view of the forces of competition between countries and businesses. In order to mitigate these predicted changes, and for example to enable dairy farming to be maintained in less-favoured areas (especially those where product differentiation is limited), there will need to be a strong commitment through the other tools available in the CAP (particularly through the redirection of direct aid). The end of the milk quotas provides grounds for the establishment of a system of contractual relationships (in order to make relationships between producers and companies more secure), but these contracts will not mention future prices; those will depend above all on the international economic climate, the industrial strategy of businesses and the potential establishment of greater price flexibility depending on the final destination of the milk.

INTRODUCTION

On 18 November 2010 the European Commission presented a communication on the future of the common agricultural policy (CAP) towards 2020 (European Commission, 2010-e). The communication was placed under the authority of the Commissioner responsible for Agriculture and Rural Development (Dacian Ciolos) and was addressed to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions. Prior to the publication of the text, the Commissioner organised a broad public consultation to gather together the thoughts expressed by European citizens and various organisations (European Commission, 2010-d). These new proposals, which are part of the continuing reforms that have taken place over the two previous decades (Burrell, 2009; Bureau, 2007; Butault et al, 2005; Nallet, 2010), convey the European Commission's strategic vision on the development of agriculture and its place in society.

According to the European Commission, the future CAP must satisfy the following three objectives at the same time: promoting healthy and adequate food production for European consumers in a context of growth in global demand, economic crisis and high price volatility; contributing to sustainable management of natural resources, while taking into account the problems associated with climate change; encouraging the maintenance of territorial balances by accepting the idea that agriculture is a crucial factor in invigorating the rural environment.

The communication is a policy guidance document. The proposals made are therefore not, at least at this stage, a precise regulatory text which could form the subject of a detailed analysis of the impact in terms of reorienting support between Member States, the sensitivity of the incomes of the different categories of farms or incentives for changes in production. While it does invite reflection and must be used as a basis for launching a debate on the future structure of the CAP, it is also important to remain cautious in interpreting certain passages of the text, as the methods of application will play a critical role (the level of financial changes from one instrument to another, the indicators used for granting support, the definition of the area covered by the measure, etc.). Once the institutional debate has been completed, i.e. in 2011 in all probability, regulatory texts will be adopted to implement a reform of the CAP from 2014. It is important to point out that this communication was drawn up with the intention of, firstly, taking into account the commitments made in the context of the World Trade Organization (WTO) multilateral negotiations and, secondly, orienting the future CAP towards the priorities set out by the President of the European Commission in his communication of 3 March 2010 entitled 'Europe 2020' (European Commission, 2010-a; Chambon and Fernandes, 2010). The Europe 2020 strategy considers that three priorities should provide the structure for public action within the European Union (EU) during the current decade: developing an economy founded on knowledge and innovation (smart growth); promoting a more resource efficient, greener and more competitive economy (sustainable growth); fostering a high-employment economy delivering social and territorial cohesion (inclusive growth). Seeking to make the future CAP consistent with the Europe 2020 strategy is naturally a priority in so far as the latter will have a significant influence on the choices that will be made regarding the future keys to allocating EU budgetary resources in the financial framework for 2014-2020. The future importance of the financing of the CAP is therefore also a priority (European Commission, 2010-b).

To complement the text of 18 November 2010 on the future of the CAP, the European Commission set out its new proposals on the dairy sector (the 'milk package' of 9 December 2010) and the policy regarding the quality of agricultural products (the 'quality package' of 10 December 2010). In the dairy sector, in which major price volatility has led to serious economic disruption, an analysis by the European Commission was produced in order to report on the evolution of the dairy market and the consequent conditions for smoothly phasing out the milk quota system (European Commission, 2010-f). In addition, proposals were made regarding future contractual relations between milk producers and companies, rules applying to inter-trade organisations and the transparency of the market (European Commission, 2010-g). In the area of quality, the new guidelines are reflected in a proposal for a regulation on agricultural product quality schemes (European Commission, 2010-h); this proposal includes strengthening the system of Protected Designations of Origin (PDOs) and Protected Geographical Indications (PGIs), a review of the system of traditional specialities guaranteed (TSGs) and the establishment of optional quality terms (such as animal feeding methods or production methods). It also provides for an amendment of the regulation as regards marketing standards for agricultural products (European Commission, 2010-i); new guidelines setting out best practice for the development and operation of certification schemes (European Commission, 2010-j); and guidelines on the labelling of foodstuffs using PDOs and PGIs (European Commission, 2010-k).

In accordance with the Treaty of Lisbon, the European Parliament has an enhanced role in the decision-making process for the CAP. It is now, apart from a few exceptions, on an equal footing with the Council in the codecision procedure (Massot, 2010-a). The European Parliament did not therefore wait for the European Commission's text to undertake its own reflections, at times asking for studies by experts (Buckwell, 2009; Bureau and Witzke, 2010; Burgaz, 2010; Capitanio, 2010; Chatellier, 2009-a; Munier, 2010; Ramos, 2009). Following on from an own-initiative report presented on 1 March 2010 (Lyon, 2010), a resolution on the future of the CAP was adopted on 8 July 2010 (European Parliament, 2010); it particularly stressed the fact that the CAP after 2013 will have to be strong, sustainable, fair and equipped with sufficient resources to achieve the objectives set for it (Massot, 2010-b). At the end of November 2010, a European Parliament internal note was produced in order to facilitate the work of MEPs on the subject of the CAP after 2013 over the coming months (Adinolfi, Little and Massot, 2010).

In this context, and in order to contribute to the reflections underway in the European Parliament, the aim of this note¹ is firstly to report general reflections on the European Commission's proposals and secondly to focus the analysis on the measures envisaged to tackle crisis situations and the risky nature of farming.

1 This note was produced following a request from the European Parliament's Directorate for Structural and Cohesion Policies. It was presented orally to MEPs from the Committee on Agriculture and Rural Development at a workshop held on 7 February 2011 in Brussels. The author alone is responsible for the content of this note. The author (Vincent Chatellier) would like to thank Hervé Guyomard, Scientific Director at INRA (French National Institute for Agricultural Research), for his advice, which is always invaluable, and for the work we have done together on this subject. He would also like to express his gratitude to Edgard Pisani, former French Minister for Agriculture (1961-1966), for his trust in co-publishing an article entitled: 'La faim dans le monde, le commerce et les politiques agricoles'. For more information, see: www.nantes.inra.fr/content/download/1754/24229/file/CV-VChatellier.pdf.

1. REFLECTIONS ON THE REFORM OF THE CAP POST-2013

This first section offers an overall reflection on the CAP reform proposals of 18 November 2010, while omitting issues relating to the regulation of the markets, which is covered in the second section.

1.1. CAP-WTO compatibility is a less central issue

During previous CAP reforms (1992, 1999 and 2003), the European Commission paid particular attention to the sensitive issue of compatibility between the measures adopted within the framework of the CAP and the requirements associated with multilateral WTO agreements. Lowering institutional prices, implementing increasingly decoupled support and the reduction of export refunds were a necessary path to take in order for the CAP to be gain approval from WTO partners. Fifteen years after the signature of the Uruguay Round Agreement on Agriculture (URAA), it has to be said that the recent changes in the CAP have meant that it is no longer subject to the same level of criticism. This is also due to the fact that the multilateral negotiations that began in 2001 as part of the Doha Round are difficult and have not yet produced a final agreement.

The European Commission communication on the future reform of the CAP is now mainly guided by the desire to satisfy internal EU requirements. The ambition is to gradually transform the CAP so that it fits as well as possible into the EU's strategic plan, as set out in the document 'Europe 2020' (European Commission, 2010-a). Compared with the previous CAP reforms, this one seems to be less directly guided by a requirement to bring support instruments into line with multilateral regulations in the short term. This was the case, for example, in 2003, when the end of the 'peace clause' regarding direct support coupled to production factors required that the system of decoupled direct payments be swiftly established. However, neither do the new guidelines aim to cause the CAP's approach to be called into question in relation to the WTO. In other words, the proposals made are unlikely to make WTO partners hostile to the planned changes. There are several points that provide support for this statement:

- Institutional prices should remain low, so that intervention acts as a safety net and not as a production incentive. Further reductions in guaranteed prices are not envisaged, in contrast to previous CAP reforms (including in 2003 with the extension of this principle to the dairy sector). As the EU price has become close to the global price in certain sectors (cereals), a further reduction in customs duties (if agreed following the negotiations in the Doha Round) would have little or no impact. In other sectors, mainly beef, a further reduction in customs duties would, conversely, be considerably more problematic in so far as the price differential between the EU and the major exporting countries (Brazil, Argentina, etc.) remains substantial, despite the price reductions that have taken place.
- In the event of an income stabilisation tool being implemented, it is clearly mentioned that it must be compatible with the green box criteria (Melendez-Ortiz et al, 2009; Brink, 2009; Swinbank, 2008).

- A very large proportion of the direct support allocated to European farmers is now compatible with the 'green box' criteria set out in the URAA (Chatellier, 2009-b). Following the decisions taken as part of the 2008 CAP health check (European Council, 2009), the proportion of decoupled direct payments will increase further between now and 2013. This means that in the multilateral negotiations on internal support, the EU authorities have considerable freedom to accept a lowering of the ceiling for support deemed to distort production and trade (without ultimately penalising farmers). Given this room for manoeuvre, and using a strict framework, the European Commission is in a position to offer the Member States the possibility of using coupled aid where useful (for particular types of production that play a decisive economic or social role). Unless we anticipate a change in the definition of the criteria governing the classification of support in the green box, it therefore seems unlikely that the future CAP will not be able to stand up to the arguments of the other WTO Member States in this respect. This should be particularly true given that the draft reform plans to change the way that decoupled direct payments are awarded to recognise more effectively the environmental services rendered by farmers (a change described in the media as 'greening the CAP').
- The proposals to reform the CAP do not directly mention the EU's future trade policy with third countries. This choice suggests that the position taken by the EU in the Doha Round negotiations persists, particularly regarding export refunds and customs duties (cf. section 2).

1.2. The future budget and the redirection of support

In terms of public policy, it is always more stimulating to begin by defining the priorities and aims of a project and then go on to discuss how it is financed, rather than the reverse. The European Commission's proposals on the future CAP follow this pattern. By setting out broad ambitions for the CAP (cf. introduction), to a certain extent they seek to convince the EU authorities that the policy is well founded and therefore that it needs to be allocated a budget that can meet the challenges that agriculture intends to take up. As we are aware that currently (early 2011) no one knows what funds will be allocated to the CAP under the budgetary framework for 2014-2020, we need to be very cautious in interpreting the supposed effects of the future reform. Every European farmer is currently facing the budget question in terms of the following four points, taken together.

The EU's budget allocation for the 2014-2020 period

The greater the EU's funding is, the less pressure there will be on the funds allocated to the CAP. A fierce debate is already underway on this between Member States. Following on from the European Council meeting on 16 and 17 December 2010, and at the behest of the British Prime Minister, five net contributing countries (Germany, Finland, France, Netherlands and the United Kingdom) have already informed the President of the European Commission of their common position: they suggest that expenditure commitments for the 2014-2020 period should not be above the level for 2013, and that in any case the increase should be below the level of inflation. This initiative was quite badly received by net beneficiary countries (including Poland, Hungary, Bulgaria, Romania, etc.).

The proportion of EU funds that will be allocated to the CAP

In 2011, the EU budget is EUR 141.9 billion, of which EUR 42.9 billion are allocated to the first pillar of the CAP (direct aid to farmers and support for the regulation of agricultural markets) and EUR 14.4 billion to rural development. In total, the budgetary cost of the CAP represents around 40% of expenditure from the EU budget. Although this relative proportion is sometimes considered to be high by some critics of the CAP, it has nevertheless decreased over the years; this is mainly because agricultural expenditure comes mainly from the EU budget and not from the Member States' budgets, as is the case for all the other budget items (education, research, health, defence, etc.). Once the overall EU budget for 2014-2020 is known, it is quite easy to anticipate that deciding between the EU's different priorities will give rise to significant tensions (European Commission, 2010-b). So what will happen to the CAP resources following these decisions? This is an important question in a context in which there will be plenty of ideas as to how to use the new funds deployed for smart growth (research, innovation, education, transport and communication networks, etc.), sustainable growth (integrating energy and climate policies, agricultural policy, etc.), inclusive growth (cohesion policy) or other ambitions that are equally as justified (consolidating Union citizenship, affirming the EU's place in the world, reducing poverty, etc.) The European Commission's text of 18 November 2010 is, to a certain extent, an early example of these future tensions. It seeks to clarify how a productive, sustainable and competitive agricultural sector can make an essential contribution to the 'Europe 2020' strategy.

The possible redistribution of CAP funds between the EU Member States

The unequal distribution of CAP budgetary support between Member States is influenced by the following four main factors: 1) the agricultural strength of the country in terms of agricultural surface area (particularly cereals and oil seeds and pulses) and livestock; 2) agricultural specialisation: not all agricultural sectors receive identical support, due to the historical rules inherent to each common market organisation (CMO); 3) the productivity of production factors: in the cereals sector, for example, the amount of support per hectare was initially decided upon in order to compensate for the economic shock due to the drop in prices (a higher yield resulted in a higher level of compensation); 4) the decision taken by the EU authorities to apply a gradual increase in support granted to the 12 new Member States (NMS-12).

According to the breakdown of the European Agricultural Guarantee Fund (EAGF) for 2009 (European Commission, 2010-c), four countries receive 58.5% of the total expenditure, in decreasing order: France (20.4%), Germany (13.7%), Spain (13.3%) and Italy (11.1%). For the NMS-12 that receive the most support, the relative proportions are considerably smaller: Poland (4.3%), Hungary (2.1%) and Romania (1.3%). These differences fuel numerous debates in the Member States, such as in France, where farmers fear that the future reform of the CAP will result in major redirection of budgetary support in favour of the NMS-12. While the European Commission's text does not provide any specific information on this point (an indication in figures of the desired redeployment), it points out that establishing a single payment per hectare that is standard across the EU is not envisaged. It also specifies that direct aid cannot be suddenly redirected to the detriment of a particular Member State. Incidentally, it is probable that the Member States where the amount of direct aid per hectare is higher than the EU average will be slightly penalised.

The reorientation of direct aid within each Member State

In a given Member State, not all farmers will be affected in the same way by the decisions on how to grant direct aid internally. Given the importance of direct aid for the incomes of many European farmers and the high level of price volatility, it seems that the future CAP reform needs to be planned with a strong level of pragmatism and based on simulations that will provide a better understanding of the expected effects of the decisions taken for different categories of farm. While this precaution is necessary, that does not mean that it should serve as a justification for maintaining the current method of distributing support.

1.3. The second pillar of the CAP faced with big ambitions

The European Commission sets out its desire to redistribute and better target the public support allocated to European agriculture. In this way it intends to improve the quality of spending by linking the support granted more with the non-market (environmental and territorial) services performed by farmers. It is also seeking to gain more acceptance on the part of citizens and taxpayers for the distribution of public support for agriculture. The final evaluation of the reform will depend firstly on the level of intensity of budgetary redeployment (from single payment entitlements towards the second pillar), and secondly on the how the methods for granting single payment payment (SFP) are revised. In other words, as the saying goes, 'the devil is in the detail'. The current proposals prompt several observations.

The CAP's two-pillar structure is confirmed

For the three general options put forward by the European Commission (in the knowledge that there is a strong preference for option 2), the CAP's two-pillar structure is confirmed. It is also specified that this structure tallies with the expectations expressed in the public debate and in the different European bodies involved. The measures inherent to the first pillar are, firstly, annual and non-contractual direct payments and, secondly, market support measures. The measures for the second pillar are multi-annual contractual measures; these are co-financed by the EU and the Member States, unlike the measures under the first pillar, which are entirely financed by the EU budget. The benefit of maintaining the two pillars of the CAP is continuity; in other words, it does not change the initial reference points for negotiators or farmers. It also means that negotiations can be begun on the new CAP more quickly than if the structure were to be revised.

Without a significant redeployment of budgets between the two pillars, the ambitions that have been expressed for the second pillar cannot be achieved

These ambitions are significant: improving the competitiveness of agriculture (by encouraging innovation and restructuring); ensuring sustainable management of natural resources (the capacity of agriculture to stand up to climate change, maintaining the production capacity of farmland); promoting balanced territorial development in rural areas; establishing risk management instruments, etc. It would have been valuable for the European Commission to have provided an initial indication (albeit partial) as to the level of intensity of transfer of funds that should take place from the first pillar (probably through a revised adjustment mechanism). An increase in funds under the second pillar is desirable, in particular to support innovation, stimulate projects and encourage farmers to adopt new practices. It will inevitably raise the question of the level of co-financing of the planned measures by the national budgets.

The boundary between the two pillars of the CAP is not so easy to draw

The boundary between the two pillars of the CAP is not so easy to draw, in terms of the objectives to be pursued (the environment is included under both pillars) or the measures to be adopted. This means that positioning the risk management instruments in the second pillar may seem surprising in so far as their aim is to mitigate the negative effects of the volatility of agricultural prices; this is therefore a concern that falls under market regulation. However, placing this tool under the second pillar has the benefit of offering the Member States freedom as to how to apply it; such a system would surely be difficult to implement in a European framework with identical rules across the Member States.

Another ambiguity arising from the European Commission's new proposals concerns the CAP taking into account areas affected by specific natural constraints. Direct aid from the first pillar could therefore be specifically directed towards these areas in future (the third level of the future SFP – see below) while, at the same time, the idea that a particular type of support can be granted under the second pillar (as is, for example, currently the case for compensatory allowance for permanent natural handicaps – CAPNH) has not been abandoned. If less-favoured areas were eligible for a 'comfortable' additional SFP per hectare under the first pillar, the support granted under the second pillar could be lower (or even nothing), thus enabling a proportion of the funds initially allocated (including the nationally co-financed share) to be allocated to other aims (which, we should remember, are numerous). The funding of measures targeting less-favoured areas via the first pillar leads us to question the technical methods of application. Will the transfer of SFP from plains to less-favoured areas (through the new SFP structure) be done at EU level or within each Member State? The first scenario would be particularly unfavourable to Member States with a small proportion of those areas; the second scenario would result in a greater loss of SFP per hectare for farms on plains located in countries with a large proportion of less-favoured areas.

1.4. The redistribution and improved targeting of SFP

SFP must be redistributed because they are allocated irrespective of agricultural prices

According to Article 6 of Annex 2 to the URAA, which lays down the 'green box' criteria, the amount of SFP cannot be based on domestic and international prices observed during a given year (Piet et al, 2006). These rules mean that the EU authorities are deprived of any real capacity to act on what is nevertheless a substantial proportion of the CAP budget, as these funds are pre-distributed and may not be adjusted according to the economic climate. The total amount of direct decoupled aid was EUR 32.7 billion in 2009, which is the equivalent of 70% of budgetary support under the first pillar of the CAP (what is more, these amounts are set to increase between now and 2013).

Decoupled support is now granted to European farmers either on the basis of a history of established direct payments (as is the case in France, using a reference period of 2000-2002), or on the basis of a degree of standardisation of the level of SFP per hectare among farmers in the same region (as is the case in Germany and the United Kingdom). In both cases, the level of direct decoupled aid cannot be adjusted based on the price situation (Bizet et al, 2010; European Commission, 2011-b).

This type of system is often criticised, because it can result, for example, in farmers benefiting from considerable public support when they are already benefiting from a good price situation. This was the case, for example, in the cereals sector in 2008 and 2010: direct aid was allocated to producers without any adjustment, when the market price for cereals was high, in other words twice the intervention price, which, it should be recalled, had been used as a basis for calculating the initial amount of direct aid coupled to production factors. At the same time, the lack of flexibility of the system means that it is not possible to give more assistance to livestock farmers (pork, poultry, cattle and sheep) whose price (and income) situation is less favourable while their production costs are increasing due to the rise in cereal prices. This example is not used with the aim of stigmatising the particular situation of crop producers in so far as the reverse situation (increase in the price of animal produce and decline in the price of crop produce) would justify the same criticism regarding the inflexibility of the mechanism. In a context in which price volatility is becoming more pronounced and public funds are restricted, the inflexibility of the method of granting SFP is now unsatisfactory. The idea of diverting proportion of decoupled support towards other sources of expenditure, and if possible quite a significant proportion, is therefore justified if the objective is to increase the legitimacy of the support (in order to better preserve it).

Abandoning the principle of compulsory standardisation of SFP is the right move for at least three reasons:

This system would result in even more drastic redistribution of income given that there are differing production systems within the same Member State (or the same region). In areas in which land ownership is scarce and there is high agricultural potential, over time farmers have adopted more intensive production systems than in areas in which these two factors are not combined; this has contributed to maintaining agricultural assets that do not now necessarily produce a better income than in other more extensive areas;

This system would result in the total level of SFP per farm being *de facto* directly correlated to the surface area. It is not certain that this option would strengthen the the argument used to justify to taxpayers the funds allocated;

If the standardisation of SFP per hectare were applied on a European scale, it would result in budgetary redistributions that were incompatible with the pragmatic arguments rightly put forward by the European Commission: *'while avoiding major disruptive changes which could have far reaching economic and social consequences in some regions and/or production systems'*.

The new hierarchy of decoupled aid: a question of balance and indicators

Before taking a final look at the prospective new system, it is first of all helpful to find out what proportion of funds from the (current) SFP will be diverted to the second pillar. The larger that proportion is, the more it will then be important to be prudent regarding the methods chosen to allocate the remaining funds (otherwise some farms could be significantly weakened). The three levels/stages of the new SFP structure are as follows: 1) basic income support; this would be determined based on eligible hectares, in line with cross-compliance and using a ceiling per farm taking into account the diversity of uses (see next point); 2) the establishment of a compulsory environmental component of SFP; this would take the form of simple, generalised, non-contractual and annual environmental actions that would go beyond cross-compliance (permanent pasture, green cover, crop rotation and ecological set-aside, etc.); 3) the creation of additional support for farms in areas with specific natural constraints.

In the absence of more precise guidelines regarding the intensity of the expected redeployment between the three prospective levels, and in the absence of specific evidence regarding the extent of the flexibility of the environmental indicators chosen (Desjeux et al, 2011), it is risky or at the very least rash to make any definitive comment. Without predicting the future options chosen, it nevertheless seems possible to say that this approach has the potential to reinforce the idea among taxpayers that direct decoupled aid is allocated with three explicit aims: to support farmers' income in a context in which agricultural prices do not always cover production costs (which benefits consumers); to encourage farmers to adopt environmental practices that are deemed to be beneficial; to financially support farmers in regions with specific constraints so that they can remain in business and thus contribute to the use of the land and the maintenance of the countryside. Seeking greater clarity in the method of allocating support is a very important issue in order to make it more sustainable in the long term.

This new approach to the CAP to some extent follows a logic that is quite close to that adopted in France following on from the CAP health check. Taking the opportunity provided by EU regulations (Articles 63 and 68 of Regulation No 1782/2003 and adjustment), the French Minister for Agriculture at the time (Michel Barnier) redirected around 15% of SFP (particularly from direct aid allocated to the production of cereals and oil seeds and pulses) towards the following targets: pastures (half of total budgetary reallocations); types of farming deemed to be fragile such as sheep farming, goat farming, suckler calves, pulses, vegetables produced on open fields or durum wheat; organic farming; mountain farming (re-evaluation of the CAPNH and allocation of additional direct aid for mountain milk producers); harvest insurance, etc. For example, in the case of the subsidy for pastures (EUR 700 million), the allocation system has the same approach as that advocated by the European Commission: simple, generalised, non-contractual and annual environmental actions. In anticipation of the point that will follow (placing a ceiling on aid), it is interesting to note that a ceiling per farm was placed on this aid (a maximum of 80 eligible hectares), plus a larger amount of aid per hectare for the first 50 hectares than for the next 30 hectares; the amount of aid is also dependent on a minimum density level (in order to establish a link between production and land). The measures taken in this 'Barnier plan' had significant redistributive effects, particularly benefiting sheep farmers and producers of milk from mountain grazing land (Chatellier, Guyomard, 2010; Chatellier et al, 2010).

In addition to the amount of decoupled aid allocated to each farm, the central issue that emerges from reading this new mechanism is the degree of inflexibility of the environmental indicators that will be used to determine the second level of SFP. The lower the overall amounts allocated to this second level of SFP, the more possible it will be to be exacting (in terms of targeting beneficiaries and environmental return). Given the pragmatic objective expressed by the European Commission (acceptable redistributive effects), the constraints should, on the other hand, be more flexible the greater the amounts allocated to the second level. As in the French experience mentioned above, it seems possible to apply generalised measures aimed at an enhanced focus on the environmental ambitions, while not making the mechanism excessively cumbersome (like some agri-environmental measures under the second pillar). It should also be specified at which geographical level these decisions will be taken (EU, countries, regions or departments).

A ceiling on direct aid taking employment into account would send a strong signal regarding the new social dimension of the CAP

Since the 1992 CAP reform, the amount of direct aid allocated per farm for a given type of production (in the same Member State) has been strongly correlated to its size (in hectares or heads of livestock). The logic that prevailed at the time was that each farm, whether it be small, medium or large, could benefit from the same level of compensation for the reduction in institutional prices. In the cereals and oil seed and pulses sectors, for example, each farmer from the same geographical area received the same amount of direct aid per hectare (in France, the regionalisation plan distinguished between departments). As there was no ceiling, the total amount of direct aid allocated per farm was thus the product of its eligible surface area and the unit amount of aid per hectare. Since decoupling has been implemented, the initial hierarchies (in terms of the amount of direct aid per farm) have only been very slightly modified in so far as the SFP amount has been determined, in each farm, on the basis of amounts of coupled direct aid allocated during the reference period of 2000-2002. In countries where the principle of standardising the SFP levels per hectare has been established (such as in Germany), gradual redistributions are nevertheless taking place between production systems. Although the correlation between the size of the farm and the level of direct aid is strong, it is not, however, complete, for several reasons: some direct aid from the second pillar of the CAP has a ceiling; the level of the premium for maintaining suckler cow herds is adjusted according to the number of livestock; the special premium for male cattle, which is now entirely integrated into the SFP, had a ceiling, etc.

The issue of modulation and/or placing a ceiling on direct aid has already been the subject of fierce debate during the previous CAP reforms. At the time of the health check, the EU authorities adopted a system for adjusting direct aid that increases according to the level of direct aid per farm. The boundaries for the different categories were set at such a level that the influence of the mechanisms remained very modest in the majority of the Member States (including France). Not only are the redistributive effects insignificant (as a percentage of total direct aid), but the amount given for the thresholds (with a category at EUR 300 000 of direct aid per farm) is surely incompatible with the aim of ensuring that the CAP is better accepted by taxpayers (many people then find out that amounts of this size are granted to farms, however large).

The new CAP reform proposals suggest establishing an upper limit on the amount of basic income support, taking into account the intensity of employment (including hired employees). Such an approach is fully justified in a context characterised by the existence of budgetary constraints and by the desire to make the CAP fairer and better accepted by taxpayers. Nevertheless it would seem important to extend the principle of ceilings to all direct aid under the first pillar (direct decoupled aid and, in the countries where it still exists, direct coupled aid). A mechanism needs to be designed that is both acceptable to all 27 Member States and applicable in each of them. Due to the wide variety of agricultural structures in different countries and the difficulty of equating the different categories of agricultural employment (family or salaried labour, full-time and part-time labour, etc.), on this point it seems that the use of subsidiarity should be favoured. The Member States should, for example, be forced to apply a ceiling according to thresholds and criteria defined at national level, but in such a way that the total impact of the levies linked to ceilings are including in a bracket that is common to all Member States (for example, between 5% and 10% of total direct aid). It seems necessary to take into account the different categories of agriculture employment (family employment and hired employment) in terms of applying the ceilings.

Some detractors of the ceiling system will surely point out that the fiscal policies applied in each Member State already play a redistribution role (and that in fact ceilings are useless). While this argument must be considered, it is nevertheless inadequate, especially given that tax exemption systems vary from country to country: the CAP must also demonstrate, through its own tools, that European public funds are allocated with the rigour required by the current European budgetary context. Aside from the technical difficulties that implementing ceilings gives rise to (indicators, accounting for jobs, etc.) there also needs to be a degree of credibility to the social dimension of the future CAP.

The possibility of using coupled support in certain cases is justified

Direct coupled aid now represents a limited proportion of the CAP budget: just under EUR 6 billion in 2009; this amount is set to decrease between now and 2012 following the decisions taken as part of the CAP health check. In this context, and bringing the pressure exerted by the multilateral WTO negotiations on internal support into the discussion, the Member States should be allowed some freedom. In France, for example, maintaining coupled aid for suckling cows is strategic in order to avoid the risk of a decline in production, including in less-favoured areas where farmers do not have other alternatives for production (Chatellier, Guyomard, 2008; Gohin, 2009). In many farms specialising in cattle, production costs are higher than turnover. The awarding of direct aid, with no obligation to produce, could therefore cause some farmers to give up dairy farming, while providing minimum land maintenance (in return for the allocation of SFP).

For a better definition of the beneficiaries of direct CAP aid

Following the recommendations of the Court of Auditors, the European Commission proposes that the redistribution of direct aid under the first pillar should go hand in hand with better definition and better targeting of support exclusively to active farmers. Given the great diversity of conditions under which this occupation is performed in the different Member States, the methods for applying such a measure should be looked at country by country (under subsidiarity). In general it seems that an up-to-date and more restrictive definition of the people/structures that may benefit from public funds is certainly desirable. Above all it should be ensured that the current mechanism does not act as an obstacle to people taking up farming.

Two examples that apply to France contribute to the discussion of this aspect. The first concerns the status of 'small beneficiaries'. A farmer who ceases business in order to start receiving his pension has the right to retain a small area of land to be used for his 'subsistence'; the size of the plot is limited to one fifth of the minimum farm size (defined in each department). The plot may be used for property or farming. If cross-compliance is respected, the land retained by these retired people (former farmers) is potentially eligible for the SFP. While the amounts concerned are mainly small, this contributes to making the administrative process cumbersome and raises questions as to the reasons for such a decision. The second example concerns the situation of elderly farmers (over 65) who retain their farms in order to continue to receive SFP, even if they no longer work physically, in other words by outsourcing the work (to a neighbouring farmer or an agricultural business). The question is whether or not the future CAP should support these people, and within what limits.

2. REGULATION AND RISK MANAGEMENT TOOLS

This second part looks at the future regulation and risk management tools. There are three sections: the first deals with the volatility of agricultural prices, considering that the future CAP instruments, however innovative they are, will have to be in line with an internationally agreed strategy; the second discusses the proposals made regarding the future tools that could be mobilised internally in order to regulate the agricultural markets and deal with risk and crisis situations as well as possible; some thoughts are also put forward on the future of the dairy sector in a context marked by moving from public regulation (quotas) to private regulation (contracts).

2.1. Price volatility, the CAP and international coordination

In its text of 18 November 2010, the European Commission highlights the extent to which growing price volatility (of agricultural products and inputs) is currently a problem for European farmers. It causes major variations in income and contributes to a growing concern that does not in any way favour making the necessary long-term commitments (establishment and investment) that this activity requires. Alongside the measures that will be adopted specifically in the context of the CAP (cf. section 2.2), the EU authorities will also have to be actively involved in better international coordination of this issue; the work undertaken in the G20 (under the French Presidency) is also intended to contribute to this.

2.1.1. Price volatility accentuates the hunger problem

The research conducted by the Food and Agricultural Organization of the United Nations (FAO, 2010-b) shows that the phenomenon of international food price volatility has worsened, particularly over the last four years. The FAO combined food price index, which is calculated on the basis of the prices of 55 products, rose to 118 in January 2006 (it was an average of 100 in 2002-2004), and 213 in June 2008, then dropped to 139 in March 2009, and finally rose again to 215 in December 2010. Not only is price volatility serious, but the higher levels are reaching peaks that have never before been seen on the international markets.

This high level of price volatility is expressed in contrasting ways by different products: in the case of sugar, the changes are spectacular: the index increased from 131 in June 2007 to 398 in December 2010; in the case of cereals, it dropped from 274 in April 2008 to 157 in September 2009, then rose to 237 in December 2010; in the case of milk, it peaked at 268 in November 2007, dropped to 117 in March 2009, then rose to 208 in December 2010; in the meat sector, the range is smaller: from 137 in September 2008 to 114 in April 2009, then to 142 in December 2010.

Another approach to price volatility, taken from the perspective of the situation observed in the different European agricultural markets, leads to a quite similar diagnosis: the price of wheat has more than doubled in three years; the price of milk has fluctuated in an almost identical proportion to wheat; the price of beef has dropped compared with 2006, with smaller variations than in other sectors. For meat, the current problem mainly relates to the increase in production costs (feed) as a result of the rise in prices of crops.

In addition to its effects on the financial situations of European farmers, the price volatility of food products is even more problematic given that it enhances the situation of food insecurity in many developing countries where food expenditure often represents a very large proportion of the household budget (FAO-2010-c; Galtier, 2009). It is occurring in a context in which, firstly, several dozen countries are already facing a recurring food crisis situation (sometimes with high social tensions or 'food riots') and, secondly, there are already nearly a billion humans on the planet facing malnutrition (63% of whom are in Asia and the Pacific, 26% in sub-Saharan Africa, 5% in South America and the Caribbean, 4% in the Middle East and North Africa and 1% in developed countries). Under-nourishment particularly affects rural populations in developing countries (Mazoyer, 2009) and two thirds of it is found in only seven countries (in descending order): India, China, the Democratic Republic of Congo, Bangladesh, Indonesia, Pakistan and Ethiopia.

The battle against price volatility cannot be limited to a single continent or a single economic area, even an agriculturally powerful one such as the EU (the leading global importer and exporter of agricultural and food products). It must be a collective ambition shared by the main big players in the production of, consumption of and trade in agricultural products (USA, EU, Oceania, South America, China, India and Africa).

2.1.2. The factors underlying the volatility of agricultural prices

It is not possible to reflect on the high level of volatility of agricultural prices without going back to the specific characteristics of the sector, as is widely discussed in the work of economists specialising in agriculture (Boussard and Delorme, 2007; Gérard, 2008; Boussard et al, 2008; Bazin et al, 2010): 1) due to the rather lengthy production cycle, agricultural supply is quite inflexible in the short term; this means that farmers cannot react immediately to market signals (such as in the case of a sudden change in demand); 2) agricultural and food products are largely perishable; that means that it is more difficult to store them (in the medium and long term) than in the industrial goods sector, where the practice is common; 3) the agricultural produce available at year $n+1$, in a country or on the international market, is difficult to predict during year n inasmuch as its level still depends (despite technical progress) largely on climate conditions (drought, flood, hail, etc.); 4) the demand for food products is relatively inflexible in relation to price: a slight surplus of supply compared with demand results in a more than proportional drop in prices.

In addition to recognising these specific characteristics, international decision-makers need to agree fully on the fact that price volatility in agriculture is the result of a complex interplay (that is often difficult to dissociate in the work of economists) of climate, demographic, political, economic (including changes in currency parities) and/or logistical factors (FAO, 2009-b, Timmer, 2010; Munier, 2010; Guyomard, 2008). Several of these factors play a dominant role, which needs to be taken on board before working together to plan how to curb the volatility.

- The growth of the world population and the change in diets are placing major pressure on demand for agricultural commodities. As the UN forecasts show, the global population is expected to reach 9.1 billion people by 2050, which is an increase of 2.3 billion people compared with the current situation; this expected population growth, which is already at a rate of 220 000 people per day, will mainly be due to African countries (+1 billion people) and Asian countries (+1 billion). This rapid increase in the number of consumers is in addition to a change in their dietary preferences (especially in emerging countries where it is economically possible) towards an increase in individual consumption of animal proteins (FAO, 2009-a).

For example, annual consumption of meat products in China increased from 13 kg per inhabitant in 1980 to just under 60 kg in 2010. In developing countries with a high average rate of economic growth, the increase in demand for food is also accompanied by growing (and worrying) needs for oil, gas, metals and other natural resources.

- The vagaries of the climate sometimes have severe effects on the production of particular goods. The impact on international agricultural prices is even greater when the countries affected play an active role in the international flow of trade in the goods. For example, the climate problems (drought) encountered in Australia certainly contributed to the sharp rise in the price of dairy products in so far as it supplies nearly 12% of the global market; in the cereals sector, the 2010 supply was disrupted by fires in Russia (which led to an embargo on cereal exports), a heat wave in Ukraine and Kazakhstan and heavy rain in Canada. While climate factors are likely to be accentuated by global warming, global warming needs to be the subject of an international strategy that goes far beyond the ambitions of the CAP in this area.
- The increase in energy prices (oil, gas, etc.) interferes with the price of agricultural products through different channels: it causes a rise in the production costs of agricultural goods, although the level varies for different categories of products; in the same way, for a given agricultural product, the use of inputs fluctuates depending on the production methods and techniques used; it influences domestic and international transport costs for agricultural products; it economically supports exporting countries, which are then inclined to import agricultural products at higher prices.
- A growing proportion of crop production being diverted from its prime function (human and animal food) towards biofuels is accentuating the pressure on crop product markets (Banse et al, 2010). Biofuels are not, however, solely responsible for the rise in food prices (Voituriez, 2009). Two arguments back up this statement: the price of cereals declined sharply in 2009 compared with 2007-2008, while global production of biofuels continued to rise; the price of certain food products (including rice) increased considerably (particularly in 2007-2008), despite having no immediate link with the development of ethanol and/or biodiesel. The land used to produce biofuels represents 2% of the cultivable land on the planet, which is still a modest proportion.
- International agricultural prices are determined mainly on the basis of the quantities of goods traded rather than the goods produced. In the case of a product for which trade represents a small proportion of global production and exports come from a small number of countries, the pressure can sometimes be high, mainly in the following two cases: where the countries supplying the global market experience a sudden contraction in their supply (climate problem, health crisis, etc.); where the consumption of the item varies suddenly, or at least more rapidly than anticipated at the time production was started. In a context characterised by a growing integration of economies, the balances are now increasingly fragile as the purchasing countries generally assume that the global market will be able to satisfy domestic demand without the need to establish and finance reserve stocks (for products for which that is technically possible).

- The influence of financial speculation on changes in the prices of agricultural commodities (level and volatility) is the subject of rich and sometimes fierce technical debates (Sanders et al, 2010). At least until now it was generally accepted that speculation was not the prime cause of rises or falls in agricultural prices (Chalmin, 2008; Guyomard 2008); the imbalance between supply and demand was still the main explanation, according to the majority of experts. It was also accepted that speculation had more effect on short-term price fluctuations than on long-term price trends. In addition, many experts agree that the existence of a derivatives market (as a place for exchanging promises to buy and sell in the long term) is necessary (within certain frameworks) in so far as it allows operators to protect themselves from excessive volatility. The main challenge then lies in regulating these markets so that the signals coming from them are clear and the derivative markets retain a degree of proximity to the real economy. In this respect, the development of commodity index funds could lead to a risk of speculative bubbles if they move too far from the reality of the balance of the markets or stocks. The following example illustrates this reasoning: when investment funds speculate up (especially if they are large), purchasers rush to buy while sellers delay their sales, all of which is based on a shared conviction that the speculator is making its decisions with a full knowledge of the facts. The question is, therefore, whether that is really still the case. Since summer 2010, and in the light of recent experiences, the debates on speculation are becoming more polarised. For example, the UN Special Rapporteur on the Right to Food considers that a significant proportion of the rise in prices of agricultural products since 2010 is explained by the emergence of a speculative bubble (De Schutter, 2010). In a context in which wheat harvests allowed stocks to be rebuilt to quite a high level, he considers that the current developments are quite directly influenced by the entry onto the market of powerful institutional investors such as speculative funds, pension funds and investment banks. The United Nations therefore consider that the recent sharp rise in food prices (which, incidentally, affects rice less than wheat and sugar), is more attributable to a panic movement on the agricultural markets (enhanced by a fear that prices will be increasing) than to an established serious imbalance between supply and demand.

In a long-term strategy on the subject of managing agricultural price volatility, the EU authorities must aim not only to work internally through the CAP tools (cf. section 2.2), but also (and perhaps most importantly) externally, in close cooperation with the other big powers, mainly those that are part of the G20 or the WTO. It would be futile to seek to confine this issue solely to the geographical area of the EU, as the risks are so high and the international interdependence is so strong.

2.1.3. A priority: the agricultural development of developing countries

Due to the expected population growth in many developing countries that are net importers of agricultural products, the low level of buying power of the populations concerned and the existing social tensions, it is essential that these countries, especially those on the African continent, are given the resources to develop their own agriculture while being shielded from international competition. The reverse strategy, which would involve favouring the systematic channel of low-price imports on the global market is quite simply perilous in the medium and long term, for two reasons: some countries that are currently exporters of agricultural goods will not necessarily be exporters in the future due to the growth of their populations (such as some Asian countries that export rice), more difficult soil and climate conditions (global warming, erosion, etc.), the use of agricultural produce for other purposes (biofuels, biomaterials, etc.) or the rise in oil prices (which contributes to a rise in

transport costs); the increase in agricultural commodity prices could then shut out the most economically fragile countries. That increase could, for example, be stimulated by China, where the reserves of American dollars are as great as resources in terms of water and cultivable land are limited. In order to take early action to prevent this phenomenon, it would seem that the EU authorities need to act with other international players in the following two directions:

- Giving the opportunity to a specific list of countries, which does not necessarily correspond to the WTO list of Least Developed Countries (LDCs), to apply customs duties that are sufficiently dissuasive for the development of food-producing farms to become economically profitable again (WFP, 2009; Pisani and Chatellier, 2010). They are not (or are no longer) profitable due to the substantial gaps in productivity (of work and production factors) between those countries and developed countries. Such a choice can only be made, however, through transition phases, because it will result in a brief increase in food prices (which will surely require the adoption of consumption support policies).
- Encouraging investments in the agricultural sectors in those countries, so that productivity can increase significantly (Bachelier, 2010). Many experts consider that the public funds allocated to agriculture have often been the victim of structural adjustment policies imposed by the International Monetary Fund (IMF). In the same way, a decreasing proportion of the funds from public development aid is directed towards agriculture. The issue of the appropriateness of direct investments in developing countries in Africa is an important point, which must be considered on a case-by-case basis: investment projects that positively involve local populations can have beneficial long-term effects on the local productive dynamics; investments based on the monopolisation of agricultural land by Asian or Persian Gulf countries for purely commercial ends are more debatable.

2.1.4. Supply, trade, biofuels and stocks

In an international framework, which does not, however exclude initiatives specific to the CAP, several actions could be useful for limiting the effects of excessive price volatility:

- Developing the agriculture of the country or economic area concerned, while ensuring that it is environmentally friendly (in order to be sustainable), less sensitive to the vagaries of the climate (which raises the question as to the potential future role of genetically modified plants) and less dependent on fossil fuels (to prevent the risk of a major future increase in production costs). This ambition is clearly expressed in the European Commission's text on the CAP towards 2020. While European consumers can take the risk of being in lasting deficit for some exotic products (coffee, tea, cocoa, etc.) or little-consumed products (mutton), the situation is very different for key products. In fact this strategy carries the risk that the expectations of the EU market (which has nearly 500 million consumers) will not always be fully satisfied: a health crisis, a poor harvest, an increase in consumption, currency disruptions or an exacerbated increase in competition could affect the expected flows of imports; this is especially true in cases where the number of suppliers is limited, such as in the beef sector.

- Promoting flows of trade between countries in deficit and countries in surplus, but without contradicting the points mentioned previously regarding African countries (Diaaz-Bonilla and Ron, 2010). The idea needs to be accepted that some countries will not always easily be able to develop their agricultural production so that it is perfectly in line with demand (Guyomard, 2009). Over the coming decades, this situation could be aggravated in some Asian countries that are experiencing high demographic and economic growth while their land availability is poor. The inequality between the world's countries (in terms of population, land, climate, etc.) has thus resulted in growth in agricultural and food trade at an annual average rate of 3% since the creation of GATT (General Agreement on Tariffs and Trade) in 1947 (WTO, 2010); this rate is higher than the growth of global agriculture production (Josling et al, 2010). In the same way, the FAO and OECD forecasts show that these flows of agricultural products will increase over the next decade (OECD-FAO, 2010), firstly towards developing countries, where population growth is strong. For developing countries, imports of wheat in 2019 are expected to 25% higher than in 2007-2009; this growth will be particularly strong (+60%) for protein meal (exports of soya beans from South American to Asia) and vegetable oils (+40%). Without predicting currency parities trends, the EU should be in a position to develop its exports in some agricultural sectors (European Commission, 2010-I); these exports are expected to be more limited than trade flows within the EU.
- Introducing a degree of flexibility into the annual production of biofuels that takes into account the real situation of the markets for human and animal food. This possibility is particularly relevant to the production of grain maize in the United States and production of cereals and oil seeds in the EU. Due to the industrial investments in this sector, such an approach is not, however, simple to envisage, at least not without the support of the public authorities.
- Promoting, as far as possible, a dietary model that, if possible, less resource-hungry (FAO, 2009-a). The rapid increase in consumption of animal proteins, particularly in emerging countries and some developing countries (with the notable exception of India), is accentuating the pressure on the agricultural markets; what is more, this would become quite untenable if the United States model became widespread (127 kg of meat products per inhabitant). In the EU, individual consumption of meat products is declining in several countries (including France) and increasing in others (mainly the new Member States) so that the overall trend is only marginally increasing. Based on similar reasoning, particular attention must be paid, on an international (but also European) scale, to the wastage of part of agricultural production all along the chain from producer to consumer; this wastage is the result of either a modern society that has become particularly demanding regarding the quality of the products consumed (use-by dates, withdrawing certain cuts from consumption, etc.), or of a lack of investment that does not enable the poorest countries to store the goods sold under proper technical conditions. On the subject of consumers, it is important to stress the fact that the impact of agricultural price volatility does not in any way have the same significance for consumers in rich and poor countries. In the former case, consumers have only been marginally impacted by the sharp rise in the price of agricultural commodities, because, firstly, they consume sophisticated food products (i.e. goods for which the cost of agricultural materials is a small proportion of the final price), and, secondly, expenditure on food represents a decreasing and small proportion (14% in France) of their total budget. In the latter case, the situation is more delicate.

- Creating international food security stocks for certain agricultural products (including cereals) where that is possible from a technical and budgetary point of view. Due to the controversies that the concept of 'stocks' create, both within circles of economists and among public decision-makers, it is important to make it clear what meaning is being attached to that concept here. The creation of stocks must be envisaged mainly for the benefit of the countries where there are regular food shortages and where the conditions for access to agricultural products are difficult for a variety of reasons, including logistical ones. The conditions for access to food in some poor countries are often very detrimental to local populations even if there is not really a global shortage of supply; the challenge is then essentially the geographical distribution of food commodities (Wright, 2009). Such stocks, which must be considered to be compatible with the WTO rules, could be co-financed by the countries and the international monetary and financial institutions; the stocks would be used, according to well-established rules, at the request of the governments of the countries concerned and, if necessary, with the technical support of the appropriate local organisations (Blein, 2010). As establishing public stocks is expensive and trade in agricultural products has a role to play in regulating the balance between supply and demand, the aim should not be to create massive public stocks to help support international agricultural prices. Various past experiences have shown that this approach was not only difficult to implement on an international scale (in so far as not all countries have the same definition of risk), but ineffective from a strictly economic point of view (Cordier and Gohin, 2011).

2.1.5. The governance of the agricultural markets and speculation

The main question here is how international decision-makers can act collectively to prevent and manage the instability of the agricultural markets (FAO, 2010-c, FAO, 2010-d). This supposes, firstly, that they can and, secondly, that they want to, with as much cooperation as possible between countries or large economic areas (Jamet, 2008). During the current decade, many ambitions should be pursued and upheld by the EU authorities.

The first ambition must be to tackle in more detail the issue of the conditions for better global governance of agriculture and food. International organisations that work in these two fields, whether in a specialised way or not, are diverse and pursue their own objectives (FAO, WTO, World Bank, World Food Programme (WFP), etc.). One of the main limitations of the system is that, at least currently, there is no competent political body with powers to coordinate the actions of these different players in the best way. Interesting proposals have been made in this respect in a recent report produced under the authority of the President of the French Financial Markets Authority (Jouyet et al, 2010).

The second ambition must be to establish that the WTO analytical frameworks as decided at the URAA (1995) are no longer necessarily relevant 15 years later. Without questioning the benefit to consumers in numerous countries of an increased opening up of the agricultural markets (Anderson, 2010), and while accepting the idea that the WTO will have to play a role in regulating the agricultural markets, we must improve many imperfections in the multilateral trade system:

- Developing countries that are net importers of agricultural products (especially in Africa) must be able to increase their commercial protection in order to develop their own agricultural production (and not rely on increasingly large imports), at the risk of a sudden about-turn that would mean that countries that are exporters today would be less so in future);

- The positive environmental contributions of agriculture, particularly of herbivore rearing (land maintenance, carbon storage in pastures, landscape creation, biodiversity maintenance, etc.), should be taken into greater account at the WTO so that the expected positive effects of liberalisation (lowering prices for consumers, etc.) are not cancelled out by future environmental deterioration, which will certainly generate costs to the community. This highlights the extent to which the WTO's trade concerns are insufficiently interlinked with other aims, which are nevertheless just as important for the future of humanity, and addressed with so much conviction in other international bodies (combating climate change, etc.). This also means that seeking optimum allocation of resources in the agricultural sector, however attractive it may be to the economist responsible for calculating the resulting benefits, also has serious limitations (Kroll, 2007). It could result in such a high geographical concentration of supply that the environmental effects could be globally appalling for the planet (pollution and soil erosion, abandonment of agricultural land); in the same way, a very high concentration accentuates the potential sensitivity of agricultural supply to the vagaries of the climate and health risks, which has a *de facto* negative influence on price volatility.
- Given the intensity of the food crisis and the expected increase in global population imbalances, the future WTO agricultural agreement must of course continue to work to achieve increased fluidity of trade (Brockmeier and Pelikan, 2008), but also, and most importantly, towards alleviating the price volatility of agricultural commodities (Jaquot, 2010). However innovative the future CAP is in terms of regulating the markets, the efforts made in the EU will be even more successful if they are consistent with the future WTO guidelines; these guidelines must give increasing space to so-called 'non-commercial' concerns such as food security, health security and the environment.

The third ambition, which is at the heart of the current G20 objectives, must be to arrive at a stricter framework for speculation on agricultural commodities (while not calling into question what is working well). The aim is to restore confidence to the various operators and prevent the creation of speculative bubbles. While a number of possibilities considered are heading in the right direction, their future impact will depend a great deal on their specific methods of application and on the level of support from the countries concerned. The following are among the possibilities raised (Jouyet et al, 2010; FAO, 2010-a):

1. improving the quality of the statistics available (past data and forecasts) on the agricultural markets (production, consumption, trade, stocks, climate, etc.) so that those involved are acting with the benefit of the most reliable information possible;
2. providing a political warning system for risk situations, distinguishing the physical markets from the financial markets (so that the warnings are quickly followed by actions);
3. making over-the-counter derivatives operations more transparent;
4. limiting the number of forward positions that an institutional investor may hold on a single commodity, in order to prevent orders for that commodity from having a decisive influence on whether the international price rises or falls.

2.2. The CAP, regulation and risk management

The European Commission's proposals regarding the CAP towards 2020 were drawn up after noting that in order to deal with possible crisis situations (such as in the dairy sector in 2009), it would be useful to maintain certain market support mechanisms. The proposals also specify that the future reform must be an opportunity to streamline and simplify existing tools and also to establish new rules concerning the functioning of the agricultural and food chain.

Many regulatory proposals have been produced following on from the decisions of 18 November 2010. They concern the implementation of contractual relations in the dairy sector (European Commission, 2010-g); agricultural product quality schemes (European Commission, 2010-h); marketing standards (European Commission, 2010-i); voluntary certification systems for agricultural products and foodstuffs (European Commission, 2010-j) and the labelling of foodstuffs using PDOs or PGIs (European Commission, 2010-k). These various regulatory proposals should provide European producers and consumers with a stricter framework in terms of the agricultural and food markets. In accordance with a desire expressed in a joint communication by the German and French Ministers for Agriculture (German and French Ministries for Agriculture-2010), the European Commission's proposals take up the idea of the optional implementation, through the second pillar (co-financing), of a series of risk management tools that are compatible with the WTO rules (such as income insurance).

2.2.1. Protection at the borders and export refunds

The European Commission's proposals to reform the CAP do not cover two instruments that are, nevertheless, very important in the regulation of the European agricultural markets: customs duties and export refunds. This means that these two instruments do not really fall under the CAP, but rather more specifically under the EU's trade policy, the terms of which are defined within the WTO multilateral negotiation process.

Protection at the borders through customs duties

At this stage of the multilateral negotiations in the (delayed) Doha Round it has been agreed that the future reduction in customs duties on agricultural and food products would be applied according to what is called a 'tiered' formula. This means that, at least for developed countries, a 50% reduction in customs duties is foreseen (compared with a past reference period) for products whose final consolidated tariff or the equivalent *ad valorem* would be below 20%; this reduction would be 57% for the bracket between 20% and 50%; 64% for the bracket between 50% and 75%; and 70% for the bracket exceeding 70%. For developing countries, the reductions would be lower. The sensitivity of different European agricultural products to this possible future reduction in customs duties is not standard, as the difference between the EU price and the international price varies from one product to another. While consolidated duty on agricultural and food products stands at an EU average of just under 20%, it surpasses the 80% threshold for products such as sugar, beef and butter. Focusing on a selection of three agricultural products (beef, milk and cereals) will help to gain a better understanding of what is at stake:

- In the beef sector, the EU price is generally significantly higher than that of the large exporting countries, including Brazil (which alone represents nearly 40% of international trade); the most recent observations (late 2010) show, however, that the price of beef has increased rapidly in Brazil, where economic growth is pushing consumption up (Institut de l'Élevage [French Livestock Institute], 2011). In this sector, which is strategically important from an environmental and territorial point of view, customs duties applied at the EU borders are still substantial: 12.8% of the value and EUR 3 per kg for boned, chilled and frozen meat. With the exception of the possible (justified) classification of the 'beef' tariff headings as 'sensitive products' (products benefiting, by way of exception, from a lower reduction in customs duties), a large reduction in tariff protection prompts the fear of downward pressure on the price of EU beef, at a time when the average income of specialist breeders has been quite low, particularly over the last three years. The EU has been in deficit for beef since 2003 (imports represent 6% of domestic consumption), and is expected to experience a further deterioration in its trade balance over the next decade. The increase in milk yield per cow, in a situation in which the milk quota is changing very little, is leading to a strong decline in EU dairy livestock; numbers of suckler cows are stable because they are directly dependent on past premium rights (particularly in France where 75% of the premium for maintaining suckler cow herds is still coupled). This increasing deficit situation is expected to lead the EU authorities to increase imports in the context of quotas negotiated at the WTO or through signing a bilateral agreement between the EU and the Mercosur countries.
- In the European dairy sector, imports from third countries represent less than 2% of EU consumption; this is mainly as part of tariff quotas that are only partially used. There are still quite high customs duties at the EU borders: EUR 1 900 per tonne for butter; EUR 950 per tonne for skimmed milk powder, EUR 1 500 per tonne for cheese. For convenience products (milk desserts, cheese, etc.), the risks of imports rising are quite low for at least three reasons: the products are perishable and difficult to transport; European companies have a great deal of technological know-how; and European consumers are quite attached to local products. While the risks of an increase in imports are more significant for industrial dairy products, many factors could limit the extent of those risks: difficult climate conditions make it more improbable for Australian exports to increase; the high demand for dairy products in Asian countries should monopolise the New Zealand market to a significant extent, with New Zealand's hopes for the growth of milk production now being more limited; the removal of milk quotas will probably result in a drop in the EU price of industrial dairy products, while, at the same time, forecasting bodes are anticipating an increase in the international price (FAPRI, 2010).
- In the European cereals sector, imports are at a low level in proportion to the volumes produced (around 2%). Over recent years, international competitors have not increased their trade pressure on the EU, in a global market in which demand is growing and the development of biofuels is having a negative impact on exportable quantities (in particular for American grain maize). In this sector, a combination of several factors means that any future reduction in customs duties would not be very problematic (especially in comparison with the situation at the beginning of the 1990s): the reduction in guaranteed prices has brought the European price closer to the international price so that the duties applied have now become low or zero; consolidated historical duties have been set at a high level; aside from some major fluctuations, the underlying international price of cereals is on an upwards trend.

With 23% of global agricultural and food imports (excluding intra-EU trade), the EU is not the 'fortress' that some competitor countries sometimes say it is. It is the leading importer, ahead of the three NAFTA countries (14%), Japan (10%) and China (7%). Moreover, European imports of agricultural and food products are constantly growing (in volume and value) as the years go by. As well as tropical products, soya and sheep products, for which imports are historically high, the EU is also slightly in deficit in poultry, beef and grain maize (European Commission, 2010-I). While a further reduction in customs tariffs would not necessarily change the level of European cereal or milk imports, the risk is, however, higher in the meat sector. Rather than a further general reduction in tariff protection, the WTO negotiators should focus their efforts on the following two points: taking more account of non-commercial concerns; seeking a better balance between the objective of high fluidity of trade and the long-term preservation, for each economic area, of balances that are helpful to all societies: the quality of the environment, maintaining the land and food security (Boussard and Trouvé, 2010).

Export refunds

According to the notification reports presented to the WTO, the EU is the economic area that has used export refunds the most over the last decade; this budgetary support from the CAP is allocated to European businesses to encourage them to export agricultural and food products to third countries (mainly benefiting dairy products, sugar, pork and poultry); without this support, they were not competitive, given the significant price difference between the EU market and the global market. Since the CAP reform in 1992, the level of export refunds has been significantly reduced in the EU: it has fallen from EUR 10 billion in 1990 to less than EUR 1 billion since 2009. Three factors explain this drastic reduction: the drop in institutional prices (particularly for cereals); the reduction in export volumes (beef, poultry, etc.); the stricter framework for the rules for granting this support as part of the URAA.

As the commitments made as part of the Doha Round currently stand, the WTO Member States must eliminate all forms of export subsidies (including refunds) by the end of 2013. This change will result in the EU being without a tool that, particularly in a crisis period, enabled surplus supply to be released onto the international market and thus to help stabilise its markets. This tool proved to be useful when the guaranteed prices were fixed at a high level, but expensive in that it encouraged producers to constantly produce more, even if the internal market was already saturated. The abandonment of this tool justifies intervention prices being fixed at quite a low level. Also, based on the same reasoning, stricter discipline will be established for commercial businesses in exporting countries, for export credits (eliminating those for which the reimbursement period is more than 180 days) and export credit guarantees.

This future removal of refunds should not, however, threaten the EU's dominant position on the international agricultural and food markets. The EU-27 has 20% of global export trade, despite unfavourable currency parity with the U.S. dollar. It is therefore ahead of NAFTA (17%) and Mercosur (16%). All these areas are seeing an increase in their exports (but for the countries of South America the rise is more spectacular). The future growth of European exports will depend on the following main factors: economic growth in the emerging countries where land is scarce; the gradual slowing down of exporting by competing countries (climate factors, rise in internal consumption, development of biofuels, etc.); the degree of competitiveness (production costs) and the differentiation of European products.

2.2.2. The inter-annual flexibility of the CAP budget

The issue of the inter-annual flexibility of the CAP budget should be considered carefully in so far as it could enable part of the budget allocated to European agriculture to be adapted according to actual needs. The aim is not to question the principle of the multiannual financial framework (2014-2020), but to have some freedom ('security budgetary reserve') to tackle any crisis situations in the best possible way. In accordance with the European Parliament's recommendations, the adoption of a mechanism to reallocate and carry over to the following year amounts that are not spent is fully justified (Lyon, 2010).

This recommendation is particularly important given that the current system for allocating SFP is excessively inflexible (cf. part 1); for example, it leads the public authorities to allocate direct aid to farmers benefiting from favourable and profitable prices, while at the same time there is a lack of funds to support producers affected by a major decline in prices or a sudden increase in costs. The objective of greater budgetary flexibility is not to give the opportunity to vary the SFP according to the price situation (which is contrary to the green box requirements) but to divert a proportion of SFP for other purposes.

2.2.3. Intervention and safety nets

The European Commission's proposals mention, without specifying the details, a possible adaptation of the intervention rules. This adaptation could include the extension of the intervention period; the application of the market disruption clause and private storage to other products. It is nevertheless clearly reaffirmed that the intervention instrument should only be used as a safety net to be deployed in the event of a price crisis or disruption of the market.

The public authorities may, using the services of intervention agencies, store certain agricultural products when their market price falls below thresholds established in advance (European Council, 2007). The stocks resulting from these purchases are then released onto the international or EU market, sometimes under the food aid to the most deprived persons scheme. Fixed-price purchases are now applied only in the case of certain products (common wheat, butter and milk powder) and to quantities determined in advance. Beyond these quantities, the purchase price and quantities offered for intervention are established by the European Commission under the 'tendering' procedure. Depending on the state of the markets, the EU authorities also have the option of encouraging private storage, through targeted aid. By focusing the analysis on a selection of agricultural products, it is possible to discuss the potential effects of the intervention system in more precise detail:

- For beef, public intervention is opened if, for a period of two consecutive weeks, the average market price is less than EUR 1 560 per tonne in a country or region (for an R3 calf or steer). Private storage aid is also possible if the prices are below EUR 2 300 per tonne. These thresholds are at such a low level that the use of the intervention mechanism is becoming less and less probable, especially in a context where there is an EU beef deficit, a decline in Brazilian exports over the recent period and an increase in the price of beef in several exporting countries. Due to the increase in production costs in this sector and the already low level of income, it is to be hoped that beef cattle farmers will not have to benefit from this scheme.

- For sheep meat and goat meat, private storage aid may be granted under particularly difficult market conditions. The EU's deficit situation means using imports mainly from New Zealand, as part of annual quotas agreed by the WTO. In France, where the self-sufficiency rate is only 47%, the price of lambs is above the EU average. The future income of sheep and goat farmers will depend more on changes in the way the support is granted (as at the time of the CAP health check) and the technical performance of farms than on the intervention system.
- For pigmeat, public intervention was recently abandoned, in so far as it was no longer used. Consumption, production and exports of pigmeat continue to rise in the EU, although the pace varies widely between countries: for example, Germany is seeing sustained growth, while that has no longer been the case in France since the start of the millennium. Having been faced with a serious economic crisis for nearly three years (an increase in production costs that is not incorporated into the sale price), French pig farmers, mainly those with limited land availability (which means buying feed), cannot therefore count on any public intervention to improve their situation. Moreover, the sector will be sensitive to the future abandonment of export refunds, which sometimes gave European exporters the opportunity to conquer markets (Russia, Japan, Hong Kong or South Korea) against American opponents favoured by their currency's parity with the euro.
- In the dairy sector, intervention is restricted to 30 000 tonnes annually for butter (at a price of EUR 2 218 per tonne) and to 109 000 tonnes for skimmed milk powder (at a price of EUR 1 700 per tonne). The European Commission may, if necessary, make these purchases by tender; in this case, the maximum price cannot exceed the intervention price. In 2009, private storage aid for butter was maintained (but not for cheese) while processing aid for butter was abolished. Two categories of processing aid (skimmed milk powder for animal feed and skimmed milk made into casein or caseinate) are still allocated, but only when the market is in surplus and according to an amount established in advance or by tender. Following the crisis affecting the dairy sector in 2009, the EU authorities made use of all the possibilities offered by these remaining regulation mechanisms. Exceptional measures were also agreed, such as bringing forward the disbursement period for direct payments and the implementation of a programme to promote dairy products. In this sector, one of the key questions is the extent to which the contractual relations mechanism that will soon be put in place to replace the current system of milk quotas will be effective in maintaining an optimum balance between supply and demand.
- In cereals, public intervention potentially concerns common wheat, durum wheat, corn, barley, rice and sorghum; it is authorised between 1 November and 31 May for all the Member States. The latter five crops will, however, no longer be eligible for intervention measures, as the rate has been reduced to 0%. For common wheat, the intervention price is EUR 101.31 per tonne, within a limit of 3 million tonnes. Given the level of prices at the beginning of 2011 and the trends forecast for the next financial year (position of buyers), it seems quite clear that public intervention will not be very useful in this sector in the short and medium term. The intervention price is set at a level that provides so little incentive that it only has a small impact on supply.

As the reforms of the CAP have taken place, the intervention instruments have been significantly changed (European Commission, 2011-a). The budgetary cost of these tools has also become extremely low in comparison to the direct aid allocated to European farmers. Preserving these instruments is definitely useful for tackling any crises that arise, but the low thresholds lead us to consider that the less these 'safety nets' are used, the better farmers will be. The objective must be to avoid using them by better adapting supply to demand.

2.2.4. Risk and crisis management instruments

In agriculture, the risks can be classified into three groups: a) risks associated with fluctuations in the prices of goods sold or inputs; b) risks attributable to the production cycle, such as the vagaries of the climate (drought, frost, hail, etc.), incidents (fire, water damage, theft, etc.), disease (plant and animal) or life events (illness, disability, death); c) risks related to the industry, i.e. the capacity of farmers to market their produce. In order to limit or better manage these risks, farmers can adopt tailored strategies (diversification, multiannual investment management, etc.) or leave it to the various existing tools (fiscal policy, insurance markets, financial markets).

Risk management instruments (Cordier, 2008), which are more developed in the United States or Canada than in the EU, may have their origins in the public sphere, private entities or professional organisations. In the typologies used to class these instruments, particular attention is paid to the correlation between the occurrence of an event (or hazard) within a population, on the one hand, and its frequency and intensity, on the other (Courleux, 2008). The risk is described as systemic when a large section of the population is affected; it is classified as independent when only one or a few individuals are affected.

In order to deal with the inherent risks of agriculture, the effects of which are growing in a situation in which the markets are opening up and the role of the public authorities in guiding production is limited (with the main exception being the safety nets, which are at low levels and provide little incentive for production), European farmers must mobilise the various instruments that are available more. Depending on the type of agricultural production, the strategies will be different, especially given that some risk management instruments will not work so easily for all products. The development of private risk management instruments (insurance, derivative risk management products) must be encouraged. The public authorities can contribute to this by making a clear distinction between what responsibility the public and private sectors have in dealing with agricultural risks, by stabilising their political guidelines for intervention in the agricultural markets and by encouraging an increasing proportion of farmers to educate themselves on these issues, which are sometimes new to them. By publicly awarding contracts, they can also promote the development of insurance (Cordier and Gohin, 2011).

The development of these private risk management instruments does not in any way mean that public authorities will no longer have a role to play in agriculture in future. The idea is not to set the players (public/private) against each other, but to find the best possible interaction between them to serve the desired objectives. With this in mind, the public authorities should maintain the safety nets (through public storage and private storage aid); strengthen the powers of the market (producer, processor and distributor), ensure that there is increased transparency on prices and margins; help to establish contractual relations between producers and companies, so that supply can be brought in line with demand; promote agriculture that is in tune with the environment and product quality (through the method of allocation of direct aid); and promote balanced development of

European land. In the possible event of sudden mass imports of agricultural products from third countries, the public authorities must also use appropriate mechanisms (safeguard clause) to avoid the risk of damaging destabilisation of the existing agricultural industries.

Without going into too much detail here as to the content and the diversity of the tools that farmers could use to manage risk in their businesses (Bielza Diaz-Caneja et al, 2009; Kimura et al, 2010; OECD, 2009), some thoughts follow dealing with several points that are important to add to the debate on the CAP towards 2020.

The diversification of agricultural and non-agricultural activities

The diversification of activities (agricultural and non-agricultural) is often a way for farmers to reduce their exposure to risk (particularly the risk of price volatility). The same applies to strategies of marketing in short distribution channels in which prices are set more by farmers than by the interplay of competition on national and international markets. Exposure to the volatility of prices of agricultural products and inputs is not, therefore, the same for all farms. Over recent decades, agricultural development has, however, clearly oriented European agriculture towards increased specialisation, with a drastic decline in the number of mixed crops-livestock units: this was considered to be beneficial in terms of technical expertise and economic efficiency. One example gives us a good understanding of what is at stake here: the sharp rise in cereal prices now has even harsher repercussions on farms producing pigmeat, as they are off-land farms. In a situation in which there is an imbalance in price development between crop and livestock farms, farms that are highly dependent on buying feed encounter much greater economic difficulties than those that are more diversified and also grow cereal crops. Certain measures under the second pillar of the CAP are certainly likely to encourage diversification, and therefore lesser sensitivity to price volatility, but the expected overall impact will probably remain modest, as there are so many concomitant forces acting on specialisation.

Futures markets

Public authorities must encourage the development of futures markets, while bearing in mind the fact that, firstly, this financial instrument cannot be used for all agricultural products, and that, secondly, it does not in any way remove price volatility; in fact it needs price volatility in order to function (Roussillon-Montfort, 2008). It is therefore not a tool for regulating the agricultural markets that could affect price trends, but rather an instrument that enables farmers to react to the potential effect of a deregulation. Aside from these two significant limitations, and in the event of high price volatility, futures markets are useful for enabling those involved in a market to cover themselves. They give the farmers concerned the opportunity to anticipate the future margin that they will have by having advance knowledge of the sale price of their products (provided that they know quite accurately what their production costs will be); this advance knowledge is valuable because it allows farmers to decide to start production, optimise cash-flow management and focus their investment strategy.

The futures markets are still under-developed in the EU (they were only authorised in 1993 in France), at least in comparison with the situation in the USA. They essentially relate to crops; they are more difficult to apply to animal farms in so far as the instrument requires a high level of standardisation of products. In a strict budgetary context, this instrument also has the advantage of being inexpensive to public authorities. The potential development of these tools is also dependent on the quality of training that can be given to farmers, many of whom are not experts in these instruments.

Mutual funds

At a collective rather than individual level, mutual fund tools (professional or inter-professional) can also, in their own way, mitigate the risks inherent to farming. They are definitely better suited to certain production sectors, such as fruit and vegetables (presence of producers' organisations, the difficulty of using other instruments, etc.), than to others. In France, following the freedom offered by the CAP health check, a so-called 'health' mutual fund (EUR 40 million) was created on the basis of a redeployment of direct support (Article 68 of Regulation No 1782/2003). The public contribution represents up to 65% of the eligible costs and is made up of 75% EU appropriations. Financial losses associated with a health or environmental incident are eligible for compensation from the fund.

Multi-risk climate insurance

The public authorities can encourage farmers to take out multi-risk climate insurance policies; these are to cover the risks to production associated with the vagaries of the climate (drought, hail, frost, floods and storms). In France, for example, a budget of EUR 133 million (EUR 100 million in EU funds and EUR 33 million in national funds) was used to fund this particular form of support in 2010. The aid takes the form of partial payment of eligible insurance premiums up to a limit of 65% (Sénécal, 2010).

Precautionary savings through adapted fiscal policies

In response to the increased volatility of agricultural sale prices, it seems essential that new fiscal policies be constructed in each country. We need to move from annual management of performance in farming to multi-annual management. The current system, at least in France (each Member State has its own fiscal features, which, moreover, make an EU debate complex), is still too inflexible. When the price situation is satisfactory, and income from farming is good, too often it encourages farmers to invest immediately in order to avoid compulsory levies. This reasoning, which is sometimes counter-productive in terms of long-term competitiveness, was not too problematic in a context in which prices and income were quite stable; it is becoming problematic in a situation of major fluctuations.

The issue is therefore now about finding the technical means to implement a system that would foster the creation of precautionary savings. This mechanism would give farmers whose income is high in the current year the opportunity to transfer part of their profit, exempt from social insurance contributions and tax, to the profit for the following year. If the income for the following year had declined due to the price situation becoming unfavourable, the amounts transferred could be incorporated into the income calculation so that the farmer would then pay his taxes and contributions. These amounts could also be used for investment, but on what would become a more multiannual basis. This precautionary saving could then be described, for example, as an 'investment savings plan'. With this in mind, would it not be a simple system to start with the possibility of transferring all or part of the direct aid potentially due for the current year to the following financial year?

It is quite clear that such a system will not in any way save farms that are in difficulty. It is only about giving farmers who wish to do so the opportunity to spread the effects of price fluctuations through a more pro-active fiscal strategy than the one we currently have. In France, two mechanisms have been created to support farmers in risk management, but their total budget is still quite small:

- The Deduction for Investment (DFI). Farmers under a real profit scheme (normal or simplified) may deduct a fraction of their farming profits each year in order to finance their investments. The amount of the deduction is freely determined by the farmer, within a ceiling that varies according to the profit for the financial year. The deduction must be used within the five years following the DFI. It may be used for producing or purchasing stocks for which the rotation cycle is greater than one year; for creating or acquiring amortisable fixed assets (which by nature excludes land) that are strictly necessary to the farm; for purchasing shares in agricultural cooperatives; in advance if the agricultural income for one year is less than 40% of the average agricultural income for the previous three financial years (whatever the cause of the drop in profits).
- The allocation for unforeseen incidents. This mechanism allows farmers taxed under the real taxation system, provided they have taken out multi-risk climate insurance, to deduct up to EUR 23 000 from their taxable income. This deduction is allocated to a credit institution and the amounts saved must be used within a period of 10 years (otherwise they are reincorporated into the taxable income). The use of these funds is limited to covering risks of fire, damage to crops, loss of livestock or any other uninsured incident due to the climate, natural causes or health causes.

Income stabilisation tools

The aforementioned insurance tools can help to increase income stability, as can decoupled direct aid. However controversial the current method of distributing SFP among farmers and Member States might be (cf. part 1), it has to be acknowledged that this aid brings a degree of income security to its recipients (Guyomard et al, 2007). It is, in some way, a basic secure income to which production strategies are added in order to complete this first level of profit. The level of SFP is fixed and does not vary according to market conditions.

Safety nets (intervention prices), however, now have practically no effect on the income levels of European farmers. They have been set at such a low level that they are now rarely triggered. Safety nets only guarantee to farmers that the public authorities would support a particular agricultural product if prices collapsed. It is useful security to some extent, but it only goes into action when the financial situation of farmers (at least a proportion of them) has already largely deteriorated. Nor do safety nets allow current market prices to be supported; past experience has shown the extent to which prices guaranteed at a high level could stimulate supply to the point that it became significantly excessive and therefore costly to the EU budget.

Based on this, and according to what the European Commission text says, it is interesting and justified to question the conditions for implementing an income stabilisation tool under the second pillar of the CAP (Bourget, 2010). Given the broad diversity of farms and of situations in the EU Member States, it is surely preferable for this mechanism to be constructed, at least for those who want it, within each country (through a common EU framework). Placing this instrument under the second pillar of the CAP gives it flexibility and allows co-financing by Member States and subsidiarity; it is nevertheless true that this choice could raise some questions among those who consider that this instrument falls first and foremost under regulation (and therefore under the first pillar). In any case, this ambiguity shows the extent to which it is not necessarily easy to build a new CAP structure while keeping the initial framework of the two historic pillars (European Commission, 2011-d).

To enhance this reflection on income insurance, it would seem appropriate to consider the way in which the Canadian authorities recently structured their 'AgriStability' programme (which replaced the former Canadian Agricultural Income Stabilisation Programme). The programme compares the farm's profit for the current year to the reference profit calculated for the previous five years (excluding the highest and the lowest). If the profit is less than 85% of the calculated average, a payment is triggered. This programme works in a similar way to any insurance scheme. A premium, which is payable in advance, is used to cover the coming period. The fee is 0.45% of 85% of the reference profit (plus administration costs). There is no compensation if the decline in profit is between 0% and 15%; it is 70% if profits drop by between 15% and 30%; it is 80% when profits drop by between 30% and 100%; there are particular rules to cover losses and start-up farmers. As well as this Canadian example, the ACRE programme (Average Crop Revenue Election) introduced in the United States as part of the 2008 Farm Bill is interesting.

Creating such a mechanism in the EU must be envisaged under two main constraints. The first relates to its expected budgetary cost. The indicators used as a reference point need to be well selected, then the thresholds and rates need to be set so that the budget that has been earmarked is kept to. This requires that statistical studies be conducted, such as those published by the European Commission (European Commission, 2011-c). The second constraint is for the envisaged mechanism to be compatible with the commitments made under paragraph 7 of Annex 2 to the URAA. This lays down the conditions for financial participation by Member States in income guarantee programmes and programmes establishing a security mechanism for income. It includes the following two points: i) the right to receive payments on this basis shall be subject to a loss of income, determined solely based on income from agriculture, which exceeds 30% of annual gross income for the three previous years or on a three-year average based on the five previous years (excluding the highest and lowest values); ii) The amount of these payments shall compensate less than 70% of the producer's loss of income.

Adopting such a tool should not be automatically ruled out on the sole basis that it would be too costly: its cost is closely linked to the cursors used as a reference point. While mitigating the variability of income is a significant concern for farmers, the average level of income is even more significant a concern; this tool does not do anything on this point.

2.2.5. The case of milk: from quotas to contractual relations

In its 'milk package' presented on 9 December 2010, the European Commission confirms, in line with political decisions taken a few years earlier (2003 and 2008), the end of the milk quotas system by 2015. The market difficulties encountered in the sector during 2009 (the collapse in the milk price paid to producers following a quite favourable price situation in 2007-2008) did not, therefore, lead the EU authorities, or the Ministers for Agriculture, to change the initial strategy undertaken since 2003. Instead, the milk crisis backed up the European Commission in the following positions it has recently adopted: i) preserving intervention tools (at least in their residual configuration) is desirable in order to deal with possible crises; ii) the establishment of contracts between milk producers and companies is a necessity for preparing for the end of milk quotas; iii) greater transparency in the functioning of the agricultural and food markets is necessary in order to ensure a better balance in the market powers; iv) strengthening the quality systems applicable to agricultural products will support geographical areas (including in the dairy sector) with differentiation strategies (including PDO-PGIs).

The abolition of the milk quota scheme in 2015 will constitute an important new phase in the development of the CAP. It is in line with the reasoning that has prevailed for several years, i.e. a withdrawal of the public authorities from the regulation of the agricultural markets; the adjustment of the milk supply to demand will therefore no longer be governed by strict administrative rules set by the public authorities, but by the processing companies through a system of contractual relations. This move from public regulation to private regulation will obviously have consequences for the way the European milk sector develops over the coming decades.

Milk quotas are effective in controlling supply and inexpensive ...

Since 1984, milk quotas have played an effective role in controlling supply (European Court of Auditors, 2009). They have also enabled the EU to move from a period in which dairy surpluses accumulated and were more and more costly (through storage and export refunds) to a situation where the management of expenditure in this sector has become very satisfactory. The cost of the CMO for milk and dairy products represents 6% of the total cost of the CAP today, compared with nearly one third in the mid 1980s. Combined with other intervention mechanisms, milk quotas have also made it possible for milk producers to benefit from relatively stable prices. However, depending on national choices regarding the application of the EU rules, milk quotas have a varying influence on regional and environmental balances. In France, for example, the public authorities seek to ensure, through quite strict rules (a strong link between milk quotas and areas, no transfer of volumes of milk between departments/regions, free allocation of released quotas to farmers deemed to be a priority, etc.), that the milk supply is not concentrated in the most competitive areas; maintaining milk production in less-favoured (mountainous) areas is considered to be of strategic importance in terms of land occupation, structuring the countryside and the vitality of the rural environment. In other Member States, such as those in the north of the EU, different choices have been made: the milk quotas are marketable and milk production is significantly less geographically fixed. The increased productivity (quota per job, milk production per cow or per hectare) associated with a decline in the overall milk quota has led to a drastic decline in the number of milk producers in all countries.

... so why do they need to be abolished?

- If milk quotas are effective in regulating production, inexpensive for the public authorities and sometimes beneficial in terms of the balances achieved between milk production, land and the environment, why does the European Commission, with the consent of the various Ministers for Agriculture, want to abolish them? Depending on who you speak to (producers, companies, public decision-makers) and their country of origin (France and Germany have long supported the benefits of quotas on supply), the arguments put forward sometimes vary. They can, however, be grouped around the following four points:
- Milk quotas do not encourage optimum allocation of resources. They are thus an additional obstacle to the process of concentration of milk production in farms and regions with comparative advantages. The result is that consumers are penalised because the average cost of milk production is not optimised. This approach, which is based on purely economic reasoning, presumes an acceptance of the idea that reducing production costs (or low sale prices to consumers) is a major objective.

- Milk quotas generate profits in that entry into the sector is dependent on obtaining the right to produce. A milk producer who sells his farm will seek to increase the value of that right, which will have a negative effect on establishment and on the average cost of milk production. This argument is particularly applicable to countries that have opted for a marketable system of quotas.
- Milk quotas are no longer suited to the current international situation. The strong growth in global demand for dairy products (+12 billion litres of milk per year, which is the equivalent of Dutch production) offers new opportunities for exports to European businesses. Countries that have large surpluses (Netherlands, Denmark, Ireland) are naturally more sensitive to this argument than countries in deficit (Italy, United Kingdom). They also accept the idea that reducing production costs is a necessary means of gaining market share internationally, especially in a context in which the supply of milk from Oceania is becoming less significant; New Zealand and Australia still supply more than one third of global exports. The choice to put an end to milk quotas is influenced more by the internal debate between EU Member States than by external pressure from the multilateral WTO negotiations. The other competing countries benefit somewhat from this regulation policy applied to an economic area that supplies nearly a quarter of the global supply of dairy products.
- Milk quotas are an instrument of the past in so far as they were combined with other tools that themselves have changed a great deal (export refunds, customs duties, etc.). As for other agricultural products (with the exception of sugar, still), the balances between supply and demand must now be achieved solely through the market. In support of this change, the public authorities must implement tools allowing the market to operate in the most correct way possible; it is with this in mind that the European Commission is proposing new measures relating to contractual relations, transparency of information throughout the industry and conditions for recognition of quality approaches.

The end of quotas: between fears and hopes

By abolishing milk quotas by 2015, EU decision-makers are therefore taking the gamble that the resulting advantages will outweigh the disadvantages. This gamble is also being made in the knowledge that the parallel reorientation of the other CAP instruments (redistributing and targeting support, strengthening rural development ambitions, etc.) will counterbalance all or part of the potential negative impact of the abolition of milk quotas.

The terms of this gamble are debated to varying degrees across the Member States. In France, for example, the end of quotas is a very significant challenge for at least three reasons: i) after 30 years of strong and systematic public interventionism (in close connection with unionism and inter-trade organisations), moving to a new system in which the relationship between producers and companies will become central will not be technically easy or politically spontaneous; ii) the diversity of production systems, land and businesses accentuates the extent of and the ambiguities in the questions raised regarding the right strategies to adopt to prepare for the future; iii) promoting the family farm model, which has long guided public action, is now destabilised by the rapid development of company formats, the decline in female employment in farming and the restructuring challenges created by the abolition of milk quotas.

The concerns of French milk producers regarding the forthcoming abolition of milk quotas do not relate to the issue of the changes to the sale price of milk quotas between now and 2015. This point, which is often examined in detail in the European Commission's documents, is really only of concern to producers located in northern countries. A selection of five of the questions provide a better understanding of the nature of the debates:

1. What will happen to the milk price given that the end of quotas could encourage the development of production and stimulate competition between farms, businesses and Member States?
2. What opportunities will be offered by the future system of contractual relations for the possible expansion (in terms of milk quota) of a farm?
3. How and to what extent can contractual relations with companies lead to a certain (feared) form of integration?
4. How will milk producers in less-favoured areas (or otherwise milk collectors in those areas) be supported by the public authorities to remain in business?
5. Do we need to invest now in order to be in a position to benefit most from the end of quotas, when there are uncertainties as to the future level of prices?

Depending on the arguments put forward from various quarters in response to each of these questions, milk producers have varying degrees of optimism. There are also many who consider the end of quotas to be an opportunity for the future development of their businesses. This is particularly true of farms whose potential for milk production is not fully exploited; these farmers are convinced that they would have the capacity to produce more milk at constant, fixed prices, i.e. without further investment and without increasing the agricultural surface area available. They are particularly interested in the possibility of the establishment of a system of payment of milk prices, which would become more flexible based on the level of valuation of dairy products. Any system that would offer the opportunity of producing more milk will be considered from a financial perspective.

The importance of the future contractual relations mechanism

Starting from the principle that milk quotas will be abolished by 2015 (despite the fact that this type of instrument had certain advantages for the public authorities), we need to consider how the European milk economy would function in the future and the conditions for implementing an alternative regulation system (contractual relations). Moving from public regulation (via quotas) to private regulation (via contracts) will inevitably have repercussions, especially in the Member States in which public interventionism was historically strong (such as for example in France). In the countries in which production rights are marketable and the concentration of processing companies is already strong (such as for example in Denmark), the challenges are less striking.

With the abolition of milk quotas, milk production is firstly likely to be concentrated more in the most competitive European production areas. With the quota systems, competition between Member States was only partial in so far as they each had protection for their own volumes through the guaranteed overall quantities. This would no longer be the case following the abolition of quotas, since the most competitive countries would be in a position to develop their production more, possibly to the detriment of other. The geographical location of milk production could also change within each Member State depending on the strategies adopted by the main large milk groups through the choices that they make to establish themselves and invest in industrial sites.

The abolition of milk quotas therefore raises questions regarding the future link between milk production and area, especially as the costs (milk production costs, collection costs, cost of transporting dairy products to consumption areas) sometimes vary widely between regions. In order to limit or manage that potential movement, public policies will be able to action the following three levers: environmental standards (conditionality of direct payments, the Nitrates Directive, etc.) which can prohibit excessive animal concentration in small agricultural regions deemed to be at risk (water pollution); directing public support to benefit milk producers (and/or businesses) in less-favoured areas, in order to enable them to remain competitive despite less-advantageous production costs and more limited productivity; protection, through public rules, from possible measures to differentiate dairy products undertaken in less-favoured areas (in line with what the Commission is envisaging through its 'quality package'). The movement towards geographical concentration of milk production could also be more or less supported by the behaviour of citizens and consumers. It is increasingly common for conflicts of interest to arise between farmers who want to develop their production tools (through merging farms, extending livestock buildings, etc.) and their neighbours, who want to preserve their living environments. Consumers can also change the forecast balances by demonstrating, through differentiated purchase prices, a particular attachment to dairy products that are from geographical areas that are less-favoured (mountainous) from a production point of view, but which have a satisfying 'product image'. The abolition of milk quotas does not therefore necessarily mean the abandonment of milk production in difficult areas, but that involves the public authorities being particularly pro-active, if this remains an objective, in counteracting the potential regional effects of abolishing milk quotas.

The abolition of milk quotas could also lead to a major restructuring of dairy farms, especially in countries where they were historically weaker. In France, for example, the rules agreed under the contractual relations system (duration of contracts, determining the volume of milk, criteria used to set the price, conditions for terminating a contract, whether or not to maintain a national basis common to all contracts, the role of inter-trade organisations, etc.) will have a decisive influence on the future configuration of the sector. Without a strong, structured response, a rapid transformation of the milk production sector is to be expected. Aside from the sometimes ambiguous positions on this issue, there are many milk producers who, if they had the opportunity, would agree to develop their milk production; in order to do this they need the content of the contracts to be very clear and a milk price which, as a multiannual average, is higher than the production cost (given that an increase in volumes can also lead to a decline in unit cost).

From 2015, achieving a satisfactory production cost (for a given quality and a given collection area) will be an undeniable asset for enabling farmers to negotiate with a partner company for an extension of contracted volumes; companies will have a strategic interest in future volumes that are released (after older suppliers retire) being allocated to the most competitive producers (or those who are in the process of becoming the most competitive through an increase in volumes). Otherwise they would run the risk of having to purchase milk at a higher price than their competitors in future. In a freer market, milk producers will also seek to secure their sales flow through contracts. The more competitive, sustainable and geographically well situated the farm is, the greater the opportunities to change collector. Farms that are not in these circumstances, however, could have increasing difficulties with collection. These arguments are put forward in order to demonstrate that the end of milk quotas is a real challenge and to stress the extent to which the public authorities still have a structuring role to play.

The abolition of quotas is going to change the competitive framework of European milk processing companies and make issues surrounding innovation, international opening up and how to add value to dairy products (convenience products versus industrial products) even more central to the problem. The establishment of contractual relations with milk producers is necessary in order to enable companies to secure their supply, in terms of quantity and quality. Businesses generally do not want to collect more milk than their factories are capable of processing or, more importantly, than their outlets allow. When collection becomes greater than processing and/or sales capacity, the milk collected is sometimes resold immediately on the 'spot' market at a price that is lower than the purchase price. The result is significant financial losses. In this context, some businesses intend to establish a system of differentiated prices according to the final destination of the milk products; in France, this strategy is maintained by cooperative structures and a private group. In this scheme, a volume 'A' would be attributed to the producers on the basis of all or part of the historical milk quota for the equilibrium price recorded on the internal market (price 'A'); an optional volume 'B' could be granted to producers, but for a lower price level. This mechanism would allow companies to become more competitive on the competitive markets (products with low added value or export markets).

This option, which would consist of adopting differentiated prices, is also criticised by some milk processing companies (in France, mainly those from the private sector, including the leading French collection group). They consider that such a system is difficult to apply due to the technical difficulty of effectively separating volumes A and B; the problem of non-transferability could encourage fraud. Moreover, they anticipate that central buying offices would take advantage in order to place downward pressure on prices from volume A. Above all, they point out that such a system would result in a loss of long-term competitiveness for the milk industry. Through the drop in prices and the increase in volumes, the processing companies have the opportunity to pass their own failings in terms of innovation and cost structure, etc. on to producers.

As the European Commission suggests, the establishment of contracts between milk producers and companies is necessary in order to clarify existing relationships and allow the different parties to benefit from medium-term foresight (European Commission, 2010-g). In France, a decree (No 2010-1753) applying the law on agricultural modernisation was published in this respect in the Official Journal of 30 December 2010, to enter into force on 1 April 2011. This decree makes it compulsory to have a written, formal contractual commitment for a minimum of 5 years between milk producers and milk buyers. The contract must specify the volumes of milk to be delivered for each 12-month period (if applicable with volumes for each sub-period) and define the conditions for adjusting the planned volume; as well as defining the characteristics of the milk to be delivered, it must also mention the rules that apply when the producer exceeds or does not meet the expected volumes. The contract must also establish the arrangements for collection (conditions for access to the goods), the criteria and references taken into account to determine the basic price of the milk, and the arrangements for invoicing and paying for the milk. Finally, the contract must state the arrangements for one of the parties to revise or terminate the contract. Alongside this decree on contracts, the French public authorities also recently confirmed a review of the method of management of milk quotas for the 2011 to 2015 period. Milk quotas will no longer be managed by department (of which there are around one hundred) but according to a new structure of nine large production areas.

It must therefore be insisted that the future contracts do not mention the price level that the milk producers will obtain during the period in question. The average price will therefore depend, as for other agricultural products, first of all on the future balance achieved between supply and demand; in the event of the sum of contracts signed within the different competing European dairy businesses not reducing milk production to the level of marketing capacity, we can expect prices to drop, and particularly sharply, given that the flexibility of demand in relation to supply is low. Conversely, the end of milk quotas does not necessarily mean that prices are set to drop. The European Commission's regulatory proposal proposes two measures that should not be ignored: recognising the functions that the inter-trade organisations will be likely to take on (improving knowledge and the transparency of the markets, drawing up standard contracts, promoting collective measures, etc.); the possibility of creating, using certain size limits, producers' organisations with responsibility for negotiating contracts.

The future of the milk sector, both in France and in the other Member States, therefore now depends partly on the way in which the different players take up these new instruments.

CONCLUSION

On 18 November 2010, the European Commissioner responsible for agriculture and rural development proposed a new phase in the long process of reforming the CAP. This proposal was made bearing in mind the fact that agriculture is now in a position to contribute actively to the strategic ambitions expressed by the President of the European Commission in his text entitled 'Europe 2020'. By taking the precaution of not entering too quickly into a precise definition of the criteria, indicators or thresholds that will ultimately be agreed and which will give shape to the real content of the future reform, the Commissioner is first seeking to give it a direction, in a particular context: i) the result of the negotiations on the EU financial framework for the 2014-2020 period is uncertain; therefore, it is difficult to predict what the future EU budget will be for agriculture and rural development; ii) the modification of the support instruments and regulation tools must be designed in such a way that the CAP remains compatible with the commitments made at the WTO as part of the Doha Round; iii) the European Commission must now work in close cooperation with the European Parliament, whose powers have recently been enhanced.

These European Commission proposals were accompanied in December 2010 by additional contributions targeting the dairy sector and the quality of agricultural products. While these different texts must be considered at the same time, their aim is not to cover all of the issues raised today by the development of European farming and the changes in agricultural and trade policies. They therefore do not discuss the position that the EU intends to adopt in international negotiations on subjects that are important for agriculture such as changes in currency parity; the need for international coordination of agricultural policies in order to combat agricultural price volatility; the trade strategy to be adopted towards developing countries that are net importers of agricultural products; the best way of taking into account, in future WTO agreements, non-commercial concerns (environmental standards, social rules, animal welfare); the future development of new technologies (second-generation biofuels, genetically modified crops, etc.). Likewise, these texts do not tackle the issue of harmonising rules between the Member States of an EU that is heterogeneous and in which there are still distortions of competition between countries.

MEPs now have the opportunity to react and to enrich the European Commission proposals. In doing this, they must keep in mind two ambitions: agriculture must become capable, in all the countries of the world, of better feeding the population (in terms of quantity and quality); it is essential for the balance of European society to maintain an agriculture fabric that is both economically effective, environmentally friendly and mindful of its relationship to the land. MEPs must be driven by the desire to implement a CAP that is fairer, more sustainable and more preventive. In order to do this, they must pay close attention to the specific way in which the redistribution of support and targeting it better towards non-commercial goods will be implemented. This change in the way that public support is granted is particularly justified in that price volatility is increasing and the residual tools for intervention on the agricultural markets will have quite a small influence on income levels. It is also important to maintain safety nets, to better manage speculation on the agricultural markets, to defend the right to minimal customs protection for certain industries deemed to be essential to regional balance, to encourage farmers who are conducting innovative projects more than was the case in the past and to better clarify the issue of market powers throughout the sectors.

BIBLIOGRAPHY

- Adinolfi F., Little J., Massot A., 2010. The CAP towards 2020: working paper on the EC communication of 18 November 2010. Briefing note for European Parliament (Directorate General for internal policies - policy department B), 78 p.
- Anderson K., 2010. Agricultural trade challenges: Doha and beyond. 30th Anniversary Conference of the International Agricultural Trade Research Consortium (IATRC), Berkeley CA, 12-14 December, 26 p.
- Bachelier B., 2010. Sécurité alimentaire: un enjeu global. Report for Fondapol (Fondation pour l'Innovation Politique), 45 p.
- Banse M., van Meijl H., Tabeau A, G. Woltjer, 2010. EU biofuel policies affect global agricultural markets? *European Review of Agricultural Economics*, Vol. 35 (2), pp. 117-141
- Bazin G., 2010. Quelle PAC après 2013? Report from the Académie d'Agriculture de France, Paris, 12 p.
- Bielza Diaz-Caneja M., Conte C. G., Gallego Pinella F. J., Stroblmair J., Catenaro R., Dittmann C., 2009. Risk management and agricultural insurance schemes in Europe. Report, 27 p.
- Bizet J., Emorine J.P., Bourzai B., Herviaux O., 2010. Rapport d'information du Sénat sur la réforme de la PAC, November, 125 p.
- Blein R., 2010. Les stocks de proximité: enjeux, opportunités et limites: le cas des pays du Sahel. Bureau Issala working document, 8 p.
- Bourget B., 2010. La politique agricole commune à l'horizon 2020: six scénarios pour la PAC. *Futuribles*, No 369, pp 31-43.
- Boussard J. M., Delorme H., 2007. La régulation des marchés agricoles internationaux: un enjeu décisif pour le développement, L'Harmattan, 337 p.
- Boussard J. M., Gérard F., Piketty M.G., 2008. Pourquoi les prix agricoles augmentent-ils ? *Oléagineux, corps gras lipides*, vol 15 (2), pp 81-87.
- Boussard J. M., Trouvé A., 2010. For a new European agriculture and food policy that meets the challenges of this century. Report, 41 p.
- Brink L., 2009. WTO Constraints on domestic support in agriculture: past and future. *Canadian Journal of Agricultural Economics*, No 57, pp 1-21.
- Brockmeier M., Pelikan J., 2008. Agricultural market access: a moving target in the WTO negotiations? *Food Policy*, 33 (3), pp 250-259.
- Buckwell A, 2009. Elements of the post 2013 CAP. Briefing note IP/B/AGRI/IC/2010-058 for European Parliament (Directorate-General for internal policies - department B), 37 p.
- Bureau J. C., 2007. La politique agricole commune, La Découverte, 121 p.
- Bureau J. C., 2010. La politique agricole commune après 2013. Les enjeux et la position des acteurs. *Futuribles*, No 369, pp. 45-61.
- Bureau J. C., Witzke H. P, 2010. The single payment scheme after 2013: new approach, new targets. External Study IP/B/AGRI/IC/2009-038 for European Parliament (Directorate-General for internal policies - policy department B), 167 p.

- Burell A., 2009. The CAP, looking back, looking ahead. *Journal of European Integration*, 31 (3), pp 271-289.
- Burgaz F., 2010. The Spanish agricultural insurance scheme: national experiences and recommendations looking at the CAP post 2013. Briefing note IP/B/AGRI/IC/2010-049 for European Parliament (Directorate-General for internal policies - department B), 33 p.
- Butault J. P., Gohin A., Guyomard H., Barkaoui A., 2005. Une analyse économique de la réforme de la PAC de juin 2003. *Revue Française d'Économie*, 20 (1), pp 57-107.
- Capitanio B., 2010. The increase in risk exposure of the European farmers: a comparison between EU and North American tools looking at the CAP post 2013. Briefing note IP/B/AGRI/IC/2010-050 for European Parliament (Directorate-General for internal policies - policy department B), 36 p.
- Chalmin P., 2008. Que peuvent les marchés? *Oléagineux, corps gras lipides*, No 6, pp 391-395.
- Chambon N., Fernandes S., 2010. Comment réformer la PAC pour améliorer la contribution de l'agriculture à la stratégie Europe 2020? Notre Europe report, 93 p.
- Chatellier V., 2009-a. The future of the CAP beyond 2013: the reform of market regulation mechanisms. Briefing note IP/B/AGRI/IC/2009-059 for European Parliament (Directorate-General for internal policies - policy department B), 40 p.
- Chatellier V., 2009-b. The distributional structure of green box subsidies in the European Union and France. In: *Agricultural subsidies in the WTO Green Box*. Cambridge University Press, pp 258-303.
- Chatellier V., Guesdon J.C., Guyomard H., Perrot C., 2010. Les producteurs d'ovins et les éleveurs laitiers extensifs sont les principaux bénéficiaires de l'application française du bilan de santé de la PAC. *INRA Productions animales*, 23 (3), pp 243-254.
- Chatellier V., Guyomard H., 2008. Le bilan de santé de la PAC, le découplage et l'élevage en zones difficiles. *INRA sciences sociales*, No 6, December, 8 p.
- Chatellier V., Guyomard H., 2010. Health Check in France: a significant redistribution of budgetary payments? OECD Workshop, Paris, 10-11 march, 16 p.
- Cordier J., 2008. Etude des risques de marché agricole en France : cadre d'analyse, modélisation et organisation des instruments de gestion. Report for COPEIAA, 105 p.
- Cordier J., Gohin A., 2011. Quelle intervention publique en agriculture pour la gestion des risques de marché? Nos recommandations. INRA report, 11 p.
- European Commission, 2010-a. Europe 2020: a strategy for smart, sustainable and inclusive growth. Communication, 35 p.
- European Commission, 2010-b. The EU Budget Review. Communication to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, 33 p.
- European Commission, 2010-c. 3rd financial report from the Commission to the European Parliament and the Council on the European Agricultural Guarantee Fund 2009 Financial Year, 21 p.
- European Commission, 2010-d. The Common Agricultural Policy after 2013: Public Debate Summary Report, 40 p.

- European Commission, 2010-e. The CAP towards 2020: Meeting the food, natural resources and territorial challenges of the future. Communication, 16 p.
- European Commission, 2010-f. Evolution of the market situation and the consequent conditions for smoothly phasing out the milk quota system. Report from the European Commission to the European Parliament and the Council, 19 p.
- European Commission, 2010-g. Proposal for a regulation of the European Parliament and of the Council amending Council Regulation (EC) No 1234/2007 as regards contractual relations in the milk sector, 19 p.
- European Commission, 2010-h. Proposal for a regulation of the European Parliament and of the Council on agricultural product quality schemes, 68 p.
- European Commission, 2010-i. Proposal for a regulation of the European Parliament and the Council amending Council Regulation (EC) No 1234 as regards marketing standards, 62 p.
- European Commission, 2010-j. EU best practice guidelines for voluntary certification schemes for agricultural products and foodstuffs. Communication, 15 p.
- European Commission, 2010-k. Guidelines on the labelling of foodstuffs using protected designations of origin (PDOs) or protected geographical indications (PGIs) as ingredients. Communication, 5 p.
- European Commission, 2010-l. Prospects for agricultural markets and income in the EU 2010-2020. Report, 76 p.
- European Commission, 2011-a. The CAP in perspectives: from market intervention to policy innovation. *Agricultural Policy Perspectives, Brief No 1*, 12 p.
- European Commission, 2011-b. The future of CAP direct payments. *Agricultural Policy Perspectives, Brief No 2*, 12 p.
- European Commission, 2011-c. The future of the CAP market measures. *Agricultural Policy Perspectives, Brief No 3*, 9 p.
- European Commission, 2011-d. The future of rural development policy. *Agricultural Policy Perspectives, Brief No 3*, 9 p.
- European Council, 2007. Council Regulation (EC) No 1234/2007 of 22 October 2007 establishing a common organisation of agricultural markets and on specific provisions for certain agricultural products, 149 p.
- European Council, 2009. Regulation (EC) No 73/2009 of 19 January 2009 establishing common rules for direct support schemes for farmers under the common agricultural policy and establishing certain support schemes for farmers, 243 p.
- European Court of Auditors, 2009. Have the management instruments applied to the market in milk and milk products achieved their main objectives? Special Report, 64 p.
- Courleux F., 2008. Prévention et gestion des risques en agriculture. Analysis report from the Service de la Statistique et de la Prospective, No 2, 4 p.
- De Schutter O., 2010. Food commodities speculation and food price crises. Briefing note 2, United Nations Special Rapporteur on the Right to Food, 13 p.
- Desjeux Y., Dupraz P., Thomas A., 2011. La difficile question des biens publics en agriculture: réflexions autour des outils économiques. INRA report, 23 p.
- Diaz-Bonilla E., Ron J.F., 2010. Food security, price volatility and trade: some reflections for developing countries. ITCSD Issue paper, No 28, 69 p.

- FAO, 2009-a. The State of Food Insecurity in the World: key points on livestock. Report, 186 p.
- FAO, 2009-b. The state of agricultural commodity markets. High food prices and the crisis – experiences and lessons learned. Report, 60 p.
- FAO, 2010-a. Price surges in food markets: How should organized futures markets be regulated? Economic and Social Perspectives– Policy Brief 9, 2 p.
- FAO, 2010-b. Food outlook (global market analysis). Report, November, 115 p.
- FAO, 2010-c. The state of food insecurity in the world: addressing food insecurity in protracted crises. Report, 63 p.
- FAO, 2010-d. When Emergencies Last for Decades: How to improve Food Security in Protracted Crises. Economic and Social Perspectives – Policy Brief 7, 2 p.
- FAPRI, 2010. US and world agricultural outlook, 401 p.
- Galtier F., 2009. How to manage food price instability in developing countries? Working paper, Moisa, No 4, 27 p.
- Garcia Azcarate T., 2009. La PAC après son bilan de santé. *Revue du Marché commun et de l'Union européenne*, No 528, 10 p.
- Gérard F., 2008. L'instabilité des prix agricoles: réflexion sur les causes et les implications de la flambée des prix. *Oléagineux, corps gras lipides*, No 6, pp 378-384.
- Gohin A., 2009. Le bilan de santé de la Politique Agricole Commune: faut-il des exceptions au traitement général? *Economie et Prévision*, No 189, pp. 1-20
- Guyomard H., 2008. Expliquer les évolutions des cours des matières premières agricoles: À l'impossible, nul n'est tenu! *Oléagineux, corps gras lipides*, n°6, pp 364-377.
- Guyomard H., 2009. Nourrir la planète de façon durable est possible, à condition que... *Politique étrangère*, Vol 2, pp 291-303.
- Guyomard H., Chatellier V., Courleux F., Levert F., 2007. La politique de soutien des revenus dans l'UE. Report from the Conseil d'Analyse Economique (CAE), pp 125-179.
- Institut de l'Élevage, 2011. Le marché mondial de la viande bovine en 2010. *Le Dossier Economie de l'Élevage*, No 407, 39 p.
- Jacquot M., 2010. L'OMC dispose-t-elle des moyens pour réglementer les marchés agricoles. Note pour l'Académie d'Agriculture de France, 14 p.
- Jamet, 2008. Politiques agricoles: libre-échange et nouvelles régulations. *Oléagineux, corps gras lipides*, No 6, pp 396-399.
- Josling T., Anderson K., Schmitz A., Tangermann S., 2010. Understanding international trade in agricultural products: one hundred years of contributions by agricultural economists. *American Journal of Agricultural Economics*, Vol. 92(2), pp 424-446.
- Jouyet J. P., de Boissieu C., Guillon S., 2010. Prévenir et gérer l'instabilité des marchés agricoles. Status report, 18 p.
- Kimura S., Antón J., LeThi C., 2010. Farm level analysis of risk and risk management strategies and policies: cross country analysis. *OECD Working Papers*, No 26, 54 p.
- Kroll J. C., 2007. Politique agricole. L'insoutenable légèreté des économiste. *Economie Rurale*, No 300, pp 42-47.

- Latruffe L., Le Mouël C., 2009. Capitalization of government support in agricultural land prices: What do we know? *Journal of Economic Surveys*, 23(4), pp 659-691.
- Lyon G., 2010. Working document on the Future of the CAP after 2013. European Parliament Committee on Agriculture and Rural Development, 15 p.
- Massot A., 2010-a. Structural and Cohesion Policies after the Treaty of Lisbon. Report for the European Parliament – Directorate General for Internal Policies (Policy Department B), 58 p.
- Massot A., 2010-b. Reform of the CAP. Note for the Europarl website, 7 p.
- Mazoyer M., 2009. Quelle est l'étendue des insuffisances agricoles et alimentaires présentes? *Tropicultura*, vol 27 (4), pp 246-252.
- Melendez-Ortiz R., Bellmann C., Hepburn J., 2009. Agriculture subsidies in the WTO green box, Cambridge Press University, 626 p.
- German and French Ministries for Agriculture. Franco-German Position for a strong CAP beyond 2013. Note to the European Commission, 5 p.
- Munier B., 2010. Commodity price volatility: causes and impact on the EU agricultural markets. Report for the European Parliament - (policy department B), 31 p.
- Nallet H., 2010. L'Europe gardera-t-elle ses paysans: une mise en perspective de la réforme de la PAC. Fondation Jean Jaurès, 183 p.
- OECD, 2009. Managing risk in agriculture: a holistic approach. Report, 68 p.
- OECD-FAO, 2010. OECD-FAO Agricultural Outlook 2010-2019. Report, 98 p.
- WTO, 2010. International Trade Statistics. Report, 250 p.
- European Parliament, 2010. Future of the CAP after 2013. Resolution of 8 July, 15 p.
- Piet L., Courleux F., Guyomard H., 2006. Les DPU: application en France et premiers éléments d'analyse économique. Notes et études économiques, No 25, pp 45-78
- Pisani E., Chatellier V., 2010. La faim dans le monde, le commerce et les politiques agricoles. *Revue Française d'Economie*, Vol 25 (1), pp 3-77.
- World Food Programme, 2009. La faim et le rôle des marchés. Report, 213 p.
- Ramos-Real E., Gallardo-Cobos R. The future of the CAP beyond 2013: the reform of rural development policy. Briefing Note IP/B/AGRI/IC/2009-060 for European Parliament (Directorate General for Internal Policies - Policy Department B), 61 p.
- Roussillon-Montfort M. A., 2008. Les marchés à terme agricoles en Europe et en France. *Notes et Etudes Economiques*, No 30, pp. 99-124.
- Sanders D. R., Irwin S. H., Merrin R. P., 2010. The adequacy of speculation in agricultural futures markets: too much of a good thing? *Applied Economic Perspectives and Policy*, 32 (1), pp 77-94.
- Sénécal B., 2010. Voies et moyens d'une nouvelle régulation. Report from the Conseil Général de l'Alimentation, de l'Agriculture et des Espaces Ruraux (CGAAER), 49 p.
- Swinbank A., 2008. Potential WTO Challenges to the CAP. *Canadian Journal of Agricultural Economics*, No 56, pp 445-456.
- Timmer C. P., 2010. Reflections on food crises past. *Food policy*, Vol. 35 (1), pp 1-11.
- Voituriez T., 2009. Hausse des prix agricoles et de l'énergie: quelles relations et implications à moyen terme et à long terme? Report from IFRI, 37 p.
- Wright B., 2009. International grain reserves and other instruments to address volatility.