

COMPETITION, COOPERATION, SOLIDARITY
PROJECT PAC 2013

Price Risk Management post 2013

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The views expressed in this article are the sole responsibility of the author

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INTRODUCTION

We are working on the premise of a possible demise of the single payment regime (SPR) and price support mechanism in the 2013-2020 timeframe. In this context the protection they afforded against the instability of farmers' incomes also disappears. What will the volatility of farm prices and income be like thereafter? What are the instruments best suited to the post 2013 context, given European budgetary constraints and international trade regulations? How can an effective risk management mechanism be set up in the EU?

I - Is Intervention Necessary?

Farming is a high-risk business. It faces *production risks* associated with weather factors, diseases, health and phytosanitary standards, and *price risks* associated to the instability of raw materials prices. These risks must be taken into account when agricultural policies are drawn up if those are intended to maintain or improve producers' competitivity and collective well-being.

A. Intervention is necessary to improve:

State intervention is justifiable in so far as risk management instruments makes it possible to improve the competitivity of agricultural businesses and collective well-being.

Competitivity and sustainability of farm businesses

Some individual ex ante risk management strategies – such as debt diversification or debt limitation – are frequently at odds with competitivity objectives and/or curtail business capacity to invest properly. It has also been noted that if an adequate risk management is indispensable for the survival of the farms, too great a protection hinders their dynamism and their adjustment to market conditions.

Collective well-being

A producer with sufficient bargaining power can factor in his risk premium into product prices. Down goes the consumers' well-being, since everyone pays a higher price. Yet risk management instruments make it possible to shift risk on to other economic actors.

B. Role of Public intervention (cf. appendices: Fig. 1)

If the risk's probability is low and if, should it be realised, the extent of the damage is low, the producer can cover himself through income smoothing. Public intervention can advance the emergence of income smoothing instruments in the shape of precautionary savings made readily available to producers. For medium risk events, private companies can take on the management of the risk (cf. "fenêtre privée" in fig 1). The nature of the risk, whether independent or systemic¹, will be better met respectively by insurance or financial contracts. In the case of high risk, a share of the risk must be shouldered by the state. The object is then to protect farmers against these risks more cheaply and in accordance with European and international regulation.

1 Affecting all policy holders at the same time

C. Evolution of price risk post 2013: will farming prices/income be more volatile beyond 2013; will the European producer be faced with greater risks post 2013?

Income risk is a *mixed risk* since it embraces *price risk* and *yield risk* (also called *production risk*). Production risks will be at least as significant in the future as they are today. For it seems increasingly likely that global warming will bring about more incidences of natural disasters and wider ranges of temperature than currently experienced. Furthermore farmers must constantly observe new regulations concerning health and safety and the environment (use of animal drugs and inputs, for instance), which increase production risks². Punitive risks and the cost of standards implementation could have implications on income risk

Regarding price risk, will there be greater price volatility once market price support and SPRs have gone? The evolution of agricultural prices is quite difficult to anticipate. On the one hand, market liberalisation could reduce price variations thanks to a bigger market better able to cushion shocks. But on the other hand, the producers' projections will be the more difficult as a result. Moreover, some economists think that projection mistakes could, according to the elasticities in supply and demand, cause higher price volatility. Several other factors will affect price volatility, such as the likely concentration of supply in specific geographic zones or again, the relationship between farming and other policies (e.g. energy policies). An increased interdependence between the agricultural and energy markets could cause agricultural prices to remain high and increase their volatility – particularly if the quantities placed on agricultural markets work as adjustment variables for the energy markets. Supply concentrations in specific geographic zones lessen the market's capacity to absorb shocks, thus leading to higher risks.

² However a question remains unanswered: should health and quality risks be covered on the same basis as climatic risk?

The diverse types of risk are spread out in very different ways according to a farm's technico-economic orientation, its degree of specialisation and its geographic situation. European producers are facing risks in direct proportion to their specialisation or inclusion in a CMO or a significant price support scheme within the CAP framework. The extent of these risks is hard to estimate; quantitative research on the evolution of these risks post 2013 is scarce.

II - Which is the relevant risk to attend?

The relevant risk to a farmer would appear to be *income risk* since it "covers" – so to speak – the range of events which could occur over the production process. However *price risk* and *production risk* are not alike and their management tools are different. Price risk is essentially systemic, that is: it affects all producers at the same time. Reinsurance needs are accordingly significant making the risk hard to cover for a private insurance company. Such management tools as futures contract seem better suited. Production risks are mostly independent, subject to adequate geographic spread. In this case, "mutualisation" type tools are recommended. The management of income risk supposes a combination of both these types of products.

The management of production risk is under reasonable control at national level and is receiving a great deal of attention in many European countries who have moved from the agricultural disaster management model to a crop insurance system. The management of price risk was hitherto handled

through the CAP's first pillar. What remains unclear is whether, beyond 2013 extra instruments allowing for cover against potential extra price risks are required, and if so, which?

III - Which instrument would manage a potentially increased price risk?

The challenge is to find instruments which provide the producers with an adequate safety net whilst cutting down public support to farming (pressures on the European budget and observance of international regulation). According to the nature of the risk, several management tools (see fig. 3) are available. Specifically one should consider:

- farming insurance (crop insurance)
- social safety nets (income protection insurance)
- futures market
- contracts/financial commodities
- fiscal measures

The (potential) extra price risk associated to the withdrawal of CAP funded supports can be handled in two ways: either as such, with instruments such as futures markets and contracts or via income risk comprised of yield risk and price risk.

A- Addressing Price risk

1 - Futures markets

Futures markets are the exchange of a futures contract between sellers and purchasers – and not necessarily the physical exchange of goods. The contract specifies product quantity, quality, the date and the sale price. The price is thus fixed ahead of its harvest on the basis of available data. If the market price at the time of sale is higher than that fixed in the contract, the seller makes a loss by comparison with market prices. Conversely, if it is lower, he makes a profit.

For a product to be traded on a futures market, the product must be exchangeable, storable and have a constant and easily recognisable quality over a long period of time. Milk, for instance cannot be traded on a futures market.

The advantages of futures market:

- Guarantee of a stable price fixed in advance
- Daily quotation of the price. The farmers are therefore in full possession of the data (whereas in standard negotiated contracts, the processor-buyer's bargaining power and information are often much greater than that of the farmer-seller.

Their draw-backs

• The complexity of the system and a poor knowledge thereof make its access difficult to most producers. Even in the United States, where futures markets are well established, farmers still favour negotiated contracts. The reason most frequently given is the potential loss incurred if the going rate is higher than the futures market price, the cleft stick situation if the crop suffers any damage before delivery and the producer cannot meet his contractual obligations, the complexity of the system and the

substantial financial and transaction costs.

- The agrifood business is more and more concentrated, which leaves only a small number of buyers whereas futures markets need an adequate number of interveners to function properly.
- Finally there exists a danger linked with the speculative use of futures markets. Speculative behaviours can fuel the volatility of prices and disconnect them from supply and demand as perfor ming on the actual markets.

Conclusion:

Futures market amount to a very interesting risk management instrument but only for readily exchangeable goods of constant quality. They ensure the management of risk, that is the protection against price volatility but never an average rise on prices to the producer. The expansion of futures markets requires the presence of producers' organisations such as cooperatives, which can supply large quantities to the markets. Official intervention could consist in advancing the training of and information to farmers.

2 - Contracts, backward-forward integration

The way contracts work is by shifting some of the risk upwards and downwards on to the other businesses in the chain. As a counterpart, the producer must observe certain rules.

Advantages:

- From the processors' point of view, they ensure the security of supply, a better quality control of the production process.
- From the producer's point of view, they allow for a reduction of price risk. As a rule the other risks continue to fall to the producer. It further secures a production outlet and thus reduces transaction costs.

Draw-backs:

• The producer's bargaining powers are often greatly inferior to the processor's.

The way to overcome this problem could be the framing of standard contracts governed by the authorities. Producers grouped together in cooperatives or producers' associations also find their bargaining power enhanced.

B- Addressing Income risk

1- The fiscal instrument

Tax exemptions could also encourage producers to implement precautionary saving on the lines of what exists in France since 2002 and is known as *DPA*³, a deduction for hazard.

It works as follows: The producer makes a provision on an account. This provision is deducted from income. Should the hazard take place, the sum can be withdrawn and is included in the income for the year of the event. The sum can be allocated at the producer's discretion. The provision thus set up is valid for 5 years. If no hazard has occurred over the 5 years, the provision is reinstated in the fifth year's result. The hazards provided for by these deductions are:

- Climatic (frost, drought, floods)
- Economic (prices)
- Sanitary (diseases)
- Family

This system seems an interesting management tool. However it must dovetail smoothly with existing devices. For instance, it must be designed to fit in with other tax deduction allowances. In France, the *DPA* was barely

3 Déduction Pour Aléa

used before 2004 because it ruled out applying for *DPI*⁴ (an endowment for investment). Unfortunately, this system makes tax accounting a necessity for all farms. This is a draw-back, as all farmers will need to be better trained in accountancy and management. Finally this measure can only apply to profit making businesses. A farm with negative results does not pay taxes and needs not take dispositions to pay less⁵.

2- Insurance

Insurance as an alternative to traditional farming income support systems are eyed with considerable interest by the authorities. There are two types of agricultural insurance which are not to be confused: crop insurance covers production risks whereas income protection insurance covers income risk, that is both price and yield risks. Crop insurances were created to replace the national agricultural disaster set ups and to curtail ad hoc expenditures linked to large scale production risks such as natural disasters. Income protection insurances are more recent products often presented as an alternative to farmers' income stabilisation classic mechanisms.

a) Crop insurance

Crop insurances have already been studied in depth at national level in several countries and have experienced considerable growth in Spain and in the United States. In these two countries, they cover the main natural risks, e.g. droughts, humidity, hailstones, wind, pest infestation, diseases. They now exist for almost all major crops and fruit and vegetables. After a few years of trial and error, these insurances operate quite well. The adverse selection⁶ problem has been overcome with the authorities picking up the tab for the premium or part of it. The State further takes on part of the reinsurance. Fraud is held in check by means of effective information

^{4 (}Dotations pour Investissement= endowments for investment) Producers had to chose between either one or the other allowance

⁵ However, for this type of holding one could devise direct support to the constitution of provisions in the shape of short term soft loans. This solution could spare them resorting to frequently onerous short term loans. For instance Canada offers nil interest short term loans via the Advance Payment Programme and the Spring Credit Advance Programme

⁶ when the majority of applicants for cover are higher risk producers

systems.

The extension of this type of insurance Europe wide level basically requires working out at which level this insurance would have to be managed. Is it better to keep it managed at national level while studying modalities for part-financing of the insurance programmes by the European budget or should it be managed at Community level? *Insurability* can be optimised if it has been possible to mutualise the risks over time and space. This argument could militate in favour of a European insurance system: the greater the population to insure the more widely the risk is spread.

b) Income protection insurance

The income protection insurance is a more recent instrument. It has only been tried on a large scale in the United States and Canada. Could this instrument help manage the possible price volatility post 2013? The income protection insurance, which guarantees that the farmer will receive a gross minimum income for one or several crops, offers the double guarantee of price and yield. Several formulae operate. For instance the Canadian programme of agricultural income stabilisation allows for the compensation of gross margins against a reference level thanks to provisions set up by the insured along with public compensation funds. The level of public compensation share is in proportion with the extent of the loss. In the United States, the producer can insure a percentage of his reference turnover calculated as the average of past yields and crop price picked up on a futures market at sowing time.

The income protection insurance ensures the stability of agricultural income and ensures that support is correctly channelled to those who need it but it does not amount to an effective way to support income, and its budgetary cost is very high (cf. appendix 1). The organisation of compensation schemes for agricultural risks varies from one country to the next but always requires public intervention.

The difficulty of ensuring against risk is linked to:

- The systemic nature of this risk (i.e. many insured are hit at the same time). Therefore the needs for reinsurance are very high and public intervention is necessary for the system to operate.
- Adverse selection (i.e. more high risk producers are likely to take insurance cover). To rein in this phenomenon and encourage a large number of farmers to take on insurance policies, the premium has to be subsidised or the insurance has to be made compulsory in order to grow the insured base.

Risk insurability can be improved through the diversification of insured portfolios. Over and above geographic diversification, it would be more profitable to insure the farm income than a gross margin per crop. That would broaden the portfolio to several crop types, the prices of which, one might hope, will not vary in exactly the same way.

• Moral hazard (i.e. an individual's change in behaviour after having taken out an insurance policy, which results in an increase in the potential magnitude and/or probability of a loss). The fraud related issues have been successfully tackled in the United States. It amounts to less than 1% of the premiums paid according to the RMA. Key to this is the setting up of a global data analysis system run by the RMA, the use of local references collected by a government agency — rather than private references - for the cal culation of guaranteed yield, a ceiling fixed at 85% of the guaranteed turnover.

Income protection insurance appears to correct some imperfections by comparison with price support system

		YIELD		
		Low	High	
		Price support paid	Price support too high since the	
_	Low	Insurance paid	YIELDS ARE THE CAUSE OF THE LOW PRICE	
PRICES			IT COMPENSATES	
	Нібн	PRICE SUPPORT NOT PAID	No compensation needed	
	пісн	ONLY INSURANCE IS PAID		

Compatibility with national, European and multilateral regulations.

European law allows government support in the context of agricultural disaster and of production risk insurance within limits of 80% of the premium cost for agricultural disasters and of 50% for non disaster risks. But at the moment, national governments are not allowed to support price risk management mechanisms. Furthermore, community part-financing is allowed only if the measures are entered in the WTO green box and a ceiling is set at one percentage point of modulation.

The insurance against catastrophe hazard is compatible with WTO regulations and is entered in the green box. Other insurance measures (loss of gross income above 30% of average income, and compensation under 70% of the loss) also entered in the green box. But most of them - against non-catastrophic production risks – as well as income protection insurance are entered in the orange box in that they are not entirely decoupled from production and that they support a guaranteed price for the farmer (for more details cf. appendix 3).

Why replace distorting instruments by others which have the same effect?

A study by the OECD has compared the diverse agricultural income support or stabilisation instruments. For the same amount of aid, crop insurance and support for price coverage on a futures market are the most effective instruments both to reduce income risk and to increase production.

According to this study, crop insurance has twice more impact in the United Sates than compensatory payments and five times more than anticyclic payments

How is the transition from the current system to an insurance system to be organised?

Insurances base their estimation of loss on a reference income, that is a reference yield valued at a reference price. The reference yield represents, as a rule, an average of the farmer's past yields. But this does not allow for establishing the reference yield for newcomers. A regional reference yield resolves this situation. But it is also necessary to evaluate the yield risk and the price risk in order to calculate the premiums. Very little research has answered this point, essentially for want of data and because of the uncertainty regarding prices evolution post 2013.

Conclusion

Insurance tools have attracted a great deal of interest. Indeed, they seem well suited to addressing production risks (crop insurance). The debate about this product post 2013 revolves essentially around breakdown of public vs. private interventions and national vs. European. The optimal management level of insurance processes is not easy to establish. A European level management makes it possible to broaden the insurance base but increases fraud potential and operational costs. For the time being, European funding only operates in the cases of catastrophe risk in order to co-finance national set ups. In the event, the management could be left at national level and modalities for cofinancing by the EU could be redefined in order to ensure cover beyond natural disasters.

As against that, Insurance would appear to be less well suited to the management of income risk. The major advantage of insurance instruments is their compliance with current international trade regulations. Income protection insurances are placed in the orange box by the WTO but as the

support to insurance will probably not go beyond the threshold of 5% of the value of the overall production and is not tied to a particular product, it will be exempted from reduction commitment. However, income protection insurances are unsatisfactory in several respects. They roll on a structural deficit for, given the highly systemic nature of price risk, the budgetary cost (reinsurance, premium subsidies) to the collectivity is very high. Besides, their distorting effect on production and trade is relatively marked. Finally the setting up of the insurance system is complex (public private partnership rules, information gathering and fraud detection).

In practical terms, it may be preferable to preserve and improve the existing devices dealing with agricultural insurance (production risks) and income smoothing (precautionary saving) – here the Canadian programme could be a useful example – and to promote the setting up of, or the access to price risk management mechanisms.

With regards to price risk, the way to deal with it in terms of risk management depends a great deal on the type of crop but farmers' training and the reinforcement of their bargaining power would play a key role. The producer must be able to choose the risk management instruments suited to his needs:

<u>Futures markets</u> are very good tools for readily exchangeable constant quality goods. For futures markets to develop, producers' organisations such as cooperatives capable of delivering large quantities on the market are necessary. Public intervention could be focussed on the training of and information to farmers.

<u>Contracts</u>: can carry interesting clauses if the bargaining power between the stakeholders is even. The role of the authorities could be to frame the contracts. The organization of producers in cooperatives or producers associations and the setting up thereof are also of the essence in order for them to have a greater bargaining power.

<u>For other crops</u>, (that is those which cannot be traded on futures market or through contracts) sustaining a floor price and thus a "protection" at borders would probably be the best solution in terms of cost effectiveness. But this measure is going to be hard to justify given international regulations rejecting all price support measures

Bibliography

2006, L'assurance agricole en guise de Farm Bill ? [Agricultural insurance by way of Farm Bill?] Fact sheet from the Economic Mission, French Embassy to the United States

2006, Les chiffres de l'assurance agricole aux USA [fig.s for agricultural insurance in th USA]. Fact sheet from the Economic Mission, French Embassy to the United States

Boussard et al., 2005, Endogenous Risk and long run effects of liberalization in a global analysis framework, Economic modelling 23 (2006) 457-475

Burgaz, 2000, Gestion des risques en matière de revenus [Income Risk Management], workshop on Income Risk Management, OECD, Paris

COPEIAA, 2006, Gérer les risques : des enjeux cruciaux pour les agriculteurs et la PAC [Risk management a crucial issue for farmers and the CAP], Acts of the 10 October 2006 colloquium.

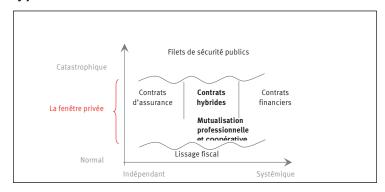
Harmignie et al., 2004, Gestion des risques: perspectives pour l'agriculture wallone [Risk Management, Scenarios for Walloon Farming], www.ecru.ucl.ac.be/recherche/publications/publicationsecru/risque.pdf

Mahul, 1998, Vers une redéfinition du rôle de l'assurance agricole dans la gestion du risque sur les récoltes [Towards redefining the role of agricultural insurance in the management of crop risk], Cahiers d'économie et de sociologie rurales n49

Ménard, 2004, Gestion des risques climatiques en agriculture: Engager une nouvelle dynamique [Climatic Risk management in farming: Setting a New Trend], Rapport de l'Assemblée Nationale (report to the French Lower House)

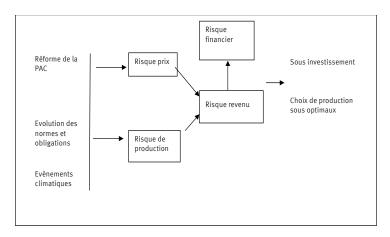
Figures

Figure 1: Risk management mechanisms according to type



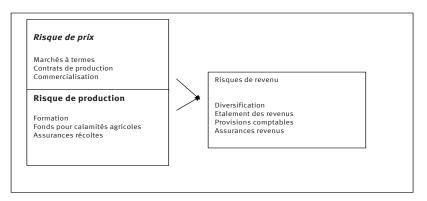
Source: Cordier, Proposition d'organisation des outils de gestion du risque de marché au bénéfice des filières cotonnières africaine [A Proposal for the organisation of management tools from market risk to the advantage of the African cotton sector], presentation « Atelier de Dakar », Dakar, le 24-25 November 2005

Figure 2: Risks faced by a farmer



Source: Harmignie et al, 2004, Risk Management, Scenarios for Walloon Farming

Figure 3: Risk management tools available to the farmer



Source: Inspiré de Harmignie et al, 2004, Gestion des risques perspectives pour l'agriculture wallone.

Appendix

Appendix 1: The insurance system in the United States

Insurance cover available in the States comes under:

- Yield based insurance (crop insurance), evolved since the 80s
- Sales based insurance (income protection insurance)

For each of these types of insurance, there exists a basic insurance (the "CAT"), which protects against "catastrophic type hazards" and an extended cover (the "buy up coverage"), which offers a better cover.

Yield based insurance:

Known as "Multiple Periple Crop Insurance", it covers the main natural risks such as drought, excess humidity, hail, wind, pest infestation, disease. They are available for almost all the main crops, fruit and vegetables. Recently, products aimed at stockbreeders have been developed.

The modus operandi is as follows: for each crop, a price and a reference yield are established. The reference price is fixed by the RMA (Risk Management Agency) a Department of Agriculture unit. The reference yield is either an average of the farmer's past yields or an average of the region's past yields.

Risk insurance policies are as follows:

The CAT (Catastrophic coverage):

This insurance covers yield losses representing more than 50% of the reference yield. The indemnity benefit is equal to the difference between the guaranteed yield (that is 50% of the reference yield and the quantity actually harvested, valued at 55% of the market price fixed by the RMA.

The premiums for this insurance are entirely funded by the federal government. Farmers pay only for the administrative cost, currently around \$100.

Extended cover:

If the producer so wishes, he may choose to ensure a larger proportion of his reference yield: from 50 to 75% or even 85% in some regions. He then assumes a part of the premium, which remains subsidised by the federal government.

The indemnity benefit is equal to the difference between the percentage of the selected reference yield and the quantity actually harvested, valued at 100% of the market price fixed by the RMA.

The GDRP: Group Risk Plan

Here the reference yield is an average yield for the County as calculated by a national agency, the "National Agricultural Statistics Services". For the CAT-GDRP, the indemnity benefit is equal to the difference between 65% of the regional yield and the quantity that was actually harvested valued at 55% of the market price as fixed by the RMA. For a Buy-up coverage-GDRP, the farmer chooses the reference yield percentage he wishes to ensure up to 90% of the regional yield.

The use of a regional yield helps curbing fraudulent claims. However it does not allow for the diversity of individual situations (imperfect targeting and risk of adverse selection).

Income based insurance:

They are based on the couple yield-market price. They cover a percentage of the reference turnover (reference yield * reference price). The reference price is the sale price anticipated at the time of harvest, taken from a futures market at sawing time. The indemnity profit is paid when the turnover falls

below the guaranteed level. It matches the difference between the actual turnover and the guaranteed turnover. The reference turnover is generally calculated on an individual basis, as an average of passed turnovers but there are also *Group Risk Income Plans* which take as their reference an average regional turnover.

The existing insurance policies differ in the chosen reference price and the guaranteed reference yield percentage. Most policies propose a cover by crop (Revenue Insurance (RA), Crop Revenue Coverage (CRC). But insurances covering the totality of the farm's income such as the Adjusted Gross Revenue (AGR) also exist. It covers a given percentage of the farm's gross income. The reference income is calculated on the basis of the "producer's Schedule F tax forms" and the farm's expected income for the current year.

The insurance set up

The RMA (Risk Management Agency) is a branch of the Department of Agriculture. It was created in 1996. The RMA,

- determines premiums' price
- refunds administrative and operational costs
- covers a part of the reinsurance costs
- subsidises insurance premiums

Insurance policies come to the farmers via 16 private companies.

The RMA includes an R&D service studying the development of new insurance products, determines which crops are insurable, etc.

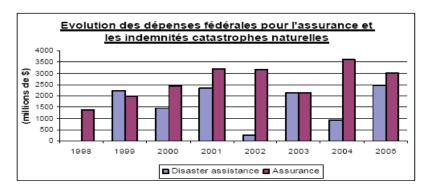
The United States is not a model

The United States made insurance a pillar of their agricultural policy. Recently (2005), some Iowa University economists proposed to forego current federal programmes and to replace them by an insurance safety net.

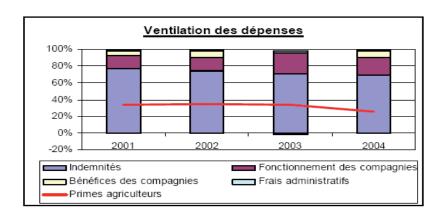
The cost of public support to these programmes reaches \$ 3 to 4 billions per year (10 to 15% of the agricultural budget), that is barely less than the decoupled payments to major crops producers. As such, the American set up does not represent a model to be followed at all cost or in every respect. Indeed, it includes pricey implementation modalities the interest of which is debatable. To wit in particular the costs of insurance broker's commissions being met by the state, the high subsidy rate of the insurance premiums and the option for farmers to take up cover by plot, which swells the numbers of loss assessments and fosters fraud. (source: COPEEIA colloquium)

Appendix 2 : Cost of the insurance system in the United States

Originally (80s), the crop insurance programmes' aim was to encourage farmers to subscribe to a provident fund so as to avoid ad hoc payments in the event of large-scale losses. To encourage farmers' participation to these programmes, the government funded generously the insurance system so that the total cost of farming insurance has grown and grown whilst ad hoc payments endure.

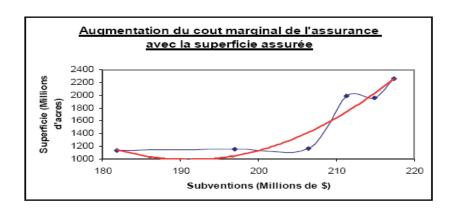


THE AMERICAN INSURANCE MODEL (HARVEST AND INCOME PROTECTION) TODAY RUNS AT A STRUCTURAL DEFICIT. SPENDING IS DISTRIBUTED AS FOLLOWS:



It can be seen that operating costs take up an important share of public expenditures on insurance. In fact since 1997, subsidies to companies' operating costs have increased by 60 % whereas the areas covered have only increased by 35%.

For a large area of land the insurance is very costly.



Appendix 3: Classification of risk management measures at community and international levels:

At the WTO risk management measures are considered as internal support measures and are allocated either to the green box or to the orange box.

To be entered in the green box, according to the Agricultural Agreement⁷, criteria are as follows: "they must have minimal or no distorting effects on production and trade". The Agreement distinguishes explicitly income insurance and income safety-net programmes (paragraph 7, appendix 2) and aid for the relief from natural disasters (paragraph 8)

- to be placed in the green box, payments under income insurance and income safety-net programmes including a governmental financial participation, can only be set off if the <u>loss amounts to more than 30 %</u> of gross income (or equivalent in net income). The loss is measured against a previous 3 years average (or a five year "Olympic average⁸"). The amount of such payment must com pensate less than 70 % of the income loss. Furthermore, it must not depend on the type or volume of production nor on the domestic or international prices of that production, nor on the factors of production employed.
- Aid for the relief of natural disasters, whether paid out directly to the producers or in the framework of governmental financial participation to crop insurance schemes, must essentially meet two conditions. First the authorities must formally acknowledge the occurrence of a natural "or like" disaster (epidemic, pest infestation, nuclear accident, war). In addition, the production loss must be more than 30 % of the average production for the five preceding years (or of the Olympic average), short of which it cannot be compensated. These two criteria exclude from the green

box crop insurance indemnity benefits towards the most common climatic hazards. Unlike aids towards income loss, payments towards production losses may compensate the total lost profit, but not "more than the total cost of replacing such losses".

The Agreement specifies that if a producer receives in the same year payments under the two programmes above (as per paragraphs 7 and 8, appendix 2), "the total of such payments shall be less than 100 per cent of (his) total loss".

Most risk management measures are therefore placed in the orange box. However the support to these tools is exempted from reduction commitments if the support sum is below 5% of the value of the overall production and it is not restricted to a particular product (de minimis rule).

Could this classification evolve?

These risk management measures have not come under much scrutiny at the WTO. A few demands to broaden the criteria have been made by Canada (compensation up to 70% of average income rather than of the loss, no public acknowledgement required for natural disasters). The technical nature of these tools and the fact that the countries do not wish to upset the classification criteria for the green box make changes unlikely. But for the time being – even if management measures are classified in the orange box because of their cost - the de minimis clause will apply. These measures will therefore not fall under reduction commitments.

Thereafter, the problem arises from European regulation. risk management instruments are very tightly regulated by Community regulation. Community cofinancing of the national risk management systems is only authorised by the EU if they belong in the green box. What is more its ceiling is fixed at one percentage point of direct aid modulation.

⁷ Concluded in Marrakech in 1994

⁸ The « Olympic average » is calculated by using the last five years, omitting the highest and lowest annual results within that time period, and averaging the remaining three.

The European Union accepts governmental aids aimed at compensating losses arising from natural disasters or health crisis but governments are not allowed to support price risk management mechanisms.

It is no less conceivable that in the future the European Commission will evolve towards regulation more friendly towards risk management instruments.

Legal Mentions

With the support of the European Commission : support to active entities at European level in the field of active European citizenship.



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