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International Agricultural Trade Liberalisation and Food Security: Risks Associated with a Fully Liberalised Global Marketplace

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Integration into a large and diversified marketplace is a key component of achieving food security. Depending predominantly on food Imports, however, is not always consonant with achieving a high level of food security. We argue that overreliance on food imports exposes countries to non-negligible weaknesses of the global food market, and that the risks associated with these weaknesses are amplified by the absence of binding rules limiting the use of export restrictions. Finally, we suggest that acknowledging the legitimacy of food security concerns can enhance support for further agricultural trade liberalization, through increasing political and consumer confidence.

Keywords: Food security; Agricultural trade liberalisation; Export restrictions
JEL Codes: F13

1 Introduction

Liberalisation of industrial markets can be seen as one of the greater accomplishments of the international community since the Second World War. Increased openness of markets has contributed to making industrial production more efficient, thus reducing the price of manufactured goods and, in principle, improving overall quality of life. This success has led to efforts, within the General Agreement on Tariffs and Trade (GATT) and its successor, the World Trade Organization (WTO), to extend liberalisation to other areas of trade, such as trade in services and agricultural products.

Some observers argue, however, that agriculture should benefit from a different status than other industries in the global marketplace, and that agricultural markets should not be liberalised where this would induce a large-scale outsourcing of food production.¹ Arguments range from the importance of maintaining agriculture in order to keep rural culture alive to ecological issues. In the context of trade liberalisation, these considerations relating to

* Comments and suggestions by JOAN APECU, MARSHALL BURKE, OLIVIER CADOT, JOHN FINN, ROGER KAMPE, RAFAEL LALIVE, GUIDO PALAZZO, PETER TIMMER, SUZANNE DE TREVILLE, DANIELA URIBE, NIKKI VELASCO, HANNU WAGER, and HAROLD ZIMMERMANN are gratefully acknowledged.

¹ This paper focuses on food products, and does not address trade policies to be applied to non-food agricultural products, such as biofuels and cotton.

the nature of agriculture and its broader contribution to the society are commonly called “non-trade concerns.”

One non-trade concern that has regained attention over the past couple of years is food security. In spring 2008, the world was experiencing a food crisis that, according to the final declaration adopted by the 2008 United Nations Food and Agriculture Organization (FAO) summit “has highlighted the fragility of the world’s food systems and their vulnerability to shocks.” (FAO 2008b) Over the 2 years leading up to spring 2008, world food prices soared,² causing unrest in many of the poorest countries in the world. Mauritania, Senegal, and Haiti, for example, experienced violent protests related to rising food prices. There were also shortages on international food markets, especially for rice. Although the prices have since then retreated, factors such as climate change, energy security, water scarcity, competition for land, and growing demand for food are likely to contribute to continued price volatility (EVANS 2009). The 2008 food-price hike has made many import-dependent countries more aware of the possibility of future price volatility, and has raised concerns about their long-term food security and the resilience of their supply chains in times of crisis.³

Proponents of further liberalisation argue that international trade is a reliable means to provide food security for the populations of these countries through imports in an efficient global marketplace that is quick to respond to changes in demand and occasional bad harvests in some of the bread baskets of the world. The essential nature of food, however, raises concerns about whether international trade alone is adequate in this respect in a world where various global risks, such as the current financial/economic crisis, energy prices, and climate change, are inextricably linked.⁴

The view that a fully liberalised global marketplace can always provide food security seems to assume that the world has become politically, economically, and environmentally significantly more stable and predictable than before. However, import-dependent countries lacking such confidence worry that simultaneous bad harvests across several regions, global unrest, or other disruptions to the increasingly centralised global supply chains could put their populations in a vulnerable position. This vulnerability is even

2 By March 2008, average food prices had risen 73% from their 2006 levels, and cereal prices had risen 129% from their 2005 level (FAO 2008c).

3 Another more general factor is that the current financial/economic crisis has undermined the confidence in the markets unless they are supported by appropriate policies and regulations to address such externalities.

4 On the interconnectedness of global risks, see WORLD ECONOMIC FORUM 2009.

greater in the case of least-developed net food-importing countries that may lack the financial resources to acquire food if international prices rise.

In this paper, we explore in what measure concerns about food security are legitimate justifications for policies used to keep domestic agriculture alive, even if they come at the expense of some market distortions. While an increasingly liberalised marketplace appears to present significant risks to countries predominantly relying on imports for their food supply, these risks need to be balanced against the economic benefits that could be gained from further liberalisation. Furthermore, open markets can be supportive of food security, provided that the rules guiding the liberalisation process would fully recognise the legitimacy of food security concerns of all countries by ensuring the security of their supply and giving them an adequate policy space to maintain a degree of domestic production to mitigate these risks.

2 Liberalisation of agricultural markets

What are the arguments used to support increased liberalisation of international agricultural trade? Most flow from application of the widely accepted paradigm of market economics to agriculture. Research shows that trade liberalisation increases growth (INGCO and NASH 2004), which is in general considered a good indicator of economic strength. This would also be expected to apply to agriculture. According to this model, reducing obstacles to agricultural trade should lead to a rationalisation of farming, where food is produced by the entities that can produce it most efficiently. This should lead to an overall decrease in consumer prices, while making farming more profitable for producers who have a comparative advantage due to climate conditions, labor costs, or other factors, and result in an increase in global trade.

Agriculture markets, however, are currently quite distorted compared to the liberalised model on which such research is based. Farming in many countries (both developed and developing) is dependent on some level of protection. Many countries provide subsidies to their farmers in order to make their farming sector more profitable and their farmers able to sell food at lower prices.⁵ Subsidies are also given for reasons such as security against price fluctuations and bad harvests due to weather conditions, as

5 According to OECD statistics, "Producer Support Estimates" accounted for an average of 26.15% of farm revenue in OECD countries, in 2006 (OECD).

well as for reasons not directly linked to production. It is also common to set import tariffs on food, in order to make imported food more expensive, again increasing the competitiveness of local agriculture relative to imports (AKSOY and BEGHIN 2005). The argument goes that such policies should be abolished, since they allocate resources in an inefficient way and distort the global agricultural market.

For better or for worse, we should expect agricultural trade liberalisation built around the paradigm of free markets to lead to some geographical redistribution of agricultural production. Indeed, in a free market, we would expect farming to be concentrated in regions with the most favorable climates, the best agricultural expertise, and the most resources available for agriculture. In purely economic terms, it would only make sense to shift agricultural production from countries such as Japan, South Korea, and Switzerland, which have to cope with challenging topography, high labor costs, and high demand for land, to countries such as Brazil and Australia.⁶

There has not been much research into the exact scope and nature of this geographical shift in agricultural production likely to result from liberalisation. One model developed by the World Bank, though, suggests that a full liberalisation of global trade would increase the agricultural and food output of Australia and New Zealand by 20.5%, and that of Brazil by 34.0%, while reducing the output of EU25 and EFTA countries by 12.3%, and that of Japan by 18.4% (ANDERSON, MARTIN and VAN DER MENSBRUGGHE 2006).⁷

In the light of our discussion above, it is probable that the removal of agricultural subsidies and import tariffs would lead to a reduction in agricultural output in less competitive countries, possibly restricting agriculture to niche markets in some of them. For example, the reduction in the protection of South Korean rice farmers has resulted in a gradual decline of South Korean rice farming, with many rice farmers going bankrupt (SCHUMAN 2005). Liberalisation of agricultural trade is likely, in any case, to lead to a redistribution of global agricultural production, with agricultural produc-

6 Some argue that liberalisation would not lead to agricultural production receding from countries such as Japan, South Korea and Switzerland, and that these countries could adapt to the loss of subsidies by making their farming sectors more efficient, for example by shifting to larger farm sizes, and adopting GMOs and other food technologies. Others are skeptical, though, about the extent to which such an adaptation could take place, since it is hard to see how farming could ever be profitable in a purely competitive setting in, for example, mountainous regions where rough terrain and climate renders difficult the use of industrial farming methods, or regions such as the coasts of Lake Geneva, where the cost of land would be prohibitively high for agriculture if it were not for explicit zoning of some land as agricultural land.

7 These changes were predicted for 2015, relative to the 2005 values, assuming a full liberalisation of all trade in 2005.

tion somewhat more concentrated into “bread baskets” or regions benefiting from a strong natural advantage for farming. For the purpose of this paper, we shall work under the hypothesis that there are countries, both developing and developed, whose levels of agricultural production would fall significantly as a consequence of full liberalisation of agricultural trade.⁸

Some authors object to liberalisation of agricultural trade on the grounds that it would hurt rural society. ROSSET (2006), for example, claims that, in a fully liberalised market without any subsidies, all farming except for large-scale industrial farming in some favored areas would become impossible. Many then continue that, since agriculture is an essential part of rural livelihoods, increased centralisation of agricultural production to certain large producers should be fought even if it would make sense in purely economic terms. A South Korean farmers’ leader, KYUNG-HAE LEE was a notorious proponent of this idea – his challenge to trade liberalisation was that it was unclear in whose interest it was to lower food prices in such a way that might destroy local rural culture (2003). Similarly, according to ROSSET, “Food is different. It is not just any merchandise or commodity. Food means farming, and farming means rural livelihoods, traditions and cultures, and it means preserving, or destroying, rural landscapes” (2006). Such considerations have led many groups, especially farmers’ associations, to condemn the current trend of agricultural trade liberalisation (JOINT DECLARATION 2005). For others, however, such concerns just illustrate an emotional attachment to rural culture, a reflection “of our longstanding agricultural romanticism [...] compounded by our new-found environmental romanticism,” which cannot compete with the advantages that could be gained from agricultural trade liberalisation (COLLIER 2008).

But, although questions relating to the cultural value of agriculture are interesting and important, in this paper we shall concentrate on a different aspect of a possible concentration of agricultural production resulting from full agricultural trade liberalisation, namely the relationship between concentrated agricultural markets and food security. AMARTYA SEN’s groundbreaking 1981 essay led to a general recognition that famines are usually due to a group of people lacking adequate entitlements to food, rather than a large scale shortage in food supply. This has led to food security being generally defined in relation to access to food: according to the FAO’s 1996 definition, “Food security exists when all people, at all times, have access to

8 Switzerland, Haiti, Norway, Jamaica and Japan should exemplify different facets of domestic agricultural production levels (potentially) falling in response to full liberalisation.

sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life" (FAO 1996). This leads us to the central question of this paper: Does an import-dependent country run a greater risk of being unable to guarantee its citizens' access to food according to the FAO criteria than a country that produces most of the food it consumes?

On one hand, it can be argued that the international market is adequate to secure access to food, especially since it allows countries to share risks across regions. Also, many argue that shifting supplies on the global market creates greater interdependence between countries, and that this contributes to making the world more stable and food secure in general. According to Vasquez, the United States representative to the FAO, the "mutual reliance that exists for food [through the global market] is a good one" (BLAS 2008). Some claim that food imports might even be more reliable than domestic production. Consider the following statement by Block, the Agriculture Secretary under Ronald Reagan, in 1986: "The idea that the [underdeveloped] countries should feed themselves is an anachronism from a bygone era. They could better ensure their food security by relying on U.S. agricultural products, which are available, in most cases at much lower cost" (quoted in IROGBE 2005).

On the other hand, it can be argued that this view is overly optimistic, and that predominantly relying on the international market for food supply implies considerable risks. In particular, there exist concerns that the global market in its current state is not robust enough to guarantee food security for all populations of all countries. Increased concentration of food production might lead to political imbalances, with food used as an instrument of political and/or economic pressure. Such pressure could reduce food security (HAUBERT and COURADE 1998).

3 Market stability

International trade has contributed significantly to increasing food security worldwide. In general, isolated communities are much more vulnerable to periodic food shortages than are communities well integrated into the global marketplace, since such communities have few alternative food sources in bad harvest years. Experience has shown that small-scale subsistence farmers, for example, are relatively vulnerable to food shortages due to inadequate participation in the market, in spite of their proximity to food production.

The 1845–1850 Irish potato blight is a classic example of food producers suffering from a famine while food importers experienced little hardship. In the XIXth century, Ireland was a major exporter of food. Social developments had led to the emergence of a large peasant class that was entirely dependent on potato crops. Farm sizes were too small to grow anything else than potatoes, and the peasants were effectively outside of the monetarised economy. When the potato blight struck, these peasants had no alternative food source, and were not able to acquire food on the market. Their inability to buy food was made more acute by the simultaneous disappearance of the peasants' main source of revenue, that is, their potato crop, together with their food source. Throughout this famine, however, Ireland continued exporting food to the English who could afford it (FRASER 2003).⁹

Integration into a large and diversified market usually increases food security, by providing access to multiple alternate food supplies. Excessive reliance on food imports may carry its own risks, however. Even minor disruptions to the global trading network could have devastating consequences for a country dependent on food imports. Political unrest, a major pandemic, or another extreme event might suddenly disrupt agricultural trade, making it difficult for a country with little domestic food production to supply food for its population.

Even without any major disruption resulting from an extreme event, the situation of countries highly dependent of food imports is not perfectly comfortable. Current global cereal stocks of about 405 million tons are small when compared to the current annual consumption of cereal of about 2126 million tons/year – they correspond to less than 70 days of normal consumption. In addition, production has lagged consumption for the past two seasons. Consumption exceeded demand by 2.6% in the 2006/2007 season, and was expected to exceed demand by 0.8% in 2007/2008 (statistics from FAO 2008d). These statistics highlight the thinness of the global food trading system even under normal circumstances.

Note that a crisis in the global trading network that lasted a mere two months could have devastating effects on the food security of import-dependent countries with average stockpiles. Here we are not talking about extreme

9 A similar example is presented by SEN (1981), who describes the 1972–1974 famine in Ethiopia. In this famine, farmers and pastoralists in the province of Wollo were dying of hunger, although the Ethiopian food supply was not particularly low, and market prices for food (even in Wollo) rose relatively little. SEN argues that a drought caused farmers in Wollo to simultaneously lose their source of food and their source of income, reducing them to destitution and expelling them from a normally operating market.

events (say, events that are likely to occur once in a thousand years), but events that are sufficiently likely during the course of a decade to warrant active consideration in planning. Had the 2003 SARS outbreak not been successfully contained, for example, borders could easily have been closed for long enough to wipe out food stockpiles. Along similar lines, MICHAEL OSTERHOLM (2005), the associate director of the United States Department of Homeland Security's National Center for Food Protection and Defense, noted that an influenza pandemic could close international borders for 12–36 months. We might also worry that a sudden oil shortage due to political instability in one of the major oil producers (Nigeria, Saudi Arabia, or Venezuela, for example) could disrupt industrial farming and international transportation of food supplies, with particularly severe consequences for food-importing countries.

The fact that market integration contributes to assuring food security does not mean that maintaining a certain level of local food production should not also form a part of a comprehensive policy designed to enhance food security. A country that complements market integration with an adequate level of domestic food production will be better positioned to withstand a temporary shortage on the global food markets. A country lacking this base level of domestic production will be more vulnerable to such disruptions on the international market, especially given the very low levels of food stocks discussed previously.

The risk of a shortage in the export market is exacerbated by the fact that most of the food that crosses international borders is produced by relatively few countries. The three largest exporters of rice accounted for 60.5% of global exports in 1998, for example. For maize and soybeans, the corresponding figures were 89.4% and 89.7% respectively (JAPAN AND THE REPUBLIC OF KOREA 2000).¹⁰ Trade liberalisation would be unlikely to reduce these proportions, since the largest current food exporters, such as Argentina, Australia, Brazil and the United States, who have already demonstrated they have a comparative advantage in agriculture, would probably be best placed to take advantage of the resulting new opportunities. Of the current large food exporters, only the European Union, heavily reliant on subsidies under the Common Agricultural Policy (CAP), would be unlikely to remain competitive in an open market.

10 For these statistics, the European Union counts as a single entity.

More generally, in the case of an entirely open international agricultural market, therefore, we might expect to observe a large group of countries dependent on exports from a handful of “bread baskets.”¹¹ Apart from the political implications this might have, which will be discussed later, we must consider that a drought or some other disruption in one of the large food exporters might be sufficient to cause a shortage on international markets, especially given that many models predict an increasing frequency of droughts and other events as a consequence of climate change (POLASKI 2008).¹²

Another feature of the food market that can be of concern is that, recently, the supply of staple foods is having difficulties in matching the growing demand for food (FAO 2008d), implying that production shortages on the global market in the relatively short term should be considered as a relevant scenario. Let us explore such a scenario a bit further: Were a major food exporter suddenly rendered incapable of exporting food due to a crop failure, leading to a production shortage in foodstuffs, food prices would be expected to rise steeply, making it difficult for the poorest net food-importing countries to acquire food from the international market without external financing. Consumption of staple foods is price inelastic, meaning that the amount of food purchased by consumers will not vary with price, as long as the consumers can afford the food (JAPAN AND THE REPUBLIC OF KOREA 2000). A shortage in supply would thus not result in a smooth global reduction in consumption, but would risk excluding consumers in poor countries from the international market.¹³

The supply of food is also price inelastic in the short term. It takes time to get from the first clearing of land to the first harvest, thus the market cannot react quickly to fluctuating prices and/or to shortages on the international market. Supply-demand imbalances could thus last for longer than many countries (especially poor countries) can afford. The fact that agricultural production takes a significant amount of time to launch also means that countries facing a sudden drop in the amount of food available on the

11 It is possible, though, that as a result of liberalisation, the number of major food exporters would increase; this would somewhat relieve the risks associated to production model built on major bread baskets.

12 The long drought Australia has been experiencing since the start of the decade reminds us that extreme weather events can lead to bad harvests even in some of the most fertile regions in the world.

13 For now, global food production is developing just fast enough to match the growth in demand, which has created a somewhat fragile situation on the global market. Of course, though, it might be possible to boost the growth of agricultural production, for example by shifting more aggressively to industrial agriculture and GMOs, and thus relieve part of the current pressure on supply. For the long-term challenges relating to feeding the growing population, see for example EVANS 2009.

international market would not be able to compensate for this shortfall by boosting domestic production.

In other words, relatively normal disruptions may put poor net-food-importing countries in a difficult situation.¹⁴ These countries cannot afford to hold massive emergency stocks of food, and are likely to be the first to face food shortages in the case of a momentary breakdown of the global trading network. In the case of sustained production deficits, they might not be able to afford the increased food prices, and would find themselves excluded from the international market.¹⁵

The situation of Haiti in the 2008 food crisis has demonstrated the effect that production deficits can have on poor countries that are heavily reliant on food imports. In the 1980's, Haiti started importing large quantities of American rice at the expense of protecting its own agricultural sector. This policy, which had the immediate result of lowering Haitian internal food prices, made Haiti dependent on foreign food exports. By 1999, Haiti was importing more than 50% of the food it consumed (FAO n.d.). But, as international food prices started to rise, many Haitians could no longer afford the imported food, which led to wide-spread rioting. Many Haitians themselves recognise the policies that led to the decline of their agricultural sector as one of the primary causes that led to the recent food shortage (WILLIAMS 2008).

In this section, we have seen how populations of countries which do not have a viable amount of domestic food production could find themselves in a less food-secure situation than their counterparts in countries with more developed agricultural sectors. Disruptions to the global market and/or international supply chains could render it difficult for some countries to import food, and food importing countries might feel the effects of production shortages more severely than exporting countries.¹⁶ Of course, the development of international agricultural markets has done much to increase food security globally, and integration into the global market place is crucial for every country. But, in case of extreme events affecting the

14 Developed countries can also face risks in the case of supply-demand imbalances, in particular because of possible export restrictions – this will be discussed in the next section.

15 Some suggest to rely on foreign food aid in case of occasional food shortages in developing countries. While such aid may be necessary to address sudden shortages, it does not provide a long term solution – countries whose economies are donor-dependent have limited political sovereignty, and face the risk of losing their ability to guarantee their citizen's food security in case donors become less generous (BEINTEMA and STADS 2004).

16 Countries with an economy that is too heavily reliant on agricultural exports, though, would also suffer a lot from a bad harvest, because the country would lose a major source of income.

global food market, countries which have supplemented integration into the global marketplace with an adequate level of domestic production will have more options available to react to such events than their counterparts that are fully reliant on food imports.

Some might argue that the various risks discussed above are things of the past, and that the world today is robust enough to be immune to them. Such a claim seems a bit hasty, though: people are known for underestimating the probability of extreme events (DUFFIE, HOREL, SAITA and ECKNER 2006). And, food analysts have been wrong in the past about how stable the international food markets are. Agra Europe predicted in 2005 that “food prices will continue their historic real term decline” (AGRA 2005), but cereal prices ended up almost tripling within 3 years of this statement.

The World Economic Forum report on Global Risks 2008 identified food security and “hyper-optimisation and supply chain vulnerability” as two of the four key global risks that the world faces today (WORLD ECONOMIC FORUM 2008). Its Global Risks 2009 report examines interconnections among global risks, such as how food security relates to climate change, water resources and energy (WORLD ECONOMIC FORUM 2009). The scenarios outlined in these assessments do not support the robustness claimed by those who argue that risk factors only exist in the past. As such, structuring the rules governing the global food market in a way that, while promoting integration, allow countries some room to retain or develop a domestic food supply might not be a bad idea.

4 Export restrictions and the politics of food

The risks presented in the previous section concern all countries heavily reliant on food imports, but can be especially problematic for countries with less financial means. Indeed, in the case of a global production shortage or disruptions to international markets, wealthier countries would be more likely to afford sudden spikes in commodity prices and to develop alternate ways of acquiring food; poorer countries might quickly find themselves in an unsustainable situation, as happened to Haiti in 2008. Another potential failure of the international food market that could affect all food importing countries, though, is the use of export restrictions, where a producing country bans or severely limits food exports in order to keep domestic food prices low.

Supply of food is barely matching demand, as discussed above. Simultaneously, food exports correspond to just over 10% of total production. During the 2006/2007 season only 256 of the 2013 million tons of cereals produced crossed international borders. Consumption of cereals during that period was 2067 million tons, creating a production deficit of 54 million tons, equivalent to more than 20% of all exports (statistics from FAO 2008d).

Consider a food crisis that would diminish global production by as little as 10%. This would drastically reduce the amount of food available for importation. The existence of an international food market depends on some countries having surplus food, hence the small proportion of food that is traded internationally makes the position of food importers even more vulnerable. A production shortage might therefore first impact export markets, since countries typically have as a first priority to guarantee the food security of their own populations.¹⁷ Note that when food prices spiked in 2008, roughly 30% of countries imposed some form of export restrictions (WODON and ZAMAN 2008).¹⁸

The 2008 surge in rice prices illustrates how export restrictions can combine with a production shortfall so as to exacerbate the position of countries dependent on food imports. A moderate rice shortage arose from a combination of a 10-year drought in Australia, pests in Southeast Asia, and a 45-day cold snap in China; that is, several of the major rice producers experienced a simultaneous decline in production due to entirely normal causes. This led to export bans or restrictions from some of the world's largest rice exporters such as Vietnam, India, Cambodia and Egypt who desired to keep domestic rice prices in check. Exports declined far beyond what would be expected from the reduced production (GOODSPEED 2008). It is estimated that the volume of rice traded on international markets diminished by a third as a result of these events. Major rice importers such as the Philippines had difficulty importing enough rice to meet domestic demand (PHILIPPINE DAILY INQUIRER 2008). Rice exporters themselves acknowledged the delicate situation of rice importers. Chookiat Ophaswongse, president of the Thai Rice exporters Association, remarked: "I have no idea how importing

17 Ethical questions are also beginning to arise concerning whether it is appropriate to import food from a country that is facing a food shortage. When the EU first increased its cereal imports to meet its biofuel targets, some questioned whether such imports from poor countries were appropriate. Developed countries have been portrayed as *seizing* the food of the world's poorest to fuel their cars (URIBE 2008). More recently, this argument has appeared also in relation to food imports for human consumption, as illustrated by a 2008 controversy concerning whether it was ethical for Switzerland to compensate the shortfall in its domestic production of potatoes by importing potatoes from Egypt, thus taking food from a country facing food shortage (24 HEURES 2008).

18 This number is based on a World Bank survey of 118 countries.

countries will now get rice” (quoted in BLAS and KATE 2008). In the case of a global food shortage, food importers will usually be the first to face problems, because the first priority for any food producing country is to feed its own citizens.¹⁹

Current WTO rules, meanwhile, do very little to protect food importers from export bans. Although Article XI of GATT (1947) only permits export restrictions to relieve “critical shortages” of foodstuffs, this has not stopped several countries from introducing such restrictions. Export taxes can have a similar effect of reducing supplies from reaching the world market, but there are no effective rules to restrict or limit WTO member countries from applying them. Even though the Doha Round of trade negotiations aims at drastic reduction of various forms of measures countries can take to support their domestic production, there is little hope that the WTO will establish any strong rules concerning export restrictions any time soon (WTO REPORTER 2008).

For now, export restrictions are addressed at the WTO in Article XI of the GATT 1947, which essentially bans all import and export restrictions other than taxes and duties. Article XI allows, however, for exceptional circumstances under which export restrictions can be used. In particular, Article XI:2(a) allows for “export prohibitions or other restrictions temporarily applied to prevent or relieve critical shortages of foodstuffs or other products essential to the exporting contracting party.”

There has been much discussion about what counts as a “critical shortage” that could be invoked in order to put export restrictions in place. There is general agreement that the term “critical shortage” should be taken in a fairly broad sense. The sub-committee dealing with this Article at the 1948 Havana Conference “was satisfied that the terms of paragraph 2(a) ... are

19 A similar story (although much more severe) is presented by SEN (1981) concerning the Bengal famine that occurred during the Second World War. Between 1942 and 1944, approximately 3 million people died of starvation in Bengal, a province of India. The supply of rice (the main staple), though, was not particularly low that year – indeed, the region had faced a worse harvest just a couple of years earlier. So why was there a famine then? According to Sen, what happened is that inflation linked to the war effort started raising food prices. Wages, though, did not follow, and many groups of people who were dependent on wages, such as agricultural laborers and craftsmen, started having a hard time affording food. The threat of hunger and rising food prices, meanwhile, led those who could afford it to hoard food. This led to less food on the market, and a vicious cycle of increasing prices that ended up driving many people out of the market. This famine was, it seems, largely caused by a market failure. As such, those who needed to buy food suffered most from the famine, while farmers suffered significantly less. Now, although this famine could not have happened without extremely bad management, and we should hope that our modern global governance systems are a lot better, this famine gives us another example of the human tendency to hoard resources in times of need, and often rather starve a neighbor than face need in one’s own house.

adequate to allow a country to impose temporary export restrictions to meet a considerable rise in domestic prices of foodstuffs due to rise in prices in other countries." (WTO 1995) It was also agreed that Australian export prohibitions on merino sheep were covered by paragraph 2(a) (WTO 1995), even though these measures were primarily aimed at maintaining the Australian wool industry (that is these measures had nothing to do with preventing shortages of food).

Moreover, it should be noted that paragraph 2(a) allows WTO members to use export restrictions not only to "relieve" but also to "prevent" critical shortages, which according to the preparatory work of the provision should be interpreted as "enabling a member to take remedial action before a critical shortage has actually arisen." (WTO 1995). It thus follows that already a risk of a critical shortage could be considered a sufficient justification to invoke GATT XI:2(a). Some observers, in fact, are concerned that, in the context of Article XI, the term "critical short-ages" could be interpreted so broadly as to justify export restrictions under Article XI.2(a) in almost all cases where a country would have any interest in using them; indeed, no export restrictions established invoking paragraph 2(a) have ever been found illegal (FINN 2008).

Article XI thus provides only a very weak framework in which to limit export restrictions. And, what is more, paragraph 1 does not apply to export taxes and duties that may have an equivalent effect as export restrictions. Members are essentially free to impose and/or change export taxes as they wish without infringing WTO rules (FINN 2008). Hence, if a WTO member would not be considered eligible to impose export restrictions under paragraph 2(a), it could still render exports impractical through high export tariffs.

Some countries, especially Japan and Switzerland, have attempted to push for stronger disciplines on export restrictions in the context of the Doha Round at the WTO. They have cited in particular the effect export restrictions had on international food prices (BRIDGES WEEKLY TRADE NEWS DIGEST 2008.) No real progress in restricting the permissible grounds for the use of export restrictions is expected as part of the Doha Round, however. All that is currently on the table is increased transparency²⁰ in the pro-

20 There have been discussions on what kind of notification obligations WTO members wishing to impose export restrictions should have, and about a possible right interested importing countries should have to consult with the country imposing such restrictions.

cess of imposing export restrictions as a part of Article 12 of the Agreement on Agriculture (FINN 2008).

To summarise, there appears to be very little real political effort to limit export restrictions in the context of the WTO, or otherwise. The final declaration adopted by the June 2008 FAO High-Level Conference on World Food Security failed to even specifically mention the issue of export restrictions (FAO 2008b). The small size of food export markets combined with the lack of effective international mechanisms to guarantee the security of supply in case of production shortfalls in exporting countries should thus be considered as a legitimate concern to countries relying heavily on food imports.

Another factor to be considered is whether food exporting countries stand to gain excessive market power. Talk in spring 2008 about a South-East Asian rice cartel by Thailand has illustrated this possibility. Vichienchot Sukchokrat, a Thai Government spokesman, defended such a cartel: "Though we are the food centre of the world, we have little influence on the price. With the oil prices rising so much, we import expensive oil but sell rice very cheaply, and that's unfair to us and hurts our trade balance" (THE AUSTRALIAN 2008). Thailand has dropped the idea for now, but the prospect of such a cartel reminds of the weak position of importing countries in the face of such a cartel.²¹ In the long run, were food exporting countries to impose measures that were too unfavorable to importers, importing countries could attempt to restart their own agricultural sector. But this might prove quite costly, and lead to a problematic transition phase.

Also, there exists the classic concern that excessive reliance on food imports would risk undermining the political sovereignty of import-dependent countries, in particular through embargoes. Food embargoes were regularly used during the last century. The United States, for example, imposed food embargoes on Cuba and the Soviet Union at various times over the past 50 years. A concern is that food could again be used as a means of political pressure in a global market in which food production is highly concentrated. It is generally agreed, of course, that: "Food should not be used as an in-

21 The WTO does not provide any comprehensive rules on how domestic and international competition policy instruments, such as antitrust or competition laws, interact with international trade. This was one of the so-called "new issues" that was addressed under the work program set out in the 2001 Doha Ministerial Declaration. However, in July 2004 the General Council of the WTO decided that the interaction between trade and competition policy (in addition to investment, and transparency in government procurement) would no longer form part of the work program and that, therefore, no work towards negotiations on any of these issues would take place within the WTO during the Doha Round (WTO 2004).

strument for political and economic pressure" (FAO 1996, reiterated FAO 2008b), but such declarations are not legally binding, and even binding legal instruments are not necessarily respected in times of crisis.²²

Thus, even though, currently, export restrictions are probably the most problematic aspect of food politics from the point of view of food importing countries, other risks associated to the politics of food should not be taken too lightly either. Recognising the political and economic risks associated with reliance on food imports, many countries have argued that maintaining domestic food production was essential to their national interests. For example, President SARKOZY of France²³ argued that, "for reasons of independence and food security, the food Europeans consume cannot depend on surpluses from foreign countries, over whose conditions Europeans have no control"²⁴ (2007). On a similar note, countries such as Japan and South Korea, which heavily subsidise their domestic farming sectors, defend their policies with the argument that "[d]omestic production plays a role of insurance against risks such as import interruptions, poor harvests in exporting countries, etc." (JAPAN and THE REPUBLIC OF KOREA 2000) Some major food importers concerned about the sustainability of their food security have even sought long-term food purchase agreements, as well as leasing or purchasing agricultural land in countries that are more favorable for food production in order to secure their food supplies.²⁵

The risks associated with market stability and the use of export restrictions discussed above, while being especially problematic for poor countries, can potentially affect all countries. As regards wealthy countries, the counter argument is that they should not need to be concerned about food security even if fully reliant on food imports, since there are plenty of countries that would be happy to sell food to those who can afford it (for example, TIMMER 2008). In normal market conditions, this is true. However, the scenarios discussed in the previous section, combined with the lack of effective disciplines on export restrictions, make food security an issue for even wealthy import-dependent countries. Reacting to the 2008 food crisis, Nakamura, head of Japan's food education council, stated: "Until now, Japan

22 Consider, for example, the fate of the ban on chemical weapons during the First World War.

23 Although Sarkozy's comments were perhaps partially motivated by a desire to obtain rural votes, his comments still illustrate that people in power are concerned about the stability and reliability of food import markets.

24 "Pour des raisons d'indépendance et de sécurité alimentaires: l'approvisionnement des européens ne peut pas dépendre de pays étrangers, au surplus exposés à des crises sanitaires ou des aléas climatiques sur lesquels nous n'avons aucune maîtrise."

25 WORLD ECONOMIC FORUM 2009 mentions investments by Saudi Arabia, China and South Korea in Kazakhstan, Mozambique and Madagascar, respectively. See also EVANS 2009.

could rely on purchasing food from anywhere in the world because consumers can afford to pay. In the future, it may be impossible to import even if we have money" (quoted in BIGGS and SAKAMAKI 2008).²⁶

5 Agricultural trade liberalisation and poverty

We have thus far explored risks to food security of import-dependent countries in an increasingly liberalised marketplace. The need to mitigate these risks suggests that rules ensuring the security of supply and policies aimed at maintaining a level of domestic agricultural production in all countries might be desirable even within a liberalised framework. Before supporting such policies, though, we should still check to see if they would have excessive downsides to them. In particular, many have argued that full agricultural trade liberalisation is a good tool to fight poverty.²⁷ In this section, we examine agricultural trade liberalisation as a tool to fight poverty, to explore how concerns about poverty alleviation relate to food security interests.

Many place high hopes in a further organised liberalisation of agricultural trade in the context of the WTO that could provide a rules-based, level playing field between farmers in developed and developing countries (AKSOY and BEGHIN 2005). In the 1980's and 90's, the artificially low international food prices caused by subsidies and import tariffs in developed countries put farmers in developing countries at a disadvantage relative to their counterparts in developed countries, and discouraged investment in agriculture in many developing countries. The market was simply not profitable enough for them (DIAZ-BONILLA, FRANSEN and ROBINSON 2006). But a fair and equitable rules-based system should lead to agricultural investment in developing countries being more profitable, thus leading to more investment in rural development and reduced rural poverty.

While agriculture represented only 3.2% of the global GDP in 2005, (WORLD BANK 2008) many argue that, since a disproportionately large number of the world's poor gain their livings from agriculture, a boost to the agro-eco-

26 See also the WORLD ECONOMIC FORUM Global Risks 2008 report which notes that "more recently, concerns about sustainable food security have spread to developed countries which have not generally considered themselves exposed to food insecurity. For example, the United Kingdom has historically relied on the depth of international markets to ensure food supplies at a reasonable price, but this model may be put under stress in the future." For a closer assessment of the UK food supply, see AMBLER-EDWARDS, BAILEY, KIFF, LANG, LEE, MARSDEN, SIMONS and TIBBS 2009.

27 One number that has often been presented is that the elimination of all trade barriers would lift 300–500 million people out of poverty (USTR 2005).

nomy could have a huge effect on poverty. It is estimated that 75% of the world's poor live in rural areas (INGCO and NASH 2004). Those poor rural areas that have favorable climate conditions should in principle have a comparative advantage in agriculture. While cautioning that it would be incorrect to generalise from the experience of any particular countries or simple net consumer/net producer ratios to judge the effects of food price increases on poverty, POLASKI argues that, under appropriate conditions, rising international market prices²⁸ associated with the removal of subsidies and tariffs might improve local economies in rural areas in ways that also benefit non-farming households (POLASKI 2008).

Increased agricultural trade could also provide new export opportunities to more efficient producers in developing countries. Some models predict that food exports from developing countries should increase substantially if the US and EU were to lower their agricultural import tariffs²⁹ (see ROBINSON and THIERFELDER 2006). It is argued that "general GDP growth has had less impact on poverty reduction than growth in the agricultural sector, partly because of the high level of poverty in rural areas of developing countries" (KAYA, KAYA and GUNTER 2008). This means that, if all these models are correct, liberalisation of agricultural trade could be a useful tool to fight poverty.

Looking at the matter from the perspective of poor food-importing countries, though, others argue that, if the international agricultural market were fully liberalised, the expected rise in international food prices and decrease in exports from currently subsidised producers would hit the world's poorest hard, possibly leading to food shortages in areas that could not cope with this price increase (for example URIBE 2008). In this regard, it should be noted that most least-developed countries and many other developing countries are net food-importers. The counter argument is that the welfare increases due to more open agricultural markets would compensate for these price increases in most cases, and that the groups that would actually be hit hard would be rare enough that their situation could be saved with targeted aid (see AKSOY and BEGHIN 2005).

28 Although further liberalisation of agricultural trade would probably decrease consumer prices of food – particularly in those developed country markets that currently provide a high level of protection to their domestic producers – international commodity prices would be likely to rise, at least initially (RODRIG 2008). Indeed, protective policies tend to reduce food exports to many developed countries, and also encourage farmers in these protected markets to over-produce and export their surplus cheaply. This artificially lowers international food prices (OSTRY 2004), which means that reducing these distortions would be accompanied by a rise in international market prices.

29 According to ROBINSON and THIERFELDER (2006), eliminating import tariffs would have a much stronger effect in increasing export opportunities in developing countries than reducing subsidies.

These two considerations are reflected in the Decision on Measures Concerning the Possible Negative Effects of the Reform Programme on Least-Developed and Net Food-Importing Developing Countries, adopted in 1994 at the same time as the WTO Agreement on Agriculture. Under the Decision, "Ministers recognise that the progressive implementation of the results of the Uruguay Round as a whole will generate increasing opportunities for trade expansion and economic growth to the benefit of all participants." But they also "recognise that during the reform programme leading to greater liberalisation of trade in agriculture least-developed and net food-importing developing countries may experience negative effects in terms of the availability of adequate supplies of basic foodstuffs from external sources on reasonable terms and conditions, including short-term difficulties in financing normal levels of commercial imports of basic foodstuffs" (GATT 1994).³⁰

In light of the current food price hike, people are becoming more aware of the risks that rising food prices could present for poor net food consumers, particularly in net food-importing developing countries, and the notion that the increased agricultural trade associated with free markets would be beneficial to everyone has been constantly challenged (see for example RODRIK 2008). Others have questioned whether trade liberalisation without some explicit pro-poor safe-guards would benefit the poor much. Some research suggests that agricultural development is likely to be successful in fighting poverty only in societies that are not too polarised. In societies where the income gap between the rich and the poor exceeds twice the average income, even economic development linked to agriculture might not benefit the poor much (TIMMER 2002). But, in many least-developed countries, that is exactly those countries where the need to fight poverty is most pressing, the income difference between the urban elite and the urban and rural poor is huge. This might undermine the idea that increasing agricultural trade would effectively fight poverty.

Some also worry how competitive the poorest farmers could be on an open market. According to POLASKI (2006), small-scale subsistence farming is not generally competitive on the global marketplace. This means that simple agricultural trade liberalisation would probably hurt the livelihoods of most of the world's poor farmers, who are mainly subsistence farmers. POLASKI thus suggests that a form of trade liberalisation that would allow develop-

30 This decision is referred to in the 1994 WTO Agreement on Agriculture, and so is legally binding. Many argue, though, that the text of this decision is too vague to be enforceable, and, indeed, there has never been any explicit follow-up to this decision.

ing countries some policy space to protect their agriculture would be better for these countries. Her models also predict that these protective measures would not have much impact on the benefits gained from trade liberalisation by net food-exporting countries. Such considerations remind us that, even though trade liberalisation potentially can have positive effects, we should not apply orthodox liberalisation theory to all markets, without considering their particular characteristics.

Finally, least-developed countries currently benefit from preferential access to protected developed country markets. For example, the EU has eliminated all duties and quotas for (almost) all products originating from least-developed countries (EUROPEAN COMMISSION 2001). Further liberalisation would erode this relative advantage, and they might lose their export markets to more efficient producers. Some least-developed countries have expressed serious concerns about the potential loss of this advantage (MILLER 2004). And even proponents of further liberalisation, such as the World Bank, while arguing that such preference systems have multiple drawbacks, have endorsed publications that acknowledge "the erosion of preferences to be a serious concern for poor countries." (BOUËT, FONTAGNÉ and JEAN 2006) It remains subject to debate whether, on balance, least-developed countries as food exporters would benefit more from fully open markets or from the preferential access to developed country markets that they currently enjoy.

The emerging picture seems to be that, although agricultural trade liberalisation can be an efficient tool in fighting poverty, this liberalisation will have the most social benefits if it is implemented in a pro-poor way; full liberalisation does not seem to be a necessary requirement for the desired poverty alleviation. As such, the challenge becomes how to implement agricultural trade liberalisation in a way that gives countries the necessary policy space to ensure an acceptable level of domestic food production, while encouraging investment in agriculture in developing countries, and giving successful farmers increased export opportunities.³¹

31 The challenges related to liberalising agricultural trade in a way that takes into account the needs of poor farmers has consistently been highlighted at the WTO Doha Round negotiations. One of the main reasons for the failure of the talks among ministers at the WTO in July 2008 was the extent to which developing countries should be allowed to use the special safeguard mechanism (SSM) to raise tariffs temporarily to deal with import surges and price falls. The main contentions were how big the import increase would need to be to trigger the use of the SSM by a developing country, and whether such countries should be allowed to go beyond their pre-Doha Round bound rates in applying it. One of the arguments used by the proponents has been that protecting poor farmers against such volatility of markets would enhance long-term food security. An argument used by those in favor of more restricted use of SSM, including food exporting developing countries, is that this would undermine poor farmers' opportunities to export in order to escape poverty. For an overview of various proposals on the negotiation table, see WTO 2008.

6 Conclusions

In this paper, we have explored the legitimacy of using concerns about food security to justify policies aimed at maintaining an adequate level of domestic food production in countries whose agricultural sector would not be competitive in the global market without any protective measures. On one hand, international trade has contributed significantly to increasing food security worldwide. On the other hand, if the considerations presented in this paper are sound, the particular structure and characteristics of the international food market present non-negligible risks to countries relying heavily on food imports for their food security, thus justifying the use of policy measures to mitigate such risks.

The factors that contribute to these risks include: the small size of international export markets relative to total production, the price-inelasticity of both demand and supply for food, the small number of countries that are significant net food exporters, and the fact that food exporters facing temporary decreases in production would be more likely to curb exports than internal consumption. All these factors imply that production shortfalls risk causing food shortages in countries relying heavily on food imports.

The risks associated to production shortfalls were illustrated by the 2008 crisis in the rice market, where a slight decrease in production levels made many key exporters impose export restrictions and left importers in short supply for rice. This should serve us as a warning of what could happen in case of a more severe production shortfall.

Other concerns have also been associated to over-reliance on food imports. Countries predominantly dependent on foreign food supplies could face food shortages in case of an extreme event affecting the global supply chain, and would also face the risk of food exports being used as a tool of political pressure. These concerns are exacerbated due to the lack of any effective rules that would ensure the security of supply in the face of export restrictions or similar measures. All these factors make the position of being heavily reliant on food imports vulnerable.

This paper also recognises that increased agricultural trade liberalisation would have multiple benefits. Many policies used by developed countries to protect their own agriculture have led to dumping of cheap food onto developing markets. This has hurt the development of agriculture in many of

the poorest countries. Liberalising agricultural trade could help revitalise their agricultural sectors.

The question now becomes: how can we liberalise global markets in a way that would encourage agricultural development in developing countries, while leaving all countries the policy space to protect their populations' food security? The first steps are clear. Export subsidies, and other similar policies that significantly distort global markets, but only have dubious value in protecting food security, should be eliminated as much as possible.

Subsidies and policies that are mainly designed to have effect on production for the domestic market are, however, more complicated. This paper has presented the argument that appropriate protective policies would mitigate the food security risks associated with an increased liberalisation of agricultural trade. Other research has also suggested that it is in the interest of countries with large populations of subsistence farmers to implement some protective policies for these farmers (POLASKI 2006, 2008). A global trading system that allows all countries some policy space to protect their domestic interests would probably be beneficial to a large majority of countries, as long as it was ensured that these policies did not significantly distort global markets.

It is often argued that poor countries can legitimately use concerns about food security to justify their agricultural policies. Many also argue that big countries can legitimately seek an adequate level of independence from food imports, because of the size of their demand relative to the size of international markets (for example TIMMER 2008). However, this argument based on the thinness of the international market is hardly reassuring for small importers heavily reliant on the market for their food supply. This paper suggests that the possibility to determine agricultural policies in response to concerns about food security should be extended to all countries. The desirability and need of all countries, whether rich or poor, big or small, to have an adequate policy space to safeguard the essential food security interests of their citizens should be explicitly recognised in the context of negotiations aiming at further trade liberalisation.

The recognition of food security as a legitimate concern for all countries does not necessarily contradict efforts to further liberalise international trade. On the contrary, we might hope that, in a context where citizens were confident that their governments would be in position to take necessary measures to guarantee their food security, support for open markets and

trust at the international level would increase, creating a political climate more favorable to further opening of trade.

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