

AGRICULTURE AND FOOD IN THE GLOBALIZATION AGE

Manuel Belo Moreira*

Technical University of Lisbon, Portugal

Introduction

The objective of this article is to reflect on three basic questions concerning globalization and its effects on agriculture and food: 1) what are the major characteristics of globalization; 2) who are its major actors and 3) what are the future trends?

Globalization continues to be a disputed concept despite the immense literature dedicated to it. I will focus on features of the current globalization process that can be employed to better understand the direction and reach of changes, particularly in agriculture and food.¹ It is not my goal to produce original contributions about the theoretical relevance and accuracy of globalization or about its scale and scope. I will use a theoretical framework based on a political economy perspective focusing on the global agents, their logic and dynamics. However, this must be tempered by calling attention to the agencies and contingencies involved in the process. In fact, political economy insights suggesting global lines of evolution are not contradictory but rather complementary to actor-oriented, actor-network theory and social constructivist approaches, which acknowledge the social agencies and the complex articulations of the different spaces involved in agro-food production and consumption (Llambi et al. 1999, Goodman and Watts 1997).

The second section deals with the major characteristics of globalization. Since this is a subject that has been treated extensively in the globalization literature, I will avoid unnecessary repetitions and concentrate on highlighting features focusing on the economic and political dimensions of globalization that I consider indispensable, in order that the importance of the phenomenon may be better understood. Focusing on the global agro-food system in the third section, the relevant features of the major actors of the globalization process will be identified along with their different logics and dynamics and their relationships with local actors.

In the fourth section a framework is proposed to consider future trends in agriculture and food based on the concepts of substitutionism, appropriationism and the technological treadmill by using a two-scenario approach: one that explores the deepening of the current trends and another, considering a globalization backlash. In addition, some conclusive remarks will be drawn in the fourth section.

MAJOR CHARACTERISTICS OF GLOBALIZATION

Globalization is understood as an uneven and dialectical process initiated during the last three decades of the twentieth century marking the birth of a new phase of capitalist development. This means that the current situation is novel in relation to past periods of capitalist development². An understanding of globalization and its uniqueness must include not only the features that characterize the process but also the socioeconomic and cultural contexts under which the development of the process takes place.

The technological revolution in transportation and information technologies marked the development of globalization as a process³. In fact, faster and cheaper transportation is vital to international trade, and information technologies have been instrumental in the construction of a more rapid, cheap and worldwide communication network that induces a compression of time and space (Giddens 1992). It also greatly facilitates a flow of international finances, new methods of management and financing, and the achievement of new forms

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¹ An excellent introduction to the various dimensions of globalization can be found in the preparatory debate of the Montreal Global Congress of Sociology, which is accessible on the Internet <http://www2.hawaii.edu/~fredr/glocon.htm>. A number of works specifically involving agriculture and food deserve to be mentioned: Arce and Marsden (1993), Bonanno et al. (1994a and 1994b), Buttel (2001), Goodman and Watts (1997), Friedland (1994), Friedman and McMichael (1989), Marsden (1997), McMichael (1996) and Renard (1999).

² Authors such as Bairoch (1997) contest this idea on the grounds that in the period ended in 1913 the relative levels of international trade and foreign direct investment were similar to what is usually described as the most relevant feature of globalization. On the extreme opposite side Sklair (2001) argues that there are enough elements of proof to support the idea of a transnational capitalist class.

³ A technological deterministic position is not advocated. As Schumpeter (1952) put it, technology is not independent from the quest for profit.

of business control and spatial coordination even at very large distances. In short, the technological revolution has changed and magnified the reach and velocity of the process.

Another condition of globalization springs from state-led decisions favoring the liberalization of international trade and financial movements, privatization and de-regulation⁴. Decisions strictly related to the process acknowledged the hegemony of the neo-liberal ideology⁵, which paved the way for a specific acceptance -- inside the political realm and among public opinion -- of the need both to break with the Keynesian heritage and to adopt those neo-liberal prescriptions.

This passage from ideology to practical policy measures started in the UK under Thatcher, and was joined in the US by the Carter administration. Subsequently, the International Monetary Fund (IMF), in close connection with the US Treasury Department and the World Bank, started to consider neo-liberal policies as the equivalent of a medical prescription to be imposed on developing countries (Stiglitz 2002).

Highlighting Distinctive Features From The Past

Among the extensive list of characterizing features of globalization, the impact of de-regulation and liberalization on the State and the internal changes in the Transnational Corporations (TNCs) deserve particular attention.

Full liberalization and higher degrees of de-regulation of capital movements had an enormous global impact inducing what Fitoussi (1997) termed *financial tyranny*. The outcome of this financial tyranny is the reverential acceptance of the so-called market judgment that has been instrumental in changing the dialectical relations between global capital and the State. These relations follow a direction that undermined the power of labor and diminished the degree of the State's freedom to both influence the economic sphere and to determine capital regulations, regardless of the democratic legitimization that those policies fostered in free elections⁶.

Prescribing that countries must comply with market discipline can result in a forced acceptance of the requirements of global capital, enforced through the supervision of rating or audit companies. Companies that set neo-liberal standards to demonstrate their philosophy therefore penalize any government that dares to avoid the "normal" standards and codes⁷, i.e., the State changed from regulator to facilitator of the requirements of the global capital (McMichael and Myhre 1991).

Critical analyses soon started to highlight the relevance of these changes and to demonstrate the negative economic and social impacts, particularly resulting from the increasing macroeconomic volatility. However, this criticism was dismissed, without discussion, by the economic mainstream. In fact, the orthodox world of economics had placed its trust in the projections of expected generalized benefits for all and it was necessary to wait for recent works from well-established mainstream academics to bring the discussion about the effects of globalization to the agenda of the economic mainstream⁸.

Other crucial features result from the changes in TNCs' management and internal organization, marking the emergence of new types of corporations that broke with the multidivisional organization and introduced what Castells referred to as the network enterprise.

The changes in the power relations between TNCs and their workforce must also be stressed. In fact, globalization has made it much easier to de-localize entire manufacturing or only part of production processes, strongly contributing to a situation where possible employment is increasingly precarious. These changes are occurring during a period of imposed fiscal orthodoxy concerning welfare spending. The precarious possibility of employment and diminished welfare safety nets represent a remarkable shift in the balance in favor of capital versus local actor, or putting it in other words, it is a signal of rupture in the social contract that prevailed since the Second World War. Finally, attention must be paid both to the growing concentration of capital that points

⁴ Which in fact is more re-regulation than single de-regulation (Bonanno et al. 1994a).

⁵ Namely the role of a number of influential think tanks not only contributed to the theoretical development of neo-liberal ideology but were instrumental in the spread of neo-liberalism through the media (Dixon 1999 and George 1999) and objectively reinforced by the paradigm shift from the Keynesian to the neoclassic models that occurred in the academic realm (Moreira 2003).

⁶ Fear of facing negative evaluation from the financial markets and the resulting consequences forced governments, such as Brazil, to conduct conservative policies even when elected with a mandate to oppose such policies.

⁷ Not assuming that standards and codes "... rely heavily on an Anglo-American style of corporate governance and an arms' length model of financial development. They close off alternative paths to financial development, of the sort that have been followed by many of today's rich countries (for example, Germany, Japan, or South Korea)" (Rodrik 2001:7).

⁸ Such as Rodrik (2001 or 2002), Samuelson (2002) and Stiglitz (2001 and 2002), as well as a paper from a leading team of economists of the IMF (Prasad et al. 2003).

to oligopoly trends verified in many sectors, involving a relatively small number of TNCs, and to the relevance of intra-firm trade⁹. All of these developments are at odds with the idea of a competitive market and serve essentially to avoid market relations (Watts & Goodman 1997).

However, the reach of economic globalization cannot be fully understood without consideration of geopolitical dimensions in order to explain the large gap between the liberalizing rhetoric of the richest countries' governments and their concrete actions. In fact this rhetoric is often ignored, such as instances when governments promote and support their "national champions"¹⁰, or when ordinary trade rules are differently enforced according to the provenance of the goods¹¹. In the agro-food sector when influential political corporations or particular constituencies are hurt by imports, the usual procedure was to use tariffs. However, due to commercial agreements related to globalization, an increasing use of non-tariff barriers has been observed, under the guise of sanitary and health concerns¹².

This double standard, particularly involving agricultural trade, has been a standard procedure of the richest countries, to such a point that allowed Jacques Berthelot (2001) to entitle his book "Agriculture, Globalization's Achilles' Heel".

THE ACTORS OF THE GLOBALIZATION PROCESS: DYNAMICS AND RELEVANCE

TNCs, the critical actors of globalization, seek to expand capital's reach beyond the nation-state boundaries through highly complex and contingent dialectical relations with local actors, such as state apparatuses, local capitalists, workers and peasants. To understand the logic and dynamics of the process, the following argument can be enlightening: TNCs do not act in the same way as local actors; they do not share the same degrees of power when dealing with countervailing powers present at the local level, and they do not have the same flexibility and knowledge needed to face the opportunities and the threats associated with particular locations. In fact, it seems that between global and local capitalists there is a kind of division of capital reach, that is, they follow non-written guidelines that determine, for each type of business, when competition is expected and when it should be replaced by partnerships between TNCs and local capitalists.

Relating global corporations to local capital is easily addressed by demonstrating the distinctions among three types of corporations. This approach considers that TNCs have different logic and dynamics according to the sphere in which they predominantly operate: production-driven, commercial-driven, and speculative-driven. Following are main characteristics that differentiate these types (Moreira and Gerry 2003).

Production-driven corporations deal with labor, organization of production, management and marketing issues, and have to face production and commercial risks. Investments are usually important and durable, meaning that decisions to de-localize are more difficult to make, and highly dependant on the amount of incentives that can be obtained from the host country. Furthermore, this type of corporation must use innovation to maintain or improve its competitive skills, which usually implies large amounts of capital and highly qualified workers to face the R&D involved¹³.

Commercial-driven corporations are able to avoid production risks and to reduce commercial risks by transferring part of these to local production units. Also, they do not need to deal with production labor, production management and production-related marketing. Furthermore, they have much lower constraints to

⁹ More than 30 per cent of the total in the beginning of the 90s (Markusen 1996).

¹⁰ When speaking of national champions, I am referring to leading national corporations that from the beginning of capitalism have been assisted by governments, namely when they expand their business abroad. Historically, it is enough to refer to the frequent US intervention in Latin American that resulted in the expression "Banana Republic", or the famous statement that "what is good for General Motors is good for America". This practice did not end with globalization, regardless of the liberal rhetoric. One has only to look at the economic diplomacy developed by different governments that applies enormous pressure to support their nation-based corporations as has been widely reported by the business press and can be illustrated by the support of US government to assist Boeing, and from European governments, namely France, to support Airbus. This can also be illustrated by the protectionism granted by the Bush administration to facilitate the reorganization of the steel industry, under pressure as a result of intense competition from imports.

¹¹ Cruz and al. (1991), from the Centro de Investigaciones Economicas of the Universidad Autonoma Chapingo, provided evidence about the different treatment by US health authorities toward tomato imports from Mexico, this treatment being extremely severe when these imports compete with US internal production and lax in the periods when US producers suffer any damage. See also Conroy et al. (1996).

¹² In spite of the rejection of these practices by the General Agreement on Tariffs and Trade (GATT) or by the World Trade Organization (WTO).

¹³ Frequently, competing TNCs establish temporary strategic alliances to meet these necessities, particularly to face high R&D costs (Petrella 1996).

de-localize since the importance and durability of their operations usually are not comparable with production-driven ones.

Speculative-driven corporations do not have concerns about production and commercial activities, therefore escaping the correspondent risks. Furthermore, taking advantage of information technologies, they can reduce high wages for the skilled labor they need, using labor outsourcing from low wage countries such as India.

When passing from abstract theorization to the real world it can be difficult to assess the core business of many TNCs, since they can be involved simultaneously in production, circulation and speculative activities. In fact, only by consulting accounts or annual reports can we gain some idea about what is more important to a concrete corporation, whether it be production, circulation or speculation on financial markets.

Global sourcing and the feasibility of controlling business at large distances in real time contributed to the change in status of many long-time manufacturers and to the development of new types of industries. That is, some industrial TNCs rely on partnerships involving local or global capital instead of using their own facilities to produce their product. In those situations, TNCs work as coordinators of local smaller subcontractor operations, many of them owned either by local capitalists or by partnerships between local capitalists and other TNCs¹⁴. Using this strategy, some TNCs maintain the status of manufacturer and are closer to typical commercial-driven production, since they can avoid production-related restrictions and risks through a wide use of contractual arrangements with local or global producers.

The meaning of empowerment of speculative-driven capital must also be stressed. The strategic money, according to Aglietta (1992), is controlled by investment and pension funds, meaning that the respective management and the technical staff in charge of rating and auditing global corporations have gained an overwhelming power. This situation raises concerns since all this power, only visible through the so-called market judgment, resides in the hands of people who are not politically responsible, who remain in the shadows and, furthermore, constitute everything but an effective market (Krugman 1997).

Finally, attention must be given to the logical contradiction between speculation and other types of activity. In fact, speculation is not favorable, to production or to the commercial activities, but since many TNCs do not disdain the practice of speculation, it is understandable why we do not observe a clear opposition to financial speculation inside the global capitalistic world¹⁵. The same applies to land speculation that blocks land property changes and difficult agrarian restructures, but which do not provoke particular concern in the capitalist world¹⁶.

Non-capitalist forms of production are the most affected by this agreement between global capital factions, while local capitalists could be affected when involved in production or in circulation. However, they can also take advantage of speculative opportunities using the international financial system and its safe havens.

Production-Driven Agro-Food TNCs

Massive TNCs involved in agriculture and food production are a good example of how production-driven global capital remains relevant to giants such as Nestlé, Unilever, Kraft Foods (the food branch of the Altria Group, that also includes Philip Morris and Nabisco), Cargill enriched with the acquisition of Continental Grain and its Joint venture with Nippon Meats, ConAgra, Danone and Parmalat¹⁷. TNCs such as Dole (includes Bud Antle and Pascual Hermanos), Del Monte and Chiquita are also directly involved in the production of fresh products even if they do not reject contracting local operators or even use local markets to acquire products that will be sold under their brand name (Raynolds 1997). Others are deeply involved in the production of agricultural inputs such as Monsanto (seeds, herbicides, biotechnologies, etc.), Dow Chemical (agro-chemical, agricultural services, etc.), Dupont (including Pioneer Hi-Bred, a leading seed producer, crop protection, etc.), Hoechst, an agricultural branch of Aventis, which is the result of a merger with Rhone Poulenc (agro-chemicals and biotechnologies), John Deere and Caterpillar (machinery). And last but not least, it is important to mention the formation of clusters linking input providers with other firms downstream in the food chain, such as Monsanto/Cargill, Novartis/ADM (Heffernan 1999).

¹⁴ Castells (2003) uses the Cisco example to underline the novelty of an industrial corporation involved in manufacturing that does not own production facilities.

¹⁵ Chesnais (2000:41) quotes a 1993 IMF publication (*International Capital Markets, Part 1, Exchange Rate Management and International Capital Flows*) indicating that currency operations conducted by the financial departments of TNCs are increasingly regarded as the pivotal center of the profits.

¹⁶ Contrasting with the logic of land reforms in Japan and South Korea imposed by the U.S.

¹⁷ Parmalat is an Italian based dairy TNC that recently gained notoriety when it was involved in a financial scandal that led to the bankruptcy of the firm.

When facing local competitors, large TNCs tend to acquire smaller businesses to profit from desirable assets, market power, and/or interesting innovations. Three instances from my own country (Portugal) illustrate this type of procedure at the agro-food level: the acquisition by Nestlé of Longa Vida, one of the leading national brands of yogurt, followed by its de-localization of production activities to Spain, the purchase of the leading Portuguese tobacco manufacturer by the Philip Morris corporation, during the privatization of this firm, and the acquisition of the facilities of a union of dairy co-operatives by Parmalat.

Important differences can be found between old TNCs -- which had their brands produced in their own plantations and/or food processing facilities -- and agro-food corporations that are only directly involved in the production of particular segments of the agro-food commodity systems. These are the companies involved in the production of higher value-added goods such as the global poultry complex (Constance & Heffernan 1991). These companies rely heavily on vertically integrated local producers or independent producers under a variety of contracts to obtain raw materials or low value-added intermediate products. And unlike previous periods when national boundaries could not be so easily by-passed, this strategy is widely used, presently, as a result of global sourcing.

Commercial-driven TNCs

Icons of globalization such as Carrefour, Auchan, Tesco, Sainsbury, Ahold, Tengelmann, Metro Group and LIDL, and the world number one in stock capitalization, Wal-Mart, are examples of the relevance of commercial-driven capital.

The growing importance of these TNCs is based on their significant financial leverage and market power. Unlike a production-driven corporation that obtains most of its profits through enhanced field production efficiency, the major source of profitability of the commercial-driven TNC derives its power and position from the market place, namely the possibility of receiving cash and the subsequent ability to pay its suppliers within 60 to 90 days. These TNCs are fierce competitors that, using their financial leverage, increase their market power by forcing less efficient companies to discontinue or sell their operations. The 2000 summary report of the state of world grocery retailing published by the British Food Journal provides sufficient evidence of these trends, as it discusses key examples such as Wal-Mart taking over Asda in UK; the merger of Carrefour with Promodès resulting in the creation of the largest world retailer; and the acquisition of 50% of the Scandinavian ICA by Ahold, following the acquisition of a stake in La Fragua in Guatemala, Honduras and El Salvador (Higgins 2001).

On the other hand, it must be stressed that even though they may not be directly involved in production, large TNCs tend to remain concerned with agro-food production issues. This situation is due to the fact that food retailers attract consumers more frequently than retailers in other sectors in a context in which product quality and safety remain important predictors of food consumer preference. Accordingly, TNCs representatives visit fields and factories testing product quality and taking up a regulatory role previously carried out by the State. Additionally, as Marsden (1997:184) put it "... they have become major players in the social definition of the foods and the images and identities of food".

Speculative-driven TNCs

Speculative-driven corporations share a logic and dynamic that depends largely upon the will and capacity of the state to regulate. Given the present interconnection of the financial world, this dynamic can only be changed with the political support of the hegemonic countries, that is, the G7.

This type of corporation can play an important role even if it is not particularly concerned with agro-food production, commodity marketing, and location issues, (except if it can count on fiscal exemptions), since:

- the financial speculators interested in agriculture commodities can be one of the main factors in price variability¹⁸;
- very successful speculation could create situations where, if there is an excess of liquidity, the practice of buying relatively cheap land will increase, contributing to freeze the land until a new business opportunity appears¹⁹;

¹⁸ "Speculation that incorrectly anticipates future events increases price variability, but speculation that correctly anticipates future trends reduces price variability" (Tomek & Robison 1972:38).

¹⁹ *Business Week* reported the acquisition of land in Argentina by known speculators such as George Soros. This is not to mention the usual practice of wealthy people buying land as a mean to obtain insurance against inflation.

- industrial reorganization can be the result of raider speculation, where assets are bought, purposefully, to be split for future sale, with an uncertain predictable appraisal of the outcome's cost-benefits.

Considering the relative importance of production and commercial-driven global corporations, it is now well established that the latter have gained importance in relation to the TNCs mainly involved in production. This shift of power frequently involves price wars and a squeezing of the weaker chain's margins. Additionally, agreements or even partnerships would be established that involve procedures such as on-line electronic orders to facilitate just-in-time procedures, more convenient production schedules, and more efficient logistics. It seems logical that the leading actor responsible for this innovation, usually a large retailer at the final part of the commodity system and possibly the processing corporation in intermediate phases, appropriates the gains of efficiency. This means that traditional producers that do not want to, or are not able to be included in these partnerships, will have hard times, not only in terms of further price squeezes, but they also risk being replaced by others that fully comply with the requirements of the buyers.

At this point a break for reflection is needed. The examples given of global players in agro-food production should not be interpreted as if agro-food production has become completely globalized. The emergence of global production systems (Bonanno et al. 1994 b) is observed, and some TNCs have developed centralized instead of multi-domestic strategies. All these phenomena provide evidence of very important changes and represent the trend for the future of agriculture and food if globalization continues. However, as Goodman and Watts (1997) argue, not all TNCs have reached similar levels of globalization, and locally based agro-food production has not lost relevance on the global scale.

FUTURE TRENDS

As already mentioned, in considering future trends I will use a framework based on the concepts of substitutionism and appropriationism (Goodman et al. 1987) that seeks to explain the industrialization of agriculture. This framework is also based on the technological treadmill (Cochrane 1979) that shows the logic of the structural dynamic induced by market competition between farmers²⁰.

Allow me to start with a general trend that seems independent of globalization. I refer to the increasing importance of the service and processing sectors in relation to agricultural production. This is a fact that has been underscored since Kautsky wrote *The Agrarian Question* and there are no signals that it will be reversed. On the contrary, the industrial world will increase its influence on traditional agricultural tasks by proposing industrial forms of production. And the substitution of agricultural products will continue depending on R&D and corporate strategies. In addition, the search for higher productivity on the farm level will also continue, applying the principle of the technological treadmill, as innovations improve productivity through efficiency and increase competitive advantages. Among these new technologies it is worth mentioning precision agriculture and long distance field monitoring of the water supply, fertilizer needs, and pest control.

Consequently, it seems safe to assume that the structural change promoted by the agricultural technological treadmill will continue its historical development and will accelerate primarily in less developed countries. It will result in an intensification of the search for enhanced agricultural productivity in fewer farms, and the creation of larger farms. Despite the aggressive support by international agencies, this trend is widely criticized and this critique could play a role in providing visibility to alternative technological models. In general, what is unpredictable is the velocity of these changes, velocity that is strongly influenced by globalization.

Also, regardless of the evolution to globalization, the continuous withdrawal of state-sponsored R&D will be maintained due to the persistent fiscal crisis of the State. Accordingly, large TNCs, particularly those involved in high resource-based biotechnological and genetically applied research, will have clear advantages raising barriers to the entry of new competitors. This trend should be a matter of major concern since the research agenda is increasingly more dependent on corporations' profit-enhancing strategies and their focus on short-term results rather than environmental and health concerns. The debate concerning GMO products exemplifies the perils associated with this short-term logic.

²⁰ Substitutionism concerns industrial production that substitutes for agricultural products (synthetic fiber replaced the need to use natural fibers in textile industry); appropriationism refers to the increasing industrial development of new ways to perform traditional agricultural tasks (machinery and fertilizers replacing animal force and manure, respectively); and finally the technological treadmill, i.e. the continuous quest for higher and higher levels of productivity induced by the innovation in a competitive market environment, which is greatly enforced by the use of credit.

The Rationale Of The Two-Scenario Approach

I will focus on the most feasible of the short and medium term situations. This means that extreme situations not fitting with the current balance of powers will not be considered. This includes anti-globalization due to chaos in key points of the globe and the surge of generalized wars involving the US, EU or Japan, and, on the opposite side, a radical globalization that calls for a complete world economic integration.

Avoiding these extreme situations, the first scenario considers intensification and a deepening of current globalization features. The feasibility of this scenario probably should include some changes, highlighted by academics, to overcome the most evident shortcomings that fuel grass roots anti-globalization or alternative globalization movements. This scenario of “natural” development of globalization will be termed here as “more globalization”. At the other extreme is the scenario of a “backlash of globalization” (Bergstein 2000). Here I refer not to the complete reversal of globalization, but to a clear slowdown of the process and an increase in the levels of protectionism, particularly among the more relevant economies and in specific areas.

The rationale for the backlash scenario is based on recent events signaling important changes that contradict the logic of globalization. Some of these changes are international in nature while others are specific to the US internal context and are relevant due to the hegemonic power of this country²¹. At least four major phenomena could favor this scenario: the poor image of many TNCs; the global finance system; the so-called “war on terrorism” and other US policies, some shared with the other major economic blocks that are contrary to the logic of globalization. In regard to the TNCs’ image, it suffices to examine the extensive and impressive list of leading icons of Corporate America (joined by some European based corporations such as Ahold and Parmalat) that were found guilty of cheating not only state regulators, but also their shareholders and employees²². These illegal practices have been supported by major banks and covered by audit firms resulting in breaking the confidence on which most of the financial markets are based. These events, which affect the corporate world and put in jeopardy the transparency and reliability of corporate accounts and accounting standards, are being considered, from neo-liberal opinion makers, dangerous menaces to the future of the capitalism. In fact, it is enough to read the editorials of *Business Week* and *The Economist* to see the concern originated by these shortcomings of a fully de-regulated economy left alone to its own devices.

The global financial system can be considered as crisis-prone. The series of crises affecting the system are impressive: the debt crisis of the early 1980s; the Savings and Loan scandals of the same period; the crash of Wall Street in 1987; the monetary European crisis in the beginning of the 1990s; the Mexico crisis in 1994, and the Asian crisis in 1997 spilling over Russia and Brazil. As (Bergstein 2000) put it, “Private capital flows can de-stabilize—being too big at one time and too little at another—and there has been a failure to put in place any substantial reforms to improve the prospect for stabilizing the system in the future”.

In the same manner, the perceived shortcomings of previous privatization, and the necessity of state-led rescues when things go wrong, strengthen the perception that the movement based on the Washington Consensus has gone too far (Stiglitz 2003).

The “war on terrorism” brought a fundamental change in the US position concerning financial markets, contradicting its previous opposition to financial regulations. In addition, the concerns about intentional acts that could undermine food security or food safety constitute additional grounds for supporting at least some precautions that could result in the backlash scenario. Intentional acts are possible threats from a variety of actors, ranging from economic criminals who might attempt to disrupt normal food commodity chains from obtaining financial gains (betting on futures, for instance), to acts that come under the label of terrorist acts. Patrick Mooney, in an oral presentation at the 2003 European Congress of Rural Sociology, referred to considerations being addressed in the National Research Council, involving corporate and US administration representatives²³.

²¹ Even accepting as Wallerstein (2001) that the US power and room for maneuver have greatly diminished since the 50s, one has to agree that besides its uncontested military supremacy the US still has a more than proportional power in the world economic life, IMF, World Bank and in OECD only to mention some particularly important institutions.

²² See the extensive list of 10th June 2002 edition of *Business Week*.

²³ “In many ways, attacks on plants and animals may be easy to mount. Agricultural crops and animals are often grown, housed, or grazed in relatively high-density and uniform conditions, which make the spread of disease and infestations more rapid and effective. Genetic homogeneity, often desirable in agriculture to optimize yields or nutritional content, adds to the vulnerability of crops and animals to epidemics.” (National Research Council, 2003:22). I want to thank Mooney for this quotation.

The move of the US government from its traditional pro-trade liberalization position in GATT and in the WTO is also a major fact to consider. When the Bush administration raised taxes on imported steel and introduced a dramatic increase in farm subsidies, even at the risk of being condemned at the WTO and facing the menace of possible retaliation, this represented decisions at odds with globalization rhetoric. Whether this is the result of an election ploy or for other reasons, the US administration has adopted a non-traditional anti-liberal position that not only can slow the pace and weaken the neo-liberal globalization process, but also gives powerful arguments to critics of globalization.

Food and agriculture-related issues constitute another instance of the contradictory position that governments of the most developed countries maintain on globalization. Governments of the most developed countries intervened to control unwanted consequences of globalization at the domestic level. They kept globalization impacts under close control. As indicated above, the double standards that give protection to many farmers when facing external competition (either through tariffs and non-tariff barriers or exporting subsidies or other mechanisms as international aid to control oversupply, etc.) are cases in point. Consumers' concerns about food safety also forced government actions such by the compulsory massive slaughter of cows in some European countries due to BSE and food and mouth scares. Consequently, global agricultural commodities and global food did not reach the levels of integration and liberalization achieved by other commodities.

However, this does not mean that globalization has been neutral to agriculture and food related issues. While hegemonic countries did not consider the objective of globalizing agriculture and food a priority, we must not forget that only until the Uruguay Round, was agriculture included in the GATT. The agriculture and food sectors of the most dependent countries were the first to be forced to adapt to the requirements of global capital.

The Two-Scenario Approach: Backlash And More Globalization

The following matrix relating globalization to the concepts of substitutionism, appropriationism and technological treadmill synthesizes the foreseen trends.

	Globalization Backlash	More Globalization
Substitutionism	A strong trend to the reinforcement of substitutionism practices to take advantage of the opportunities that less international trade will offer.	More international trade usually means that substitutionism is more easily challenged. Mass products at low prices are not a particular incentive to substitutionism.
Appropriationism	New opportunities for small firms to challenge established oligopolies, which can give rise to innovations if the internal markets are strong enough to support them.	Considering the importance of oligopolies on expanding markets, it seems that consolidation practices are more probable than new surges of innovation on this matter.
Technological Treadmill	Depending on innovation and market competition, there is an undetermined forecast since trends to Substitutionism and Appropriationism move in opposite directions.	The same. But probably the most dramatic changes will be noticed in the less developed countries involved in international trade, since WTO determinants will be more important than the local, consequently unleashing the treadmill.

Under the backlash scenario the trend toward increasing long distance agricultural competition will slow down, but competition inside each country or economic area will be maintained or intensified.

With regards to the upstream of agricultural activity, globalization has been important in intensifying the reach of large TNCs that have been reinforcing their position through the already mentioned merger and acquisition phenomenon of the last three decades, namely concerning seed and agro-chemical suppliers. Under the backlash scenario, the pace of higher levels of global concentration of capital tend to slow down, meaning that new windows of opportunity will be open to smaller innovative firms that could count on higher levels of protection vis-à-vis foreign takeovers.

Concerning activities downstream of agriculture it is logical that substitutionism will flourish in a backlash scenario, particularly in larger countries or integrated economic areas with large markets. However, one type of substitutionism related to new product lines could be affected under this scenario. I am referring to the so-called functional food, nutraceuticals (that is, food with pharmaceutical proprieties) or techno-foods, which greatly benefited from the anti-regulation mood adopted by the Food and Drugs Administration²⁴.

The importance of these products will probably increase under a more globalization scenario, since it will be easier for the world's wealthiest fraction to access them. In fact they fit well on the main food choice trends related to the concepts of "efficient nutrition", "the hypochondriac factor", "the time factor", the "guilt-free indulgence", the "convenience plus" and "the sensory experience" referred to by Gray et al. (2003).

Finally, two distinct paths for agricultural production (in the strict sense) will be intensified, particularly under the scenario of more globalization. The first involves the growth of the agricultural productivist technical models. This is a path that still follows Fordist features and will be used to produce the bulk of fiber and food raw material aimed at the mass market. The second path is more flexible and relies on non-productivist technical models to generate agricultural goods. These goods are aimed at local and global niche markets. The actors involved in this latter path will suffer most if the backlash scenario becomes reality, since this premium global market will experience growth difficulties. These niche markets involve a greater traceability of the commodity system, from the producer to the consumer, often controlled by the retailers. However, enhanced marketing strategies can take advantage of items such as "guarantee of origin" or "guarantee of production process" or new farmer-owned brands and can benefit greatly from the opportunities brought about by the Internet. They require cooperation between producers and governments to enforce their favored legal status.

It is difficult to predict the way in which relevant criticisms about the inner contradiction between the current industrial type of agricultural development (more specialization and monoculture) and the ecological sustainability would be addressed. This refers to the contradiction between the call for the growth of a more diversified and smaller scale production aiming at assuring ecological sustainability, and models that focus primarily on economic sustainability based on cost-benefit analyses that often disregard the computation of existing externalities. Furthermore, the pace to reach higher levels of specialization and concentration could also be altered if preventive policies are implemented such as those established to diminish the risks resulting from intentional acts or non-intentional shortcomings, i.e., the spread of epizooties. These questions addressed by the non-orthodox critics about the dominant agro-food development model probably could be more easily tackled under the backlash scenario than with more globalization.

CONCLUDING REMARKS

Globalization is characterized by a large number of extremely important changes in the economic and political spheres some of which have been highlighted in this article. It needs also to be stressed that globalization as an agency-led process is a highly contested and disputed arena showing a profound gap between the rhetoric and the underlying ideology - extremely liberal and pro-market - and a praxis that reveals a much more complex outcome. That is, the globalizing idea, even being hegemonic inside the most relevant nation-state apparatus, is tempered by state pragmatism that responds to power relations capable of putting aside neo-liberal ideology in order to favor specific interests. The visibility of these specific interests varies significantly from context to context. It is quite apparent in the US institutionalized lobbying system but more difficult to identify in most countries.

Highlighting the importance of this game of power helps understand other aspects of globalization that transcend the economic sphere and support the idea of globalization as a utopian project²⁵. The following two

²⁴ As Francis (2003) put it "The legal system has served industry well, as critics of nutritional claims or groups opposed to campaigns such as the Nestle Corporation's promotion of powdered milk formula have learned through bitter experience. One of the first victims of legal procedures seems to be the truth about nutrition."

²⁵ Utopia clearly illustrated by Rodrik's (2002:13-14) thesis that the global economy faces a political trilemma, that is, "the nation-state system, deep economic integration, and democracy are mutually incompatible. We can have at most two out of these three. If we want to push global economic integration much further, we have to give up either the nation state or mass

aspects illustrate my point. The first refers to the almost total liberty of movement granted to capital as opposed to the barriers to labor movements. The second consists of the lack of concern, and the absence of agreements between countries, about-facing the need to promote global goods, that is, to assure that the needed global investments and the efficiency of global organizations that go beyond the reach of each particular country are met. I refer to the ability of investments and organizations to respond efficiently to global threats, such as global health and sanitary problems, and to global environmental problems as stressed by the Kyoto protocol saga.

At the TNC level, the emergence of commercial-driven giants as first class competitors is remarkable as they have gained overwhelming financial leverage and market power. They are increasingly the main players in agro-food matters, to the point that they feel the need, and are quite capable, of taking into their own hands new forms of regulation that the nation-state is not willing to, or cannot, carry out. And it must be stressed that financial capital gained extreme power to influence economic and political agenda under globalization.

Finally, it must be underscored that my considerations of future trends should be taken with caution, since the sequences presented are the sole result of a logical reasoning based on a number of past trends. However, we must avoid any idea of determinism since the direction and velocity of these global changes strongly depend on contingent processes.

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