Part C

Around Markets Regulation:

Some Notes

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1. Agricultural Market Regulation: Lessons from History and Economic Thought

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Summary

The question of agricultural market regulation has been viewed differently depending on the era, state of economic thinking, and circumstances. Reflecting the fact that economic thinking has always been stimulated by events, here we shall focus on:

a) the issue of food security from ancient times to the 18th century,

b) the issue of international trade during the 19th century, and

c) the issue of market instability in the 20th century, particularly during the Great Depression.

I – Antiquity and the Middle Ages: From the Search for Food Security to the Emergence of the Modern State

The history of societies until the Middle Ages shows us that they have always sought to ensure their food security by relying on collective institutions not driven by the search for profit but rather by the individual interests of family groups or groups of traders.

For instance, in primitive village societies where the market was absent, the village leader or feudal lord was responsible for stocks.

With the appearance of the division of labor between agriculture and cottage industries, the production of individual agricultural surpluses and the market, food security was no longer ensured by the village leader or feudal lord, but rather by hierarchical forms of coordination. In ancient times, the authorities thus implemented public storage policies (Egypt) and agricultural market regulation policies (Athens, Rome). In the Middle Ages, monarchs sought to have sufficient stocks and clean up urban markets. In the 16th century, Thomas More recommended that public stocks correspond to two years of consumption and surplus production, with the surplus exported at low cost.

However, until then, approaches were exclusively pragmatic in nature and aimed to resolve a concrete problem at a given moment in time. It was during the 18th century that the need to understand what was happening and justify public action (or inaction) by an in-depth analysis of the causes behind the phenomena emerged. It was also during this period that "liberalism" emerged—the idea that the selfish pursuit of individual interests could lead to the good of all through trade and the market.

The 18th Century and the Birth of Liberalism

The idea of liberalism found its roots in the English philosophers of "natural law." Relayed by the "Physiocrats," it was then taken up in a very diluted form by Adam Smith.

In regard to the central question of agricultural and food products, the Physiocrats, and notably François Quesnay, recommended eliminating the numerous public storage measures, transport control and diverse regulations, emphasizing their inconveniences but forgetting their advantages. They therefore counted on the well-understood interests of speculators (buy in periods of abundance, sell in periods of shortage) to ensure the inter-annual offsetting of good and bad harvests, as well as on the interests of traders for the geographical offsetting of provinces that had surpluses with those that had shortfalls.

These ideas were fought by a few authors. For instance, Ferdinand Galiani explained the difficulty of developing trade for a product such as wheat, a crucial product that was the same everywhere and produced almost everywhere. Because of production and transportation times, the wheat trade imposed risks that only bankers holding a monopoly could support. Supply and demand could therefore not be regulated by the market alone.

Galiani was not heard. At the end of Louis XV's reign and during the start of Louis XVI's reign, France undertook liberalization several times, but backtracked many times because of the negative consequences of liberalization, notably the Paris uprising of 1775. After the revolutionary period and the first Empire marked by state interventionism, the question re-emerged during the Restoration when the emigrant aristocrats again defended Quesnay's ideas. Cautious, Louis XVIII opted for domestic liberalism but set up a system of variable customs duties at the borders, the "sliding scale" that lasted until Napoleon III.

The 19th Century: The Canonic Form of Liberal Theories and the Difficulties Applying Them

Although the 18th century ended with a posthumous victory for Galiani's analyses, based on the observation of what would later be called "market failings," the question of liberalism returned at the start of the 19th century in England in a different light. The justification was much more rigorous than that given by the Physiocrats and, above all, the question was a new one: should Europe continue to produce all its food or would it not be better to count on more fertile distant lands (notably America) to ensure more efficient production.

In England, Adam Smith, David Ricardo (the beneficial nature of national specialization) and John Stuart Mill (single equilibrium theory) helped build a true economic science. However, their analyses, which led to advocating liberalization, were static; they ignored the phenomena tied to the accumulation of capital, projection errors, and income distribution. What is more, they relied on more or less arbitrary assumptions and

assumed that the market operated properly, which is debatable for agriculture which these authors did not think to treat differently from other economic activities. These authors' influence can be seen in the suppression of the Corn Laws in 1846.

In Germany in the 1840s, Friedrich List defended the need to protect emerging industries from imports, but did not apply this same reasoning to agriculture. The United States did this in the 19th century.

In Europe, generally speaking, the 19th century alternated between periods of liberalism and periods of protectionism, with the proponents of liberalism relying on Ricardo's theories and the proponents of protectionism on pragmatic common sense but, unlike Galiani, without any mention of agriculture's particularities and without challenging the idea that price fluctuations came only from harvest levels and the weather.

Liberalism dominated until the 1870s, but it then became apparent that cheap agricultural imports lead to poverty in the countrysides that were, in this way, no longer able to provide outlets for industry (deflationary spiral). European countries then adopted protectionist agricultural policies (in France, the Méline tariff of 1892).

In regard to sugar, initially produced in the colonies, its production grew in Europe in the 19th century, eventually leading to surpluses and a trade war between countries (export subsidies). This trade war was ended with the first "product agreement" signed in 1901 (a new agreement based on quotas was signed in 1931).

World War I led to an increase in state-controlled economy, but liberalism returned in force during the post-war period.

The 1929 Crash and its Consequences

The causes of the 1929 Crash were numerous, and the agricultural sector was not uninvolved (bank seizures of land impossible to resell).

In the United States, Franklin Roosevelt implemented a supply incentive policy that led to the post-World War II surpluses. This policy was guided by a degree of pragmatism because there was not in reality any new economic theory and the reasons why the market did not work remained a mystery until the elaboration of the cobweb theory by Mordecai Ezekiel.

The "cobweb" is an economic model showing the existence of "endogenous" causes of price fluctuations. It is based on the lapse of time between producers' decisions and the consequences of these decisions (production volumes). The model generates price and quantity measurements that fluctuate, alternating "highs" and "lows." The system can be "convergent" (the oscillations get smaller over time), "periodic" (the oscillations stay the same), or "divergent" (the oscillations get larger). The ratio of slopes to straight lines (hypothesis of "linear" supply and demand curves) determines which of these regimes will apply. For any given supply, a demand that is more "elastic" than the supply will produce a convergent cobweb. It will be periodic if demand is as elastic as supply. When

demand is less elastic than supply, the cobweb will be divergent. This is the case with food products. In reality, various factors prevent the attainment of such results, but the crucial lesson is that, on agricultural markets, the market equilibrium point is dynamically unstable and the equilibrium can never be maintained sustainably. In addition, this phenomenon extends to the entire economy.

While he had little influence on general economists, Ezekiel has long been described as the man that justified the agricultural exception because of the rigidity of demand and its consequences for market stability.

State-Control of Agriculture After World War II and its Contestation

The post-war period was marked by a revival of interventionist agricultural policies. The theory of public policy assessment and "cost/benefit analysis" developed and spread.

The cost of price fluctuations for the various actors and for society as a whole was analyzed. Their high social cost justified policies aiming to eliminate them.

In regard to ways to lower these fluctuations, one can distinguish between:

- The international market, where the problem comes from producers' poor information and their anticipation errors. It is therefore appropriate to set up some degree of "planning": product agreements grew out of this analysis, but they failed because some countries did not play by the rules.

- On the national level, agricultural policies. The levers to regularize domestic prices are legion (input subsidies, storage, export subsidies). Little costly in the case of shortages, these policies become costly when surpluses emerge because of stable prices.

Several elements then led to the domination of liberal ideas:

- The theory of "lobbies": farmers, highly organized, managed to extort extravagant advantages from society. To end this, the market should be allowed to balance supply and demand, giving farmers only set compensation linked to the rights that they had historically acquired. This is the intellectual foundation for decoupled payments.

- Studies based on "calculable models of general equilibrium" showing that exploiting comparative advantages would be likely to increase global incomes significantly.

- The observation that many countries have not developed at the expected pace. The "structural adjustment" policies followed.

Faced with the risk that liberalism would in return lead to price fluctuations, the authors counted on futures markets, various financial products, and harvest insurance systems to guarantee farmers' revenues.

The Return of Liberalism After 1980, Contested by "Chaos" Theorists

Liberal ideology had a considerable influence on European and American agricultural policies from the 1980s to 2007, and on the inclusion of agriculture in the Uruguay Round.

The problem linked to price fluctuations was ignored, partially because we had forgotten that agricultural prices fluctuated and partially because we believed that liberalization (and therefore the substitution of a global market for a "narrow" international market acting as an outlet for surpluses) would resolve this fluctuation due to the "law of large numbers."

The outcome of these liberalization efforts is currently mixed, with the degree of liberalization much higher in Europe and the United States.

The recent progress in economic theory when it comes to the chaos dynamic could be the starting point for a new approach to the problem of agricultural price fluctuations.

In fact, despite liberalization, international prices currently continue to fluctuate with the same magnitude as before.

From this standpoint, it should be noted that the theory that fluctuations would be lessened by expanding the market depends on a crucial assumption: that supply fluctuations depend on phenomena beyond farmers' control, such as weather incidents or epidemics ("exogenous" causes). However, some research based on mathematical "chaos" theories shows that, while the causes are "endogenous" (that is to say linked to anticipation errors and production times), the fluctuations can be highly irregular, with the absence of any periods. The practical conclusions from the analysis underlying these models go against the grain of those that recommend liberalization: by merging two markets, one obtains synchronous fluctuations that are as devastating as those that originally existed in the two separate markets. Similarly, while with fluctuations of exogenous origin, the liberalization of a production quota system makes it possible to attenuate fluctuations on the external market, in the case of endogenous fluctuations, such a system stabilizes the external market.

In Conclusion

Despite infinitely more sophisticated research instruments supplied with more reliable and more complete statistical sources, the heart of the debate has not evolved much since the time of the controversy between Turgot, a brilliant theoretician whose theories relied on fragile axioms, and the pragmatic Galiani who attempted to measure theory against the yardstick of reality and examine specific cases. In the alternation between phases of liberalism and interventionism, the rapidity with which the political

leaders forget the conditions under which the previous episode happened and their incapacity to learn the lessons from them is surprising.

Galiani's pragmatic viewpoint seems better suited to real conditions than the theory of global general equilibrium. The interest of the general equilibrium theory as the basis of comparison and as an ideal is not up for discussion: in economics, this theory plays somewhat the same role as the notion of lack of friction plays in rational mechanics. But in the real world and on the Earth's surface, friction always plays a major role, and all applications of mechanics take it into account. It should be the same in economics.

2. Forecasting and Models

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Forecasting consists of determining the levels of key variables at different future times over varied geographic spaces. The aim is to anticipate future events to facilitate adaptations (policy, behaviors, etc.) and lower certain negative impacts. Unlike predictions focusing on a single future that one seeks to know with precision, forecasting examines the consequences of more or less probable scenarios.

Forecasting as Applied to the Economy and the Difficulties Involved

Forecasts are based:

- either on the collection of experts' opinions, using more or less formal methods, so as to compare and harmonize them, but without any assurances as to the overall coherence of the scenarios envisaged;
- or on quantitative models. In this case, the model's equations provide this coherence.

A typology of the multiple econometric models elaborated over the past twenty years can be proposed based on the question examined, the scale of analysis and the methods employed. For forecasts of world agricultural trade, the questions focus on the system's capacity to meet solvent demand and future changes in this demand, the environmental consequences, probable prices, and the major export and import zones for each product. One can distinguish between sectoral (e.g. agriculture) and general (i.e. the economy as a whole) equilibrium models and accounting models based on "physical" equilibrium and containing no (or few) economic behavior equations. The models propose analysis at varied scales (global, regional, national). They are based on determining and formulating in equation form the primary relations at work and estimating, based on past data or experts' opinions, function parameters; and on extrapolating future trends by modifying some of the entry parameters, or assuming the continuation of trends, or even adapting the system to a supposedly driving variable such as rising demand.

This type of work has multiplied thanks to the advances in computer calculation capacities and the awareness that current decisions influence the future and considerable time may be needed for certain modifications because of the inertia of the economic system and the cumulative processes at work in its relations with social and environmental systems.

As the 2006-2008 food crisis illustrates, which few experts had predicted, models do not generally make it possible to provide scenarios that turn out to be true or even clarify the future. Indeed:

a) The questions asked and relations chosen are the subject of choices that are rarely explicit and even less often discussed. And yet, when the question is well posed and the principal relations are well identified, models provide relatively relevant results and are useful because they make it possible to synthesize the multiple effects linked to the relations between variables.

b) Most models favor the perpetuation of past trends, whereas crises are breaks with trends. Dynamic simulation models could determine the probability of crisis but they are chaotic and because of this difficult to elaborate and utilize (high degree of sensitivity to initial conditions). They are little appreciated by experts because they yield a wide range of possible impacts that depend on parameters that we cannot calculate with sufficient precision. The search for consensus does not favor innovative analyses.

c) Numerous elements that are not easily quantifiable are missing in models even though they play a major role in the evolution of economic variables: social phenomena, cultural phenomena, institutional phenomena, balances of power, etc.

d) The goal of "global coverage" of phenomena leads to the simplification of local specificities so as to limit the number of variables. The "heavy" trends revealed do not allow these specificities to be depicted.

Useful Tools for Reflection... whose Assumptions Must Be Made Explicit

Forecasting obliges one to simplify things considerably, and differences with reality are explained by the multiple elements seen as "exogenous" (weather events, the state of social relations, technical advances, etc.). Economic forecasting tools then become quite unverifiable. This is the major stumbling block that stands in the way of the discipline's progress and makes it vulnerable to exploitation.

In this way, the results of models cannot be seen as depicting an overall reality. Choices are made on the primary relations to take into account. Some aspects are pushed aside to limit the number of variables to analyze and stick to easily quantifiable phenomena. It is therefore necessary to make explicit which relations were chosen as essential and which were left out because of their negligible nature. Faced with complex phenomena, models are nevertheless useful to depict the relations between variables and synthesize their impacts for the various types of actors. By revealing unsupportable outcomes if current trends continue, they can suggest necessary reforms and, by emphasizing possible blockages, suggest appropriate strategies.

They must not, however, be confused with reality. To improve models and their use and avoid their exploitation for ideological purposes, the results must systematically be

accompanied by a notice specifying the main assumptions, key relations used or excluded, and the probable consequences of these choices...

Trade Liberalization and Global Models

Let us look at the example of the research on trade liberalization that has been at the forefront for thirty years in regard to development policies. Trade liberalization is justified on the basis of quantified assessments drawn from general equilibrium models (often based on the same data: the GTAP database) or partial equilibrium models. These models, cast from the "same mold" based on the Walrasian theory of a certain future, are all in favor of trade liberalization and the disappearance of agricultural policies. Indeed, by construction, they believe that:

* markets exploit all comparative advantages and are balanced at all times, because economic agents know prices in advance and can therefore effectively and with certainty predict production, regardless of the necessary lapse of time;
* prices are consequently established at a level such that supply harmoniously equals demand; and
* free markets are therefore the most efficient means to allocate rare resources (automatic regulation by the market) and economic policies are always constraints that lower the efficiency of actors' behaviors.

In addition, the arguments for trade liberalization insist on the potential gains for developing countries due to:

- price stabilization thanks to the dilution of shocks over a wider market,
- the dissemination of technical innovations and improvements, thanks to the intensification of trade, and
- a dynamic of growth and formal and informal job creation in rural areas, benefiting all of the population and notably the poorest.

This discourse is given excessive media coverage but ignores the real content of studies (produced, for example, by the World Bank) that indicate the complexity of the phenomena and the difficulties portraying them, or even the recommendations of the models' authors, who emphasize the caution that should be taken when using their results.

Despite their complexity, global models seem extremely simplified in relation to the global economic system. This is notably the case when modeling producers' and consumers' behaviors:

- capital markets are assumed to be perfect, and all profitable activities are therefore financed without delay, and
- prices allow for the immediate equalization of supply and demand, with agents having all the information necessary for their decisions, without any uncertainty.

In fact, these models do not evolve in "real time" even when they are dynamic. Finally, only inappropriate government intervention opposes agents' optimal decisions. What is more, the government's role is limited to redistributing income and consumption. This omits the economy's role in public goods and currency, as it does the role of monopolies

or the power of certain actors in markets (the assumption of “pure and perfect” competition).

Furthermore, despite being cast from the same mold, the results vary considerably from one model to the next because a few key assumptions have a non-negligible impact on the results (elasticities, shift of factors from one sector to another, real levels of customs duties).

Also, the estimates of global gains from liberalization have fallen over time and have always shown a lack of positive impacts—and sometimes even negative impacts—for the poorest. Despite this, discourse is evolving very slowly and development policy design even more slowly: belief in trade liberalization and its beneficial role for development seems to persist in many publications and at the center of the discourse on development.

One must therefore question the use of the results of models. By refusing to discuss their assumptions and know their limits, and by using them for ideological purposes rather than as tools for dialogue or to align phenomena, we are not preparing correctly for events that are, however, probable, as the recent crisis in agricultural markets shows. The lack of consideration of uncertainty—which plays an important role in how markets operate and makes up the fundamental justification for regulation policies—does not allow one to test the costs and advantages of agricultural policies.

It is appropriate to discuss the assumptions in the models and see their results as more or less probable possible futures. They could be improved by iterative correction processes, by comparing results to reality. This implies forecasts that first verify that they can reproduce the past and that examine objects that can be observed in reality.

4- The Tricky Question of Food Insecurity and its Persistence

In poor countries, because of socioeconomic conditions and the complexity of mechanisms, models can contribute to the study of food security, help evaluate alternative policies, and help organize negotiations among actors—a crucial element in policy legitimacy and credibility.

As for projects, the success of economic policies probably depends on the possibility of redefining them during their roll out, which implies having both the necessary information and expertise capacities. Models are in this case effective tools to align data and collect statistics, and therefore to multiply analysis capacities and serve as training and negotiation tools. Indeed, they offer elements to support policy reflection by making explicit the expected consequences of various measures on each type of actor and their costs.

For this, models must:

- be able to reproduce the main dynamics at work (in particular the cumulative phenomena that are decisive in household trajectories and thereby movement into and out of poverty),
- be based on relatively detailed empirical foundations,
- take into account the diversity of contexts,
- submit their assumptions and the consequences of these assumptions to various actors for opinions, and
- take into account the environmental dimension.

Several recent works show the salutary impacts on food security of policies that make it possible to increase capital in rural areas. These analyses use empirical models to reproduce theoretical approaches in terms of "poverty traps." Indeed, food insecurity is here considered to come from low incomes, which are themselves generated by poor labor productivity linked to the absence of savings and therefore investments. Producers minimize their relations with the market to the exchanges necessary to cover incompressible monetary needs and favor self-consumption. The low use of inputs then lowers monetary needs.
Liberalization does not make it possible to break this vicious circle. Market regulation policies then have a key role because they make it possible to make investment profitability more secure. They must be accompanied by measures addressing access to capital (credit) and public investment in infrastructures. They can only be assessed correctly using models if the models are dynamic and take into account uncertainty.

Even though one must also examine the institutional and financial "feasibility" of policies, modeling can make it possible to designate the most effective levers. For this, one must:

- have access to models with solid empirical foundations and relatively detailed depictions of specific situations,
- clearly explain the assumptions and their consequences on the results,
- discuss assumptions and results with the various actors concerned,
- consequentially use models in a iterative process involving the actors concerned and policy designers so as to improve both the tools and the negotiation process,
- integrate uncertainty in models of agricultural market operations,
- depict the environmental impacts that result from actors' decisions and the policies conducted, and
- use dynamic models to depict cumulative processes.

Such models would be useful as support tools to meet the 21st century's food security challenges.

It is easier to comply with these requirements for national questions than for questions addressing the global level. The larger and more complex the object depicted, the more simplifications will be necessary. Thus, global forecasting models addressing humanity's capacity to feed itself neglect, because of the complexity of real relations and the need to quantify them easily, financial phenomena. Yet, current events remind us of their

importance. At the same time, it is not possible to depict the detailed situation of each household in the framework of a national study. The question of which scale is most efficient has not been resolved and depends on the question asked. National models are a compromise: they authorize the depiction of a certain degree of detail without requiring an excessive number of variables. They correspond to easily accessible statistics, which facilitates validation.

3. Agricultural Market Regulation: Elements to Elaborate Proposals

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Summary

Agricultural market regulation involves the objectives that human societies and governments set for themselves in regard to their agricultural systems. If the aim is to obtain food as inexpensively as possible and, incidentally, to free farm labor for employment in other economic sectors, one must then accept the eviction of a large majority of peasants in Africa and Asia. If, on the contrary, the aim is to avoid peasant hemorrhages, the agricultural and food "world war" waged through the widespread placing of farmers in competition with each other must be ended. In this case, in the absence of an invisible hand, very visible hands must enforce the general interest and universal rights. The challenge is to work so that on all geographic scales and in all regions of the world, the systems of governance are or become enlightened and responsible.

Beyond the debate on the reasonableness of public intervention in markets, it is therefore important to formulate proposals on intervention methods and the precautions to take. These proposals address several aspects: (A) the fight against price volatility in agricultural markets; (B) the distribution of value added throughout the agrifood value chain; (C) the management of temporary and structural imbalances; (D) the actions to negotiate to stabilize international agricultural markets; and (E) the factors limiting the political bodies' power to intervene and the risks of corruption linked to these bodies' actions.

The Fight Against Agricultural Market Volatility

To ensure that public intervention is transparent and predictable, we propose considering **price bands or ranges** for each product. The bands are defined by a floor under which prices become unacceptable for farmers, and by a ceiling above which prices become unacceptable for consumers. The distance between the floor and ceiling must be fairly wide, not too rigid, and not too far removed from international fluctuations to avoid outside pressure caused by an excessive price gap so as to limit the cost of intervention and adapt to unpredictable changes.

The public authorities should intervene on three levels:

- **act as mediator, or even referee, between the actors** concerned by the agricultural market so that the price band is the result of a negotiation and, if possible, a compromise between the actors before each crop year;

- **prevent the price from falling below the floor** by increasing demand and lowering the food supply through the use of **stocks, exports, import restrictions, diversification to non-food uses, social policies targeting people suffering from hunger, and supply control measures in the case of structural and lasting over-supply; and**
- **prevent the price from rising above the ceiling** by lowering demand and increasing supply through the use of **de-stocking, export restrictions, imports, lowering the flow of agricultural products to non-food uses, and encouraging production in the case of structural and lasting under-supply.**

The Search for Greater Equity in How Value Is Shared Throughout the Agrifood Chain

To improve proper market operation and ensure greater equity between groups of actors in the agrifood chain, the authorities could **foster commodity chain organization and help actors get better organized and defend their interests.** This calls for **information and training actions, support for professional organization, and a better credit system.**

Managing the Short Term (and Temporary Imbalances) and the Long Term (and Structural Imbalances)

The gap of several months between production decisions, the agricultural product harvest and food consumption introduces factors of uncertainty in how markets operate. Price bands are a valuable tool to lower this uncertainty because they guarantee the transparency and predictability of public interventions, provided the public authorities do indeed intervene in the ways that they promised to do.

It is also difficult to know whether an unpredictable event is accidental or if it marks the start of a long-term trend, in other words whether temporary (infra-annual) supply/demand imbalances are a manifestation of structural (pluri-annual) imbalances. This is why it is appropriate to have tools that make it possible to regulate supply and demand over periods of time longer than one production cycle, either through storage capacity or the regulation of foreign trade:

- **Stocks** are indispensable, at least over a one-year period, to take into account the seasonal nature of harvests and the daily nature of food consumption. But other types of stocks are indispensable. The volumetric calibration of the stock must in this way differ according to whether the stock is a food and strategic reserve, or serves to offset the seasonality of agricultural production, withstand unpredictable shocks (natural, economic, military, etc. disasters) or intervene in the market.

- **International trade** is justified but on the condition that it is regulated in function of the needs of the markets of arrival and departure for the products traded. This implies reviving the first definition of trade, in the sense of contracts between countries with shortages and countries with surpluses, and turning one's back on

market integration. International trade will only contribute to the stability of national markets if the national authorities have the policy space they need to intervene in their markets when they no longer regulate themselves or regulate themselves poorly.

- The **growth and flexibility of non-food markets (agrofuels for example)** could be powerful stabilizers for agricultural markets. Conceived as an agricultural market adjustment variable, the production of ethanol or alcohol must be a light industry decentralized in cooperatives (or even an activity integrated into other farming activities) rather than a heavy industry as it is currently.

- **Supply control** (fallow lands, forest replanting, quotas, reorienting production systems, etc.) is a prospect to consider in the case of structural over-production if one wants to limit the cost of agricultural policy and avoid the collapse of prices.

- **Contractualization between individual producers or their cooperatives and the first processors** is also a path to provide farmers with predictability as long as there is a commitment on price levels in the contracts. But this path raises questions: can all producers and all products be the subject or object of a contract with an industrial partner? Do the public authorities or courts have the means to enforce these contracts?
- The **development of futures markets** equals a form of contractualization with financial actors, even though the timeline for futures markets is often too short to meet farmers' need for security.

Cleaning Up International Markets

A political authority needs to define a form of economic, environmental and social specifications. Global governance is not currently able to do this, and it is on the national level that the real or potential authority to fight agricultural price volatility is found. For the international level, several lines of action are proposed:

- **Organize international consultation on trade:** the aim is to **return to a contractual vision of international trade.** The residual share of non-contractual trade, linked to the difficulty of precisely planning national food needs, could be highly volatile but would no longer destabilize the world food market.

- **Organize global consultation to set the volume of an international stock** (different from national reserves) that could be used to stabilize the market, and negotiate the division of tasks among the countries organizing storage and supplying the stock.

- **Organize an international program to fight hunger and malnutrition** around measures that enable the "solvabilization" of the people concerned: economic re-integration, financial aid or targeted food aid (modeled on the Brazilian "Zero Hunger" program).

- **Develop commodity chains around new uses for agricultural products to absorb surpluses.** The new products should be able to be conserved easily, correspond to less essential uses than food, be worth less than food products but worth enough to avoid discouraging their production, and have low fixed production costs. An **international research and development program on decentralized agrofuel production** could be launched to this effect.

Improving the Capacities for and Quality of National Governance and Fighting the Possible Corruptions Linked to the Expansion of their Policy Spaces

While a growing share of experts and government leaders admit that agricultural market regulation is needed, doubts remain as to the public authorities' real power and fears exist as to the risks of corruption. The rigor with which public interventions are implemented, the objective and predictable conditions that trigger these actions, and the democratic control of leaders and their actions are decisive to ensure the credibility of market regulation policies. This implies:

- **Increasing national authorities' "policy space":** we must **review agricultural and food trade agreements,** in priority those of the WTO, and **reexamine the conditions** that apply to the blunt opening of markets. We must also **improve the quality of statistics,** the **capacities to analyze market evolutions** and **administrations** (**customs services, fiscal administrations, law enforcement agencies, storage infrastructures,** etc.).

- Avoid the risks of corruption (insider trading, clientelism, preferential treatment, etc.) linked to public product purchase or sale decisions, auctions, allocation of import or export permits, production quota transfers, etc. The parries are known: transparency in decision-making and implementation processes, press freedom and freedom of association, promotion of the state and the rule of law, strengthening professional organizations or unions, and more generally strengthening participatory democracy extending representative democracy.

4. International market regulation : the example of tropical products

Benoit Daviron (CIRAD), July 2010

Summary

This paper presents the main historical stages of the debate around international agreements on tropical products.

It shows that:

- Product agreement plans must be interpreted in light of two essential, historically dated facts: (a) the existence in producer countries of state offices able to administer the volumes exported and control stocks; and (b) the convergence of strategies to enter international trade by so-called "developing" countries with a shared goal of maximizing currency revenues to finance industrialization.

- The erosion of theses two "pillars" starting in the 1970s was what caused these agreements to fail.

The conclusion attempts to draw lessons for current market regulation projects.

THE FORMATION OF INTERNATIONAL MARKETS AS OLIGOPOLIES OF STATE OFFICES (1914-1950)

After a period of openness to the exterior and intensification of long-distance trade, the progressive formation of national barriers—initiated at the end of the 19th century and strengthened during World War I and after the 1929 Crash—led, immediately after World War II, to the fragmentation of the world into national or imperial markets that were isolated, or relatively isolated, from each other.

This favored development of national markets relied on a number of public and private national institutions that guaranteed price stabilization and agricultural incomes.

On their independence, the so-called "Third World" countries adopted for themselves the idea of development focused on the domestic market, instituting or consolidating strict separations between domestic markets and the international market. The stabilization funds, marketing boards and other marketing offices from the imperial era survived de-colonization. They guaranteed, in conjunction with tariff policies, domestic prices' independence from international prices.

In this way, in the post-war years, the administered and centralized management of the national levels of foreign trade characterized the operation of international agricultural product markets. Countries thus appeared as units on international markets. The global stocks held by states and the near totality of international markets could be assimilated with state/nation oligopolies. Market regulation therefore amounted to cooperation among these oligopolies.

A BROAD CONSENSUS IN FAVOR OF INTERNATIONAL COMMODITIES AGREEMENTS (1950-1970)

The issue of international agreements had its golden hours during the post-war period, even though several projects had emerged as early as the mid-19th century and more particularly between the two wars. The two key moments were the 1947 Conference on Trade and Employment and the 1964 United Nations Conference on Trade and Development.

- From the Conference on Trade and Employment (1947-1948) ...

After the war, the United States wanted to promote the creation of a wide range of multilateral institutions. Modeled on the United Nations Organization, an organization would be in charge of managing the economic relations between nations. In this way, the aim of the International Conference on Trade and Employment that was held in Havana in 1947-1948 and that gave rise to the Havana Charter, was to create the International Trade Organization.

The organization of commodities markets was included in the draft initially presented by the United States. Indeed, noting that agreements on commodities had become common practices since the 1930s, the United States wanted to channel them and limit their impact.

Thus, the agreements were supposed to bring together producer and consumer countries, and decision-making powers were supposed to be shared between the two groups. Above all, however, the Charter specified that they were transitional instruments (with a maximum duration of five years) created in response to exceptional situations (over-production) and to allow production systems to adapt. Latin-American countries were not able to ensure the recognition of either producer countries' right to unilateral action or the principle of lasting price stabilization to maintain their purchasing power.

Nevertheless, the Havana Charter did not lead to the creation of an International Trade Organization. For many years, the General Agreement on Tariffs and Trade (GATT), the only tangible outcome of the process, was the only multilateral discussion forum on international trade. Guided by the free-trade prospective but riddled with derogating clauses—in particular for agriculture—it provided, during the post-war period, only a very incomplete instrument for its management.

... to the Conference on Trade and Development (1964)

The question of international commodities agreements came back with force in 1964 during the United Nations Conference on Trade and Development. It is now profoundly linked to "import substitution policies" and industrialization, implemented first in Latin America and then in nearly all developing countries after the crisis in the 1930s and more particularly after World War II.

Import substitution policies aim to foster the industrialization of economies specialized in the export of commodities. The industrialization strategy focuses on the domestic market, unlike the export-oriented strategies practiced at the start of the century that would once again be adopted a few decades later.

They were fueled by multiple theoretical and ideological influences, notably through the work of the United Nations Economic Commission for Latin America and the Caribbean (ECLAC) Secretariat headed by Raul Prebisch.

They notably consisted of applying monetary overvaluation that allowed a direct transfer of purchasing power from the primary sector, the currency supplier, to the industrial sector, the currency user. The primary sector nevertheless conserved a preponderant place in exports, with their re-focusing on the few products for which each country had an uncontested advantage.

This increased import needs. Indeed, while industrialization makes it possible to lower foreign purchases of consumer goods, it also triggers skyrocketing equipment purchases. Thus, with the dizzying drop in international prices for commodities at the end of the Korean War, the countries "under import substitution" ran up against insupportable trade balance problems.

This is why the international commodity agreements were one of the main proposals put forth by the initiators of the UNCTAD. The approach was substantially different from the approach that had previously prevailed. The Havana Charter saw the agreements as exceptional and temporary measures to manage imbalances so as to allow sectors in crisis to adapt. Henceforth, the objective was much more to maximize export revenues through permanent price support mechanisms, with notably the establishment of minimum prices.

THE APOGEE AND DECLINE OF NEGOTIATIONS ON INTERNATIONAL COMMODITIES AGREEMENTS (1970 on)

The 1970s were the heyday of the North/South clash over international commodities markets ("coup de force" by OPEC, experiments with "untamed" cartelization of commodities markets by developing countries). The idea of an integrated commodities program was written into the Programme of Action on the Establishment of a New International Economic Order voted in 1974 by the United Nations. Adopted during the 4th UNCTAD (1976), it was finalized during the 5th UNCTAD (1979).

The program provided for the negotiation of eighteen international agreements (on bananas, bauxite, tropical wood, cocoa, coffee, natural rubber, cotton, copper, tin, hard fibers, vegetable oils, oilseeds, jute, manganese, iron ore, sugar, tea and meat). These agreements were supposed to rely on buffer stocks financed jointly by a 470 million dollar common fund, 68% of which financed by OECD countries. A second funding line (256 million dollars) was planned for research and development actions.

This dynamic came to an abrupt end with the changing of the decade. The 6th and 7th UNCTAD (1983 and 1987) produced no tangible results in the implementation of the integrated program. Only an agreement on rubber containing a buffer stock emerged. OPEC wavered starting in 1984, and the few painfully established agreements disappeared one by one (tin in 1985, cocoa in 1987, and coffee in 1989). It was then the time of the minimalist approach: agreements no longer targeted global wealth redistribution, but aimed to accompany market cycles.

This standoff in the negotiation process and the splintering of the political unity of the "Third World" reflect the growing heterogeneity of these countries' economies and their form of insertion in international trade. Indeed, the economy differentiation trend that began at the end of the 1960s was accelerated by the various economic shocks in the 1970s and 1980s (oil shock, debt crisis, etc.).

In the agricultural field, the sector taxation model ceded its place to a wide diversity of situations. Food self-sufficiency policies, agricultural export promotion policies, and policies to replace raw materials with processed products for export were accompanied by the elimination of the levies applied and even positive transfers in favor of agriculture.
From the standpoint of the agricultural trade dynamic, while developing countries as a whole were pushed to the side in international trade from 1950 to 1975 (46% of world agricultural exports in 1945, compared to 27% in 1975), their trajectories diverged afterward depending on the continent:

- The volume of agricultural imports skyrocketed in Africa and Latin America, while imports increased very slowly in Asia.

- Africa's agricultural exports dropped off starting in 1973 and stabilized starting in 1984, whereas agricultural exports grew rapidly for Latin America and Asia.

The convergence of export strategies had made it possible to find the bases for tropical market stabilization through multilateral agreements. On the contrary, the heterogeneity of these strategies, and in particular the adoption of export promotion strategies by certain countries, made any attempts at lastingly sharing the market between exporters and at price stabilization very difficult. The choice of agreements relying on buffer stocks rather than on export quotas only allowed this problem to be avoided temporarily because of the lack of production discipline by exporter countries (see, in particular, the agreements on tin and cocoa).

In addition, the oligopolies were also being dismantled. Indeed, since the end of the 1980s, the existence of states/nations as active units in international markets had progressively been challenged. The Uruguay Round agreements organized state withdrawal, removing—or at least sharply limiting—their latitude for strategic intervention (export or import volume control). In addition, much more rapid and sudden state withdrawal happened in the developing countries that had "adopted" structural adjustment policies.

BY WAY OF A CONCLUSION: WHAT LESSONS FOR INTERNATIONAL MARKET REGULATION PROJECTS?

The two pillars that allowed international agreements to exist no longer exist:

- Producer countries' export policies no longer converge around the objective of maximizing currency revenues. If there is any convergence today, it is around the objective of competitiveness...

- The governments of producer countries have lost control of exports and product stocks to companies.

This does not mean that, in the future, international agreements could not emerge around the objective of price stabilization.

But for this to happen, several things must occur:

- First, this objective must be shared by the main exporter and/or importer countries. This is far from the case for the moment. It would require, in these various countries, that the objective of price stabilization be shared by actors other than farmers, that it be seen as being in the general interest, and therefore that it would allow for the construction of vast alliances. For instance, in the 1960s and 1970s, maximizing export revenues was seen as necessary for industrialization, and therefore for "development."

- Second, governments must recover a minimal degree of control over stocks and/or exports. Yet, what countries today have the administrative and financial capacities necessary to implement a policy of export control and therefore a storage or production management policy? What countries are likely to be able to acquire these capacities rapidly? These are the questions that need further study.

5. Stabilization Policies and the WTO

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Summary

This paper tackles the question of the compatibility of public market stabilization instruments with the WTO rules applied to developing countries.

We shall first examine the three pillars of the 1994 Agreement on Agriculture (AoA) (border protection, export regulation, and domestic support measures), then we shall examine whether Regional Trade Agreements (RTAs) and the current negotiations make it possible to take into account international price volatility better than the AoA.

The Agreement on Agriculture's Conceptual Framework: Greater Trade Liberalization and Less Distortive Aid

The AoA organizes the progressive opening to competition of agricultural systems worldwide by transforming all protections into fixed customs duties (tariff setting) and bringing the tariffs thus obtained down to a consolidated level. In addition to this, export subsidies and aid that has an impact on production are lowered.

Border Protection Instruments

Solely Tariff and Fixed Measures

Non-tariff measures on the agricultural product trade (quantitative restrictions and variable import levies, minimum import prices, discretionary import regimes, non-tariff measures applied by state trading companies, self-limitation of exports, similar border measures other than customs duties strictly speaking) are now banned, with a few exceptions.

The impossibility for WTO member countries to use price control measures can be illustrated by the dispute between Argentina and Chile from 2000 to 2007 over the question of the import price bands set up by Chile for several products.

At the same time, the AoA contains provisions that can be used to respond, partially, to market instability. Access to these provisions is not the same for developing and developed countries, and the initial situation of the country when the concession lists were established influences the possibility or impossibility of maintaining protection instruments.

Safeguards for Exceptional and Temporary Situations

The AoA does not forbid recourse to certain non-tariff import restrictions: measured applied under the provisions on the balance of payments, general safeguard clauses, general exceptions, provisions in the Agreement on the Application of Sanitary and Phytosanitary Measures, provisions in the Agreement on Technical Barriers to Trade, and other general WTO provisions.

The "Special Safeguard Clause" permits raising tariffs above their consolidated levels, but only for short periods of time and as a temporary measure. It is therefore not a solution for prolonged drops in international prices. In addition, developing countries that have notified ceiling rates—notably the case for Least Developed Countries (LDCs)—cannot use it.

Special and Differential Treatment for Developing Countries Not Always Advantageous

Developing countries receive special treatment under the special and differential treatment clause. LDCs are not obliged to notify commitments to lower their customs duties. However, they cannot exceed their consolidated level of customs duties.

In addition, developing countries have the possibility of consolidating their duties (making them impassable) at ceiling rates, without reference to the duties actually applied and without reference to past customs duties.

Yet, for ceiling rates to be effective, they must:

- be sufficiently high compared to the duties applied, which is not always the case; and
- be able to be actually used by the developing countries that have notified them, which can be difficult notably for countries subject to structural adjustment.

Maintaining Tariff Peaks and Instruments Other than Ad Valorem Duties

The tariffication mechanism allowed some countries to notify still very high tariffs (tariff peaks) for certain sensitive products. This is especially the case for developed countries, notably the European Union and the United States. Some developing countries, while they were able to notify sometimes high ceiling rates (greater than 100%), apply levels of protection that are among the lowest in the world. For instance, the highest rate in WAEMU's common external tariff (CET) is 20%.

The AoA authorizes in practice protection instruments other than *ad valorem* customs duties that would allow for more effective market protections: specific duties, tariff quotas, seasonal duties, etc. However, most developing countries have not notified these types of instrument and therefore cannot use them.

Finally, the countries that have the means to do so have offset, at least partially, the drop in farmers incomes' due to the opening of borders. However, developing countries have in general not notified such direct decoupled aid.

The Case of Quantitative Restrictions and Export Taxes

Restriction policies and export taxation remain for many developing countries the favored measures to meet diverse objectives, including the preservation of food security. In this way, the 2006-2008 food crisis led various rice exporting countries to limit or ban their exports in order to supply their domestic markets in priority and limit the price hike on these markets. These policies were denounced for their effects on the habitual destination markets.

WTO rules do not forbid export taxes. In addition, exemptions are planned that limit the ban on quantitative restrictions: they may be applied temporarily to prevent or resolve a critical situation due to a shortage of food products or other essential products for the country. As long as the developing country in question is not a net exporter of the product (if it is, certain conditions must be met), countries can therefore , in addition to taxes, set up quantitative restrictions on food product exports.

Production Support Policies and Managing Market Instability

All domestic support measures that have an effect on prices or quantities are subject to reduction.

Under special and differentiated treatment (SDT), developing countries are not obliged to lower:

- investment subsidies and agricultural input subsidies for low-income farmers or farmers with limited resources, or
- support destined to encourage the replacement of illicit narcotic crops.

In addition, the "de minimis" clause allows countries to maintain:

- agricultural product support when the support does not exceed 5% of the production value, and
- support other than product support when it does not exceed 5% of the value of the country's total agricultural production. This rate is 10% for developing countries. LDCs are subject to no reduction obligations but cannot increase "distortive" support.

"Non-distortive" support (Green Box) is exempt from reduction: decoupled aid and direct payments to producers, public service programs of a general nature (research,

anti-pest programs, training, extension, etc.), aid in the case of natural disasters, activity cessation aid, environmental protection programs, etc.

Spending on holding public stocks is authorized, but only if these stocks target food security alone. Hidden support via purchase and re-sale prices is therefore not tolerated. What is more, domestic food aid also seems to be among the measures that are exempt from reduction, as long as it is linked to nutrition-related objectives.

In the last two cases, the goal of market stabilization may not be used to justify the use of the two types of measures in question.

In sum, the WTO AoA organizes the transition to a large global market through capped and dropping customs duties, mostly decoupled support, and special safeguards in the case of price or import volume shocks. Only the pace and magnitude of commitments change for developing countries, with the exception of LDCs that are exempt from liberalization obligations. The legal alternative to liberalization is limited to (temporary or permanent) protection. Price stabilization is removed. Developing countries were not mistaken and in the framework of the Doha Round are negotiating exceptions for certain products labeled “special products” and a special safeguard mechanism, rather than instruments such as variable levies or guaranteed price policies. But what about RTAs involving developing countries?

Are Regional Trade Agreements (RTAs) a Better Response to the Challenge of Market Stabilization?

WTO member countries may sign Regional Trade Agreements (customs unions or free trade agreements). In this way, they can depart from the non-discrimination principle as long as the RTAs cover a “substantial part” of the trade and are implemented within a “reasonable length of time.” Are RTAs a better response to the challenge of market regulation? Are public stabilization policies tolerated even though the WTO bans them?

In principle, no, because RTAs must be compatible with WTO rules and refer to these rules.

In practice, RTAs usually only increase trade liberalization among the parties to the agreements compared to their commitments with the WTO. In this way, RTAs are often much more restrictive when it comes to the use of trade policy instruments: they do not address the consolidated tariffs at the WTO but applied tariffs that they lower or eliminate, often with a status quo clause that prevents countries from raising the tariffs applied at the time the agreement was entered into. In addition, the WTO does not impose asymmetry between developed countries and developing countries when a RTA involves both types of countries, contrary to the WTO rules that include special and differentiated treatment. The asymmetry that may exist in the degree or pace of liberalization is the result of the negotiations between the parties.

Policy space is therefore increasingly limited: only food security or the "special" nature of a product for developing countries (in the terms of the current multilateral negotiations still underway) can justify measures influencing prices or quantities outside of support measures that have been capped on a historic basis ("Amber Box") but are nonexistent in practice.

Are Current Negotiations Evolving Toward Better Consideration of Price Volatility?

The negotiations underway on the AoA have not challenged current rules at all. They aim to continue trade liberalization and further reduce distortive support and export subsidies.

For developing countries, the most important discussions focus primarily on:

- "special products" that could receive special treatment in regard to lowering consolidated tariffs; and

- the special safeguard mechanism that allows them, as does the current Special Safeguard Clause, to temporarily increase their levels of protection in the case of sharp increases in imports or sharp drops in the price of imported products. This mechanism would be available to all developing countries, including those that consolidated their tariffs at ceiling rates, and easier to trigger than the current clause.

The issue of exchange rates has been addressed relatively little in the negotiations whereas they are a crucial stake in international trade.

Beyond WTO rules, some developing countries have implemented measures that bypass or are sometimes incompatible with the WTO's rules; these measures deal with sanitary or quality criteria or criteria arising formally from agreements between private actors.

In conclusion, the WTO framework, like the RTA framework, cannot create the conditions that would allow for the ambitious use of market stabilization instruments. Indeed, all of the rules established there, including those for developing countries, aim to reduce the use of such instruments. The existing flexibilities and those under negotiation are merely exceptional provisions or special treatment compared to the overall rules. Paradoxically, developed countries, which are least eligible for exceptions to the rules, are the ones that use stabilization instruments the most because they used them during the baseline periods chosen in the AoA. This situation suggests that strong advocacy efforts will be necessary to modify the philosophy behind the AoA to take into account structural market stabilization measures, and notably to authorize developing countries and LDCs to introduce instruments that they have not notified.

6. Food Security and the Economic Crisis

Lucien Bourgeois, economist

Summary

It was thought that another crisis like the 1929 Crash was impossible because we had immeasurably more effective means to counter the risks. And yet, the crisis did indeed happen. Its magnitude and the loss of confidence that it generated were a surprise. Only governments' actions were able to restore confidence: in this way, we rediscovered the collective essence of money!

The risks have not been removed—as we can see with the Greek crisis, which illustrates Europe's economic policy coordination flaws. The current skyrocketing of cereal prices—which illustrates the dangers of unregulated trade globalization—will certainly have a strong impact on future agriculture policies.

The Market Has Not Been a Good Indicator for Non-Renewable Goods

The 2002 reversal in oil prices only became obvious in 2004. Other industrial commodities followed the trend.
The principal explanation given—increased demand from emerging countries—is not satisfactory. Indeed, this growing demand was not new. In reality, since the 1980s, oil companies have not, due to the drop in petrol prices after the spike in 1980, had an incentive to increase their supply rapidly. Thus, for nearly twenty years, oil was three to four times less expensive than in 1980. This also did not encourage fossil energy savings or the development of substitute energies. After the 2007-2008 shock, limits were again discussed. But, because of the drop in prices, one can readily fear that there has not been any lasting changes in oil and mining companies' investment plans. There will therefore be other crises if we continue to rely on the market alone, as it is not able to give clear signals to enable the long-term adaptation of supply to demand.

The rise in oil prices also showed the dependency of industrialized countries' agricultural production, and the dangers of using agricultural products to generate energy. Indeed, rising oil prices pull up the prices of food products. We saw this in 2006 in the United States with the program to produce corn ethanol.

Only the United States Have Been Able to Restore Confidence

A manifestation of the imbalances in the global economy (excessive household debt destined to increase consumption in a context of stagnating salaries), the 2008 financial crisis was the decisive element in the contextual change. After the collapse following the American government's refusal to support the Lehman Brothers bank, only government

refinancing of banks was able to restore a degree of confidence in the system and avoid disaster.
The consequence was a very rapid increase in government debt, sometimes leading to no revival of growth and to drastic drops in standards of living.

But, beyond patching the holes, the causes of the problems were not really addressed: no suppression of fiscal paradises, no measures to limit or tax the circulation of capital, nor even any separation of business banks from deposit banks.

The Economic Crisis Is Not Over

After 2009, and under the impetus of emerging countries such as China and India, global growth became positive again. But the previous imbalances have not been corrected, notably America's trade deficit with China. This deficit has not resulted in a depreciation of the dollar and an appreciation of the yuan because of China's massive purchasing of American treasury bonds. The only true variable in currency adjustment has long been the value of the euro, which was revalued by 80% between the start of the 2000s and 2008, threatening European exports (with the exception of Germany). The divergent situations among European countries generates doubts as to the durability of the euro and the recovery of lasting growth in the EU.

A WTO Agreement Would Threaten World Food Security

The WTO negotiations failed in 2008, under the pressure from an "objective" alliance of India and the United States, the two countries that most saw their food security as an inescapable element of national independence. In this context, it is not very plausible to pretend to deregulate agricultural trade as one would any other product.
In reality, the negotiations were tested by the crisis. The discussions on agricultural trade—the outcome of which could have been very dangerous for world food security—were a pretext in part. Indeed, all the countries feared, in reality, Chinese industry and no one trusted the dollar, the main currency used in international trade.

The Crisis Turned a Spotlight on the Scope of Wealthy Countries' Agricultural Aid

The crisis upset the context for agricultural policy in wealthy countries. After the Berlin Wall fell, the EU gave up on adopting a food security policy. It returned to its colonial habits in a world that had once again become a "natural space" and undertook an "honorable withdrawal" from agriculture. As part of a strategic alliance with the United States, it made the rest of the world accept its direct aid by placing it in a "Blue Box" and then a "Green Box" (single payment entitlement or SPE, under agro-environmental conditions, "decoupled" from agricultural production itself). The crisis reveals the inoperative nature of this strategy, which furthermore cannot be generalized to the other countries of the world.

Decoupled Aid Does Not Improve Agricultural Income Security in Wealthy Countries

In this way, SPEs turn out to be unjustifiable when prices are high and insufficient when prices are low. Calculated in function of the historic rights of each farmer and little capped, they seem unfair because linked to heritage. Like any land rent, they will progressively be integrated in the price of agricultural land. In regard to other countries, decoupled aid appears to be agricultural potential aid, and therefore export aid. In the context of growing public debt, it is becoming increasingly difficult to justify such forms of aid!

The Crisis Calls into Question the "Inevitable" Drop in the Number of Farms

For fifty years, agricultural policies have been built on the principle that the number of farmers will inevitably drop. The aim is to foster capitalization and an increase in farm size to make farms more competitive with other large exporting countries. However, at a time when unemployment is rising, it is appropriate to question this dogma. Indeed, unlike industry, there are few economies of scale available in farming, particularly if one does not take aid into account. If one also includes the problem of the inter-generational transmission of capital, increasing farm size loses much of its interest. Should public funds be used to finance the restructuring of agriculture and support the job seekers thus created?

Price Volatility Lowers the Effectiveness of Agrifood Commodity Chains

The sharp spike in prices in 2006-2008 revealed the inflationary effect for consumers of agricultural price instability. Indeed, when prices rise sharply, commodity chain organization is disturbed and some operators' margins are compressed because they are unable to pass on the higher prices to consumers. But this then causes them to react to "catch up" and insure themselves against price volatility risks.

The Poorest Segments' Food Is Threatened

One specificity of agrifood products compared to other products is the urgency of the purchase act: even if prices rise suddenly, consumers cannot delay their purchases for several months. However, the poorest consumers may be excluded. This is why agricultural policies aim to lower prices for consumers, mainly for the calories that fill stomachs least expensively (bread, milk, meat).

The EU had long constituted buffer stocks. They notably made it possible to inexpensively supply institutions that provided free food to the poorest. When Europe's stock policies were called into question, prices rose sharply for these institutions.

The Energy Crisis and Agricultural Product Crisis Were Not the Cause but Rather the Consequence of the Economic Crisis

It will be impossible to find solutions to the crisis until the crisis has been analyzed.

Certain "Malthusian" theories have attributed the 2006-2008 crisis to the insufficiency of oil resources, agricultural production or other physical factors. In reality, the energy crisis and agricultural product crisis were not the cause but rather the consequence of the economic crisis. And this economic crisis is the consequence of a lack of global governance to accompany the rapid development of international trade.

The emergence of China as a powerhouse was predictable: annual growth in China has oscillated between 8% and 10% for thirty years! No market mechanism corrected the trade imbalances (American deficit and Chinese surplus) because a degree of parity was maintained between the yuan and the dollar. The 2008 financial crisis revealed the dangers of globalization without regulatory mechanisms. Markets cannot be expanded without also expanding the power of the authorities in charge of enforcing the rules of the game.

A Crisis Triggered by Wealthy Countries that Is Costly for Poor Countries

The sharp price hike in 2006-2008 was caused less by a change in food supply and demand than by insufficient stock levels when a new demand for agrofuels emerged.

Thus, faced with the need to cut their budgets and in a context where they felt that Brazil could "feed the world," the EU and the United States did not feel it was necessary to finance stocks. They therefore fell to a level insufficient to prevent speculation.
Simultaneously, the United States decided to show the rest of the world that it had the means to create a substitute for oil using corn. In the space of a few months, ethanol production was launched and rapidly absorbed 100 million tons.

In this way, the food crisis was largely the result of decisions by wealthy countries that had nothing to do with food.

But these decisions had many unfortunate consequences on food for the poorest people, notably in the poorest countries that had become accustomed to feeding their urban populations with inexpensive imports rather than developing domestic agricultural production. This is one of the particularities of agricultural markets: a small drop in supply generates a proportionally larger increase in prices. And the number of people who can no longer feed themselves increases rapidly. Riots spread, and led the governments of poor countries to subsidize food purchases. In this way, wealthy countries' savings force poor countries to spend more. Simultaneously, food consumption aid for the poorest has skyrocketed in the United States. Should we not conduct an overall assessment, covering all countries and all budgets, before making decisions?

History Has Taught Us to Resolve Certain Problems

The recent accentuation of price volatility has revealed its dangers for social cohesion as well as for modernized farms and agricultural product processors.

Yet, since the 1929 Crash, we have learned that there are ways to counter these harmful price changes and that doing so does not involve suppressing governments' means of action. It is necessary to have, first, a precise vision of the goal to attain before defining the means to attain this goal.

The world is therefore not done with its food security. It has been a concern for centuries, and we have known for as long that it is a tricky and complicated subject. Liberal solutions can be useful in some cases by giving economic actors greater accountability. But this supposes that one does not imagine that "letting things happen" is enough. For agricultural product markets to be efficient, there needs to be a political organization that does not allow just anything to be done. The recent crisis has shown us that the equilibriums are fragile and when they are upset, the poorest are always the ones who suffer first.

7. The Challenges of a Regional Approach Price Instability Management: The Case of West Africa

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Summary

With the exception of the EU's Common Agricultural Policy (CAP), agricultural market regulation and price instability management are usually envisaged in the national or international framework. However, at a time when regional integration processes are tending to become stronger and are seen as favored frameworks for development, the question of the regional scale to conduct such policies has arisen. This is notably the case for the Economic Community of West African States (ECOWAS) that is envisaging providing itself with regional agricultural market regulation instruments and instability management instruments for the most vulnerable.

This paper aims to provide food for thought on the interest and limits of the regional scale to conceive this type of policy. After a rapid theoretical overview of the issue, the paper presents the primary challenges through the situation in West Africa.

Regional Integration as a Factor to Reduce Price Instability

The majority of trade worldwide takes place between countries in the same region. In West Africa, however, even though the institutional integration process is fairly advanced, intra-regional flows remain limited (around 12%).

Beyond the static effects of trade flow creation and deviation, regional integration can help lower price volatility by attenuating:

- exogenous instability thanks to the expansion of the market: less market segmentation, more effective resource allocation, facilitated investments;
- imported instability through the establishment of an appropriate common external tariff (CET); and
- endogenous instability, thanks to more predictable policies via the harmonization of national policies or even the elaboration of common policies, the attenuation of lobbies' influence, better spatio-temporal decisions by operators, strengthening of the tradable nature of agricultural products ("commoditization"), and lower transaction costs.

The Relevance of the Regional Level to Manage Price Instability in West Africa

a) The Regional Dimension of Price Instability in West Africa

The recent food crises in West Africa revealed:

- their regional dimension;
- the growing interdependency of economies in the region and the legitimacy of managing instability at the level of production basins and consumption basins; and
- the diversity of instruments that can be mobilized for food security in conjunction with the diversity of causes of instability.

b) The Regional Integration Process in West Africa

The choice of the regional scale to manage agricultural and food price instability is also justified by the fact that regional integration is tending to speed up: WAEMU customs union, adoption of a Trade Liberalization Scheme (TLS) by ECOWAS (even if the TLS is still far from reality in the field), ECOWAS common external tariff (CET) in the process of being finalized. In this way, the theoretical advantages of regional integration when it comes to lowering price instability could potentially come into play in West Africa. In addition, ECOWAS intends to intervene directly to regulate agricultural markets and limit the effects of price instability on the most vulnerable.

c) Regional Intervention: What Types of Instruments and Prerogatives?

One must distinguish between:

- price stabilization instruments; and
- instruments to correct the effects of this instability on incomes.

The regional approach must also take into account the respective fields of intervention for states and the region. There can be a simple coordination among states or true integration (common policies).

Various levels of delegating sovereignty can be envisaged: concurrent or shared responsibilities between the national and regional level; exclusive community responsibilities. The distribution of responsibilities relies on two principles:

- The subsidiarity principle: with the exception of those areas under its exclusive responsibility, the region takes action only when its action is more effective than action undertaken at the national, sub-regional or local level.
- The proportionality principle: the region's action must be limited to what is necessary to attain the objectives in the treaties.

Public Market Regulation Instruments

a) Border Instruments in the Framework of a Customs Union

Forming a customs union is supposed to make it possible to regulate imports at the borders of the union and encourage intra-regional trade within the free trade zone. For this to happen, it is however necessary that the CET offer sufficient protection and incentive, and that the free trade zone be real. WAEMU's CET is sharply contested for offering insufficient protection and not being sufficiently coherent. The current effort to

define ECOWAS's CET is an opportunity to correct this by introducing a 5th tariff band at 35%. Due to the diversity of national situations, it has been difficult to reach an agreement, however.

The West African experience also illustrates the methodological difficulties involved in reaching a political consensus on the level of protection desired with, on one side, a statistical approach of aggregating tariff preferences and, on the other, an approach based on policy negotiation.

ECOWAS is envisaging other border instruments to mitigate instability imported from international markets: seasonal quotas, specific tariffs (rather than *ad valorem* tariffs), and a safeguard measure. However, the same difficulties as those involved in setting the CET are being encountered because of the heterogeneity of countries in the region.

What is more, the countries in the region are not equally sensitive to imported price instability. Landlocked countries and countries within the franc zone are less exposed to price instability than coastal countries and countries outside the franc zone.

b) Regional Networking of Public Stocks

A regional approach to public stocks seems relevant in West Africa. Indeed, this approach makes it possible to:

- have a denser "grid" of public stocks on the regional scale, and therefore greater efficiency in de-stocking operations and the supply of deficit zones;
- spread the cost of storage among the countries in the region; and
- promote regional trade between surplus and shortfall zones.

There is already a network of the various public food security stock management structures, based on the principle of solidarity among the countries in the region. Each stock-holding country promises to liberate 5% of its stocks for the "regional stock."

This initiative could be the basis for reflection on setting up a buffer stock system combining (national and regional) public stocks and private stocks. However, the institutional and political conditions have not yet been met, notably in regard to certifying the private operators, monitoring their practices, and applying sanctions in the case of speculative abuses. Public stock management should furthermore be transparent and depend only on the general interest. Involving the private sector and in particular socio-professional organizations could also help improve management.

Other technical and methodological issues must also be resolved: determining which markets and products to regulate, what the guaranteed purchase price should be for producers (including the question of possible different purchase prices in function of transport costs), and what the critical stock volume is.

Social Safety Nets: Is Regional Action Possible?

The Justification for Safety Nets as an Instrument to Accompany Price Stabilization

Safety nets (i.e. all actions destined to prevent populations from "falling" into a poverty trap) help manage price instability in two ways:

- They can *complete* measures that tend to act directly on prices.
- They make it possible to lower the effects of instability on incomes. They intervene where market mechanisms fail or are not longer enough (disasters, etc.).

Safety nets for consumers can have a compensatory role as systems aiming to smooth producers' incomes with the aim of increasing food production. They can in this way be seen as a condition for the establishment of these systems insomuch as they make them politically and socially possible.

Social safety nets are a social protection policy instrument. Their regional implementation remains tricky on the same footing as all social protection policies. For instance, even the European Union—the most advanced example of regional integration—has not harmonized its social protection policies.

Current State of Safety Net Policies and the Justification for Regional Action

Safety net policies involve two types of actions:

a) Preventing and Mitigating the Risk of Crisis

Implementing safety net instruments requires a particularly high degree of information. Indeed:

- Vulnerability to food insecurity, which determines the probability of crisis, depends on a multitude of factors that are often interdependent on each other.
- Safety nets are net transfers to individuals, and are particularly costly for governments.

On the sub-regional level, the state of food security information systems and crisis prevention is still heterogeneous. While the landlocked countries in the Sahel have relatively complete systems, the other countries usually have only very partial systems, essentially designed to prevent crises due to supply deficits.

Many information systems perform poorly when it comes to grasping market availability problems, and do not allow one to analyze the resources households have to withstand the various types of risk.

In high-potential zones, high and stable prices can be a form of incentive for net surplus producers. But, for the majority of producers in the sub-region—who are net cereal buyers—high prices increase the cost of cereal purchases.

For vulnerable populations that have low production capacities or insufficient monetary resources, the issue of food prices is therefore a key risk factor. It is therefore important to track market prices.

Even more than in preventing supply deficits, preventing crises due to market access problems gains in efficiency when it is done on the regional scale (tracking cross-border flows and the sub-regional transmission of prices).

Four strong elements can be inferred from the analysis of cereal market operations, notably millet and maize on the sub-regional level. They reveal the interest of regional information management:

- the existence of shocks that happen simultaneously in different countries;
- the distinction between markets "in advance" on which prices drop first with the arrival of new harvests;
- the existence of a few "lead" markets: prices on these markets determine the prices on a large number of other markets but are determined by only a small number of prices on other markets; and
- the impact of production and trade with Nigeria, Ghana and Côte d'Ivoire on the food economies of Sahelian countries.

This aspect of the safety net policy depends above all on governments. The region would intervene on three different levels:

- on the policy level by promoting a harmonized regional framework to analyze structural causes of vulnerability and instruments that could lower this vulnerability;
- on the institutional level by developing decision-making assistance capacities to prevent crises on the regional level and target interventions; and
- on the academic level by deepening knowledge of how the major cross-border zones in the food economy operate.

b) The Regional Approach and Management of Full-Blown Crises

Most countries have set up food crisis response capacities with a panel of instruments used based on the elements provided by information and early warning systems. The proper operation of the information – alert – consultation – decision – implementation chain is therefore crucial to the ability to respond in a satisfactory manner. Analysis of the 2008 crisis shows, however, that a long road remains to be traveled to attain this result (poor anticipation, national measures contrary to common policy principles). It reveals a deep-reaching problem of national coordination and crisis management: temporary establishment of safety nets by outside actors (WFP, FAO, NGOs) little integrated in public policies and not contributing to national capacity building (particularly since capacities are insufficient); numerous new actors (NGOs, etc.) are not included in the consultation and coordination systems.

The country-donor co-management system for National Security Stocks (NSSs) is an example of coordination among national institutions and external donors. However, while the rigor of the co-management system allows the NSSs to be mobilized in a timely manner, it can also limit the flexibility and reactivity necessary in the case of disasters.

To manage crises, the region cannot replace governments in the implementation of social safety net instruments. However, the ECOWAP program proposes measures on two levels:

- Support for "innovative" national initiatives: *national contingency plans,* initiatives destined to improve continuity between the warnings issued by national and regional information systems.
- The establishment of supplementary regional instruments: *regional contingency plan*; instruments destined to strengthen regional cooperation in regard to security stocks: technical cooperation and stock pooling.