

# THE IMPACT OF RUSSIA'S 2010 GRAIN EXPORT BAN

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*This report looks at the short- and long-term impact of the grain export ban issued by the Russian government during 2010-11. It shows that the ban did not bring food prices down in Russia, that it increased the price of grain internationally, and helped create an environment where price spikes and general instability are far more likely in the future. The report concludes with recommendations for alternative policies to increase food security in the future.*

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## EXECUTIVE SUMMARY

One of the key factors in global food price volatility is the way that states react to disruptions in supply. There is a strong inclination for exporters to impose export bans in reaction to potential food price increases in their own country. This reaction, however, is a poor strategy for managing food prices at home and has a range of unintended consequences for the domestic and international economy. In general, export bans exacerbate problems created by interruptions in food production and may damage incentives to increase production at home long-term.

This research project looks at how these issues played out in the case of the Russian grain export ban that was imposed in August 2010. In the summer of 2010 Russia experienced a heat wave that included the highest temperatures recorded in 130 years. As news of this disaster, and the resulting drop in Russia's grain crop became known, international grain prices increased dramatically. In response to this increase, and in an effort to protect local consumers and local meat producers, the Russian government instituted a grain export ban that pushed grain prices higher in the international markets.

The export ban is set to end on 1 July 2011. Now, therefore, seems a good time to reflect on its effectiveness. The report looks at the short-term and long-term impact of the ban. In the short-term, it focuses on the impact of the ban on food prices inside Russia and consequently looks to see if the ban helped vulnerable Russian families. It also looks at the short-term impact of the policy on the countries that buy Russian grain. In the long-term, it looks at the impact of the ban on global food price instability and on investment in the Russian agricultural sector.

### Main findings

#### ***Short-term domestic impact***

1. The ban did not bring down food prices inside Russia. Food prices generally continued to rise after the ban was imposed. Flour prices went up by 18 per cent from July to December and bread went up by ten per cent.
2. The impact of this price rise clearly hit Russia's poorest hardest. The average price of the official subsistence basket of food rose even more than bread prices. In most of Russia's regions, particularly those directly affected by the drought, the subsistence basket went up by 20-30 per cent between July 2010 and March 2011.
3. As the cost of the subsistence basket provides a bench-mark for poverty in Russia, and as incomes have remained flat during this period, we can say that poverty will almost certainly have gone up as a result.
4. Since poverty is usually most concentrated in young people, they were probably the hardest hit. Women were also probably worse hit than men. According to official statistics, this gendered variation was small, but it may be worse when one takes into account the greater role played by Russian women in providing food for their families.

#### ***Short-term impact internationally***

1. The ban did increase prices outside Russia. In countries that imported Russian grain, the most immediate impact of the import ban was to require countries to pay the new and higher international rates for grain that was contracted at lower rates.
2. The export ban set prices higher still across the world. The immediate impact of the ban was certainly a further rise in prices, as we saw in the reaction of commodity markets immediately following the announcement of the ban. This impact was felt by everyone and not just Russia's customers.
3. Inside importing countries, the negative impact of the rise in prices depended on the way governments responded.

- a. Egypt was Russia's biggest customer and the Egyptian government committed to maintaining the price of the cheapest bread. This was enormously expensive for the government and ultimately the population as a whole, but will have minimised the impact of the price-rise on the poorest households.
- b. In contrast, Pakistan - Russia's fourth biggest customer and also one of its poorest - saw a 16 per cent increase in the price of wheat, just as the government was reducing food price protections. As a result, according to the World Bank, Pakistan saw a 1.6 per cent increase in poverty over this period.

### ***Long-term impact***

1. By instituting a ban, Russia and other exporters helped create an environment where price spikes and general instability are far more likely in the future. If grain importers expect small interruptions in supply to be met with protectionism on the part of exporters, they will be more likely to increase demand whenever they are presented with supply problems, thus exacerbating those problems.
2. The export ban will probably lower investment in grain production. One of the ironies of the export ban is that it simultaneously increased prices worldwide and yet made it impossible for Russian farmers to profit from them. Export bans aim to send prices lower. To the extent that they succeed, they create lower incentives to increase investment in grain production and less cash with which to do it.
3. Protectionism in the meat sector, which is prevalent in Russia, keeps both meat and grain prices higher as it does not allow international competition for meat, and increases the demand for domestically-produced grain.
4. Export bans damage Russia's reputation as a good supplier. This may negatively affect overall demand for Russian grain in the future and, at the least, will damage the ability of Russian traders to engage in forward-pricing. This will increase the unpredictability facing Russian farmers and traders.
5. Reduced investment in agriculture will lead Russia to under-use a key resource. Russia clearly has massive untapped opportunities in grain production. Even if some of the agricultural land that was farmed under the Soviet system was fairly marginal, as grain prices continue to rise, increasingly large section of Russia's territory will become viable for cultivation in the future.

### **Recommendations**

1. Export bans should be avoided. While they may be politically necessary in extreme circumstances, they are always unreliable economic management tools.
2. If the aspiration is to keep domestic food prices low then subsidies to the final producer of the food (like a bread or flour producer) are more likely to be effective than bans on export.
3. Policies aimed at alleviating the difficulties faced by vulnerable groups need to target those groups. Export bans, even if they were to work as planned, are universal and so have very small impact on anyone in particular.
4. Russia should try to balance its support for the meat industry with greater support for investment in grain as this would help both industries long-term.
5. Russia should try to avoid the use of import quotas to support the meat industry as these push up meat prices and increase pressure on grain production. They are also less effective than market solutions for forcing efficiency gains.

The Russian government should engage with other exporting countries to try and agree principles to manage supply interruptions without the use of export bans. This could help Russia gain even wider support for its WTO membership.

# 1 History of food production and food security in Russia - overview

## 1.1 Structure of agricultural production in Russia

To understand the impact of Russia's food security and agricultural support strategy, we need to look at the broad trends of Russian agriculture as they have emerged in the post-Soviet period. Under the Soviet system in the 1970s, Russia became a massive producer of meat. This policy, which was designed to increase meat consumption, required huge price subsidies on animal feed, prompting a major expansion of Russian grain production and large net imports of grain.

Soon after the collapse of the Soviet system, Russia proved relatively inefficient in the production of meat. As a result, there was a massive contraction of domestic meat production in the post-Soviet period and a consequent increase in meat imports. Conversely, the reduced demand for feed-grain freed up grain production so that Russia became a large exporter even though production had fallen.

Since 2000, in value terms, agricultural production has been evenly split between growing crops and livestock<sup>1</sup>, and while there has been growth in both imports and exports, imports have increased far faster in absolute terms. In 1995, imports of foodstuffs and agricultural raw materials were worth \$13.2bn. Following the financial collapse of the mid 1990s, that dropped to \$7.4bn by 2000, but recovered to approximately the same level of \$13.9bn by 2004. From there the value of imports rose rapidly, reaching \$35.3bn in 2008.<sup>2</sup> In comparison, in 1995, Russia was exporting \$1.4bn of foodstuffs and agricultural raw materials. By 2005, this was \$4.5bn and by 2009 \$10bn.<sup>3</sup>

Even though food exports are low relative to imports, food represents a very significant proportion of Russia's total non-oil exports. In 2009, Russia's total exports were around \$302bn (down from a high of \$468 billion in 2008). Only around 14 per cent of this was unconnected to the extraction industry (if we count industries like chemical and rubber production as 'extraction related'). Of the \$41bn of non extraction-related business, 44 per cent was the export of machinery, 24 per cent was foodstuffs and agricultural raw materials and 20 per cent was wood pulp and paper products.<sup>4</sup>

However, while the agricultural sector as a whole has certainly recovered, the profile of that recovery is significantly different in the case of grain production and livestock. Therefore, for the rest of this overview we will distinguish between the two.

### 1.1.1 Grain

Grain production saw gradual increases between 2000 and 2008.

**Figure 1: Production of Grain 1992-2009 (million tons)**

	1992	1995	2000	2005	2006	2007	2008	2009	% of total grain crop in 2009
Wheat, winter and spring	46.2	30.1	34.5	47.6	44.9	49.4	63.8	61.7	64%
Barley, winter and spring	27	15.8	14	15.7	18	15.6	23.2	17.9	19%
Oats	11.2	8.6	6	4.5	4.9	5.4	5.8	5.4	6%
Rye, winter and spring	13.9	4.1	5.4	3.6	3	3.9	4.5	4.3	4%
Corn for grain	2.1	1.7	1.5	3.1	3.5	3.8	6.7	4	4%
Other (legumes, millet, buckwheat and rice)	6.39 2	3.06	3.88	3.28	3.95	3.41	4.16	3.28	3%
Total	106. 792	63.4	65.3	77.8	78.2	81.5	108	96.6	100%

*Ref: Federal State Statistics Service of the Russian Federation (Reviewed April 2011)*

The most striking element of this overall picture is that production went up by around 50 per cent from 2000–2009 (more if you take 2008 as the high-point). This is not the result of increased land-use. As a group of Russian agriculture analysts have observed:

The factors that explain why grain output has grown in the decade do not include a rise in grain production area. Average annual Russian grain area over 2001–08 was 45 million hectares, a drop from 50 million hectares over 1996–2000, and a large fall from 65 million hectares over 1987–90.<sup>5</sup>

Rather than the expansion of land, improved yield is probably the result of the adoption of better management practices, investment in physical infrastructure (supported by some government finance), and good weather. Eugenia Serova argues that an important factor in this process has been the gradual movement into the market of integrated agricultural ‘operators’ that bring a combination of technology, investment and better management, particularly in the more efficient southwest of the country.<sup>6</sup>

However, in explaining the success of Russian wheat production it is also important to acknowledge that Russia, prior to 2010, had experienced unseasonably good weather for the better part of a decade.

Russia’s average annual grain yield over 2001–08 was 1.83 tons per hectare, compared to 1.30 over 1996–2000....The weather indicators show that in every year during the second half of the 1990s, Russia had unfavourable weather for grain, *except for 1997*, while in every year during the 2000s, it has had relatively

good weather, *except for 2003*. Also, the surge in grain output in 2008 coincided with highly favourable weather.<sup>7</sup>

This surge in production volumes has also seen Russia become an extremely significant exporter of grain.

**Figure 2: Exports of Wheat and Rye 2006-2010 (Calendar Year)**

Exports of wheat and rye	2006	2007	2008	2009	2010
Volume (million tons)	9	14	12	16	11
Total value (\$m)	1319	3544	2875	2624	1849
Price per ton (\$)	142	251	245	163	175

*Ref: Deduced from Federal State Statistics Service of the Russian Federation (Reviewed April 2011)*

It is worth noting that average annual price fluctuations have been severe. In 2007 prices rose sharply and stayed high for two years, and this, even more than the increase in production, was the main determinant of increased revenue. Conversely, while 2009 was the biggest export year in volume terms, back-sliding of the price meant that the overall revenue was somewhat lower. In 2010, exports were down about one-third, reflecting the ban which had been in place for the last third of the year.

As one might expect, the significant price increase in 2007 and 2008 had a hugely positive effect on the profitability of the industry and the cash-flow available for investment. A national report on the implementation of the 2009 state programme on agricultural development suggested that, in the absence of subsidies, grain produced only a 17 per cent profit on sales in 2006 and 2009, but in the two years where prices went up dramatically the return on sales was more than 50 per cent. More significantly, in our discussions with experts, this was usually considered the one clearly profitable crop.<sup>8</sup>

Russian agricultural production is fairly concentrated in the south-west of the country.

**Figure 3: Gross Production of Grain by Region (Million Tons)**



	2007	2008	2009	% total (2009)
Southern Federal District	23.8	37	28.9	30%
Central Federal District	14	23.9	21.6	22%
Volga Federal District	22.3	27.2	21.7	22%
Siberian Federal District	15	13.9	18.3	19%
Urals Federal District	5.3	5.2	5.3	5%
Other	1.1	1.1	1.2	1%
<b>Total</b>	<b>81.5</b>	<b>108.2</b>	<b>97.1</b>	

*Ref: Deduced from the Federal State Statistics Service for the Russian Federation (Reviewed April 2011)*

As the table shows, 74 per cent of production comes from the combination of the Southern, Central and Volga regions of Russia, which together make-up the south-west 'corner' of the Russian federation. Only 19 per cent comes from the massively larger Siberian Federal District and a barely negligible amount comes from the rest. This is significant, for our purposes, because it is in those regions with highest production that the heat-wave had the greatest impact.

### **1.1.2 Meat**

Meat production has also seen impressive growth over the last decade. Total production volumes increased by about 50 per cent in the ten years from 2000-2009, though the increases were uneven across different sub-sectors. Beef production actually fell by about 10 per cent in that period, while pork production went up by 40 per cent, and production of poultry expanded by 230 per cent.<sup>9</sup> Pigs and poultry have tended to do better because the industry as a whole is more concentrated and developed, and because they are more responsive to capital investment as their life-cycle is shorter.<sup>10</sup>



The same period, however, has seen a gradual shift in the production of meat away from peasant farmers to larger agricultural businesses. In 2000, large agricultural enterprises were responsible for 40 per cent of meat production, but by 2009 they were responsible for 57 per cent.<sup>11</sup>

Meat is important for our purposes as a food group, but also as a large consumer of grain. Large quantities of wheat are consumed directly as animal feed, and so increases in locally-produced pigs and poultry result in increased demand for grain and higher prices. While the grain used for human consumption is generally different from that used for animal feed, the two types of grain compete for use of the same land, and high-quality grain which could be used for people is sometimes consumed as animal feed. As one USDA report highlights, 'Outdated transportation, storage, and milling infrastructure sometimes result in feeding food-quality wheat to poultry and pigs'.<sup>12</sup>

The increase in the production of meat has certainly been driven by government support. As we will suggest below, while the Russian government has intervened to stabilise fluctuations in grain prices, the bulk of government support for agriculture has been directed at the meat-producing sector. This support has included significant subsidies for investments, but perhaps more importantly, large barriers to trade. As we will discuss later, this is significant because of its impact directly on meat prices and indirectly because of its effect on the price of grain for food.

## 1.2 Russian agricultural policy up until 2010

While President Yel'tsin offered some support for agricultural producers in the first few years of the 1990s, this quickly evaporated. As Stephen Wegren, a researcher on Russian food security, comments, 'From the end of 1993, most financial advantages [to agriculture] disappeared and private farming essentially was dropped as a priority for policy-makers for the remainder of the Yel'tsin period'.<sup>13</sup>

However, the Yel'tsin years can be seen to have set the tone for agricultural policy in a different way. The uncertainty of agricultural support in the 1990s and Yeltsin's liberal market reforms failed to create a recovery in agricultural production. This set the political environment for a far more intrusive agricultural policy. On top of that, the 1998 financial crisis saw dramatic increases in food prices and this reaffirmed food prices as an important political issue.

In 2005, the Russian government highlighted agriculture as a national priority and over the next two years increased spending on the sector by more than 50 per cent in terms of inflation adjustment.<sup>14</sup> The general terms of the current Russian agricultural policy were laid out in 2007 in the Programme for the Development of Agriculture, Regulation of Commodity Markets and Rural Development for the Period of 2008-2012. This was based on the Law on the Development of Agriculture that went into effect the same year. As the title suggests, this had multiple components. It envisaged an expenditure of 551.3bn roubles (\$19.7bn)<sup>15</sup> of federal government spending and roughly the same of provincial government spending. Its main aims were:

- to increase rural employment
- to raise standard of living in rural areas
- soil conservation
- increased access to credit
- better risk management
- modernisation of capital stock

These objectives were to be achieved through five interventions:

**Figure 4: Key components of the 2008-2012 Russia Agricultural Development Program**

Title	Description	Total planned spending 2008-2012 (billion roubles/£)
Sustainable rural development	General spending on rural infrastructure and access to social services in rural areas	112.37 (\$4)
Creation of general conditions for functioning of agriculture	Mostly spent trying to support and improve soil fertility, some information provision and the development of agricultural support services	66.55 (\$2.4)
Priority agriculture subsector development	Supporting the growth of brood livestock, veterinary services, subsidies of feed development in the North	72.66 (\$2.6)
Financial sustainability of agriculture	Offering subsidised loans to a variety of sectors, particularly meat	292.69 (\$10.5)
Agriculture product market regulation	Smoothing out price variations, particularly in grain, by buying when price is low and selling when it is high.	7.01 (\$0.25)

*Ref: USDA Foreign Agricultural Service Gain Report (July 2007) Government Programme for Agriculture and Market Regulations 2008-2012*

The second document laying out Russian agricultural policy is the Food Security Doctrine, adopted by President Medvedev in January 2010. This is a development of principles set out in sections 49-51 of the National Security Strategy, which had already highlighted the need to reduce dependence on imported food. The 2010 document added to this by setting out explicit goals for self-sufficiency in different agricultural sub-sectors. This includes 95 per cent self-sufficiency in grain, 85 per cent in meat and meat products, and 90 per cent in meat and dairy.<sup>16</sup>

In grain, food security was largely concerned with offering price protections for exporters. Early in Putin's first term, the government set out the mechanisms for this in 'Basic Directions of Agrofood Policy to 2010'. This explained that the government would intervene in the market to support prices in good harvest years, buying the excess grain needed to keep prices above the level required to maintain profitability. In a bad harvest year, they would release some of their stores in order to avoid unacceptable spikes in grain prices and the consequent spike in the price of flour-based foodstuffs. In the years 2001–2008 they intervened to buy grain, reflecting good harvests, every year except 2003, when, after a poor harvest they stepped in to sell.<sup>17</sup>

However, purchase and sale are not the only levers used by the government to manage grain prices. It has also adopted other measures, including encouraging long-term price-fixing between different users, whether grain producers, flour producers or bread-makers.

To this extent, the export ban was consistent with a decade-long trend of market intervention. According to some, the strategy has largely worked. For example, Stephen Wegren argues, 'as a result of [these] interventionist policies, grain production has stabilised and the extreme production volatility that occurred in the 1990s has abated'.<sup>18</sup>

In the case of meat, where Russia is still a large importer, the food security issue is rarely discussed in terms of simple price but is, instead, offered as an attempt to gain food self-sufficiency. Russia's Food Security Doctrine envisages that by 2020 Russia shall reach 85-90 per cent self-sufficiency in meat products. This has been reflected in a rise in

protectionism and increasing subsidies. As Wegren argues, 'In recent years Russia's international food policy has become characterised by import quotas, import bans, embargoes against specific countries, and tariff rate quotas. As such, Russia's pursuit of food security reflects an inward turn, an illiberal, nationalist side of economic policy'.<sup>19</sup>

There are two outcomes of this dramatic focus on meat, over grain, within agricultural policy. First, the majority of the Ministry of Agriculture budget is spent on supporting meat production. About 60 per cent of the proposed budget for the Ministry of Agriculture in 2010 was spent on interest-rate subsidies for agricultural loans. According to the USDA, this translated into 163bn roubles (\$5.8bn) of new loans. Out of this, around 120bn roubles (\$4.3bn), or slightly less than 75 per cent, were to be spent on poultry or livestock breeding. In comparison, 30bn roubles (\$1bn) or less than 20 per cent were to be spent on subsidising grain. Only five bn roubles (\$178m) were put aside to provide for the release of subsidised grain stocks.<sup>20</sup>

Another key supportive outcome for the meat sector is a system of tariffs and quotas that limit the potential level of meat imports. This system was implemented in 2003 but has been increased progressively over the last few years creating even lower import quotas and higher tariffs on any goods that fall outside those quotas. In 2009 the out-of-quota tariffs on pork and poultry were 75 and 95 per cent respectively.<sup>21</sup>

The impact of this support on the sustainability of the businesses is unclear. Even in grain, not all of the market is particularly profitable. Stephen Wegren points out that 'infrastructure continues to be poor and archaic and there are market manipulators. In the South the situation is better, with modern roads and infrastructure but it is still messy. If you were to remove the subsidies and protections in their entirety, I am not sure they would be profitable'.<sup>22</sup>

## 2. The 2010 food crisis and export ban

### 2.1 The 2010 drought and subsequent government policy

The most obvious cause for the 2010 crisis is the drought that occurred in the Russia in the summer of that year. The heat wave saw the highest July temperatures in 130 years. To what extent this was the result of global warming (and therefore, more likely to repeat in the future) is hard to say. The National Oceanic and Atmospheric Administration, with the US Department of Commerce concluded that, 'greenhouse [effect] fails to explain the 2010 heat wave over western Russia... [and as a result] it is unlikely that a similar event will recur next summer or in the immediate future'.<sup>23</sup>

Whatever the cause, the drought and the fires that followed decimated the summer harvest as the drought covered large sections of south western Russia where most of the grain is produced.

**Figure 5: Map of Russia highlighting the overlap of grain producing regions, drought and wild-fires**



Ref: **Goodrich, L** (10 August 2010) *Drought Fire and Grain in Russia*, Stratfor

The overall impact of the drought was severe. Minister Skrynnik, talking to the Federation Council in October, suggested that 43 regions had been affected and 13.3 million acres of crops destroyed. This was 17 per cent of the total crop area and included almost 25,000 farms.

As mentioned, there are four main grain producing regions of Russia: Central, South, Volga and Siberia. Of these, the Volga region - the biggest producer - was most severely hit, seeing its annual harvest drop by more than 70 per cent, while the Central region dropped by 54 per cent. Overall the harvest was down about one-third on the previous year.

The impact of the drought on markets can be seen in a number of stages. First, when it became clear that the Russian harvest was going to be severely affected by the drought, grain prices rose sharply. This increase was exacerbated by grain speculators inside Russia withholding their grain (often breaking contracts to do so) in anticipation of future price increases and the possibility that Russia might impose a ban.<sup>24</sup> This also led to

panic-buying inside Russia so that the cost of staples such as bread, buckwheat and dairy products increased.

At the end of July, even before prices had really started to surge, Russia released 3 million tonnes of its grain reserve into the market. On August 15 the government also instituted an export ban that was supposed to continue until the December 2010. However, this was subsequently extended to the following summer harvest as continued hot weather in autumn looked as if it might have damaged planting and lowered returns for 2011.

The government also took steps to try and ensure that the poor harvest and increased feed-prices would not damage the recent growth in meat production. Vice President Viktor Zubkov argued: 'I consider one of the most important tasks in this difficult period to be protecting on-going growth in the production of animal husbandry. Under no circumstances should we permit a reduction in the number of cattle or poultry'.<sup>25</sup>

The determination to protect the gains made in meat production was bolstered by additional budgetary support. A new policy document on the support of the sector was released in mid-July and the government announced in October that one billion extra roubles would be allocated to support animal husbandry in 2010 and a further 7.5bn roubles (\$268m) in 2011, in addition to already allocated funds.<sup>26</sup>

The third priority for the Russian government was to try and ensure that farmers were not bankrupted by the disaster. Deputy Prime Minister Zubkov announced a series of measures offering either direct grants or loans to ensure that farmers would be able to continue planting in the next season or carry on feeding their animals.

In addition, in September the state-owned Rossel'khozbank, Russia's largest farm credit provider, reduced its interest rates. Short term loan rates were cut from 13.5 per cent to nine per cent and longer-term loans from 13 to 11 per cent. Further interest rate reductions were given for people buying calves and a moratorium on repayment was applied to those in drought-affected areas.

The Russian government has also significantly increased its financing of agriculture. In September 2010, Prime Minister Vladimir Putin announced a 50 per cent increase in agricultural spending to 153bn roubles (\$5.5bn).<sup>27</sup>

## **2.2 Impact of the crisis and the ban**

One element of the Russian Government's response to the 2010 drought and rise in food prices was to institute a grain export ban in mid-August. This ban negated any existing contracts that exporters had with clients abroad and, as it constituted a force majeure, exempted them from any liability on those contracts. The sellers were, therefore, free to resell their grain if they were able to at prices that were, in the short-term, higher than those in the contracts. The stated objective of this policy was to ensure domestic supply and so protect prices of domestic staple foods and animal feeds.

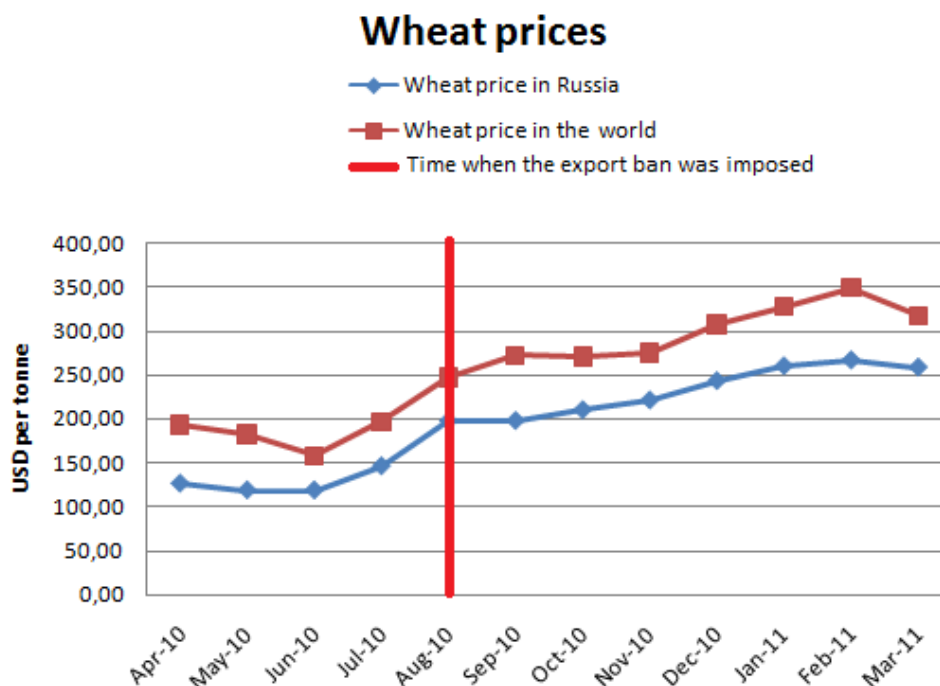
In the sections that follow we will try to summarise the main short-term and long-term impacts of the policy. To look at the short-term impact, we will review the effect of the ban on grain, flour and flour-based goods as well as on meat prices. We will then look at the way those prices ultimately impacted on the poor. To examine the long-term consequences, we will explore the likely impact of the ban on long-term prices and price stability, as well as looking at its effect on investments.

### **2.2.1 Impact on the prices of flour and flour-based food**

The most obvious reason to impose an export ban was to ensure that local supply of food-grain remained higher than it would otherwise, so that flour and flour-based staples (particularly bread) remained cheaper. The Russian government was, furthermore, confident that this could happen without any need to import grain because the combination of reserves and production totaled more than enough to fulfill likely consumption.

The easiest way to assess the impact of the export ban is to look at grain prices. According to official statistics, the ban has had two discernible effects. First, for a month or so, prices rises did seem to slow relative to world prices. Second, since the new-year, prices have also been fairly flat in Russia. More recently, they have even started to fall. However, on the face of it, the effects seem to have been small, as we can see in Figure 6.

**Figure 6: World wheat prices compared with international wheat prices**



Source: Local prices are provided by the Federal State Statistics Department of the Russian Federation and international prices provided by Index Mundi, (<http://www.indexmundi.com/commodities/?commodity=wheat&months=12>)

What is most striking about this chart is that, in general, it seems to show that Russian prices track international prices in spite of the ban. While this trend of upward prices of grain is confirmed by numerous sources, some still think that the ban did have an effect, arguing that, without it, prices would have gone up faster. Dmitri Ryl'ko, general director of IKAR (the Institute for Agricultural Market Studies), argued that prices for the whole period were lower than they would have been without the ban.

There is no way of knowing what prices would have been, but it is important to stress that the picture was not uniform. The US Department of Agriculture confirms the general upward trend of the official figures but highlights regional variations.

From beginning of July 2010 to mid January 2011 the price of one metric ton of milling wheat Class 3 increased by 50 per cent to 6,400 roubles (\$213) in the Southern Federal District, by 100 per cent to 7,750 roubles (\$258) in the Central Federal District, by 120 per cent to 8,000 roubles (\$266) in the Volga Valley Federal District, by 160 percent to 8,500 roubles (\$283) in the South Ural, and by 185 percent to 7,700 roubles (\$257) in Siberia. Increases in prices of milling wheat Class 4, feed quality wheat, food rye, and feed barley, were even sharper.<sup>28</sup>

Curiously, in recent months this picture seems to have changed. According to Dimitri Rylko, prices have dropped in recent months and there is now about \$100 difference between Russian internal market prices and international prices. There also seem to be broader concerns that the internal price may drop still further.<sup>29</sup>

From August 2010 to the end of the year, prices of food in general also went up. As Stephen Wegren summarised:

The export ban was initially enacted to impede speculation and price hikes on bread and grain products, but in fact the ban proved to be ineffective in stopping food inflation, as the price of foodstuffs increased 0.9 per cent in August 2010 alone (a ten-year record)—a month in which food prices normally decline.<sup>30</sup>

This creates a puzzle. If there is no export and enough locally-produced supply to cover consumption, why do prices go up at all, or at least, why don't they go up a lot more slowly?

An export ban might not affect the price of grain or food prices for two main reasons. The producers of grain may simply not sell that grain, or the people who process the grain into final products may not pass that reduction in cost onto the final consumer. In the Russian context, both of these activities would be seen as unreasonable profiteering in times of national difficulty and both are usually labeled 'speculation'. President Medvedev commented on numerous occasions on the disconnection between food price rises and grain availability, and blamed that difference on speculators.

'The speculators need to be caught,' Medvedev said at the meeting in Saratov, a city on the Volga River in an agricultural region hit by the drought. 'There are no objective reasons for the current changes in price' for food products.'<sup>31</sup>

The first problem is usually characterised as 'hoarding' and follows simple market logic. According to Brian Wright and Carlo Cafiero, writing for the World Bank, the main cost of holding grain is the interest on the capital used in buying or holding the grain (either as real or opportunistic cost).<sup>32</sup> Physical costs of storage are low, and storage capacity developed to facilitate export can also be used to store grain instead of selling it. As a result, if there is a perception that prices will be higher in the future, then there is an incentive to hold grain rather than sell it. The same logic can also apply on the demand side, with consumers expecting prices to go up buying more in the short-term.

The strongest evidence for this phenomenon in Russia is simply the dynamic of prices. The fact that prices did not go up in Russia in August, while they did internationally, suggests that it took a little while for producers to adjust their behaviour to the new circumstances. But as international prices continued to rise, it makes perfect sense that sellers would store their grain in anticipation of selling it at the higher international prices in the future. As a result, supply inside Russia went down and prices continued to rise until the end of the year.

The second reason prices may not go down is that, even if grain is sold and prices of grain go down, this might not be passed on to the consumer. This is usually characterised as 'price-gouging' and may reflect the abuse of people with a strong market position or simply the 'stickiness' of retail prices.

In Russia, a close analysis of food price increases clearly shows that prices tend to go up when commodities increase in price, but don't so easily come down. Wheat prices went up dramatically in 2007 and stayed high in 2008 (at least as reflected in the average cost of Russian wheat exports). Reflecting this increase, the price of wheat flour went up by 17 per cent in 2007 and by a further 41 per cent in 2008. This was reflected in bread prices which went up around 16 per cent in 2007 and 30 per cent in 2008 (the exact percentage depended on the type of bread). Pasta also went up by 11 per cent in 2007 and 42 per cent in 2008. However, even though wheat prices were one-third lower in 2009, this did not result in a decrease in price of wheat-related products. In fact, while flour price did not go up at all, bread prices still went up by 8 per cent and pasta by 12 per cent.<sup>33</sup>

This can happen for a range of reasons. First, producers may simply see no reason to pass on decreases to consumers if they can take advantage of lower prices to increase profit margins. Second, the more developed a country, the less connected are the cost of grain and the cost of bread. In many Western countries bread prices may be hardly affected by high grain prices as the cost of bread reflects the high cost of labour, marketing budgets and retail mark-up far more than it reflects grain prices. In the

developing world, the connection between grain and bread prices is far closer. As Russia becomes a more westernised retail space one would expect the connection to lessen.

In the aftermath of the grain ban, prices did continue to go up, even with the Russian government reassuring the population that there was no need for them to do so. Curiously, before August, prices for grain and grain-related products had been down, but in August flour prices went up by 11 per cent and then another four per cent in September. Overall, the end of the year was up ten per cent on the previous year, but 18 per cent since July, with bread prices going up seven per cent in the same period.<sup>34</sup>

While these price increases are significantly higher than one would expect, they don't seem high enough to justify some of the reporting in both the Russian and the international press about Russian food prices. One possible reason for the panic is that there were huge regional variations in these price differences. According to national statistics, there were six municipal and city regions that experienced more than 40 per cent increases in flour prices from July-December 2010.

Another reason for the panicked reporting is that some foods saw far more dramatic increases in prices and these may have distorted people's perception of price change. Buckwheat is less than one per cent of Russia's grain harvest, in volume terms, but remains a popular staple. Its price increased three-fold in 2010 and by 112 per cent between July and December alone. This price increase, which really was an outlier relative to other food price increases, was widely reported and may have given the impression that food price increases were greater than they actually were.<sup>35</sup> The panic, hoarding and profiteering this created would have almost certainly helped to keep food prices high.

### **2.2.2 Impact on meat prices through feed subsidies**

Another objective of the export ban was the desire to maintain the gains in meat production that had occurred over previous years. As discussed, Russian agricultural policy has focused on the production of meat for the last five years at least, with a combination of significant barriers to imported meat and subsidised loans. As a result the Russian government, understandably, did not want higher feed prices to result in higher slaughter rates and a decrease in the size of the animal stock.

The impact of the drought and the export ban on meat prices is certainly complicated. While increases in grain prices means that meat is more expensive to produce, and therefore should be more expensive to buy, significant increases in grain prices can lead to a higher slaughter rate (as farmers shift away from meat production), and this can result in lower prices in the short-term. This seems to be what happened in Russia immediately after the export ban. Immediately after the summer drought the USDA reported that increased animal slaughtering was bringing prices down.

As of the end of August the total number of cattle decreased by 2.4 per cent from the same date the previous year, while meat production (mostly as a result of cattle slaughter) increased by 7.3 per cent in January – August 2010 compared with the same period in the previous year.<sup>36</sup>

This was directly attributed to the drought and seems to have been unaffected by the ban.<sup>37</sup> However, government intervention to increase grants and loans, particularly to animal producers, seems to have been effective. As the USDA said later in the year, 'This money [financial support from the government] allowed poultry and pig breeding to escape the drought unscathed'.<sup>38</sup> However, the interventions that seem to have helped were the direct supports to the industry. As grain prices in general don't seem to have been affected very much it is hard to see how the export ban could have helped the meat industry.

In addition, the objective of the Russian meat production policy is not to keep meat prices low (at least in the short and medium term) but rather to increase domestic production of meat. As suggested earlier, this is occasionally characterised by Russian politicians in terms of its impact on price but, up until now the policy has been pursued in spite of the inflationary impact it had on meat prices. The strategy has repeatedly been hailed a



success for expanding the production and consumption of Russian meat even as meat prices have continued to rise.

If the main concern was the price of meat, as it is presented to the consumer, then the easiest way to bring this down would have been to lower the import tariffs on meat and meat products. This would have been a disaster for the local producers as they would have faced declining prices at exactly the time when costs were going up, but it would have lowered the price of meat that average people pay.

Also, and perhaps most significantly for our purpose, the nature of the direct supports to the meat industry worked to undercut the export ban. The subsidies to the meat producers and, particularly, the enhancements in market protections, ensured that meat prices stayed high. This meant that meat producers could continue to afford high grain/feed prices and could continue to compete for grain produced to feed people. The impact of this policy may not have been excessive in this context, as prices did not go up very much, but in the long-term it does highlight that there is a clear tension between policies aimed at supporting meat production and policies trying to reduce the price of grain.

### ***2.2.3 Impact on poor and vulnerable groups***

#### **Russian consumers**

It would seem obvious that trying to keep the cost of bread down by maintaining the supply of grain, and keeping the cost of meat down by increasing the supply of feed, would necessarily be good for poor families in Russia. However, there are a number of reasons why the policy might not work. As we have suggested, the main problem with the policy is that it may not translate into increased supply or decreased prices.

In Russia, in addition to the specific discussion of meat and grain above, we can also look at the way in which the price of the subsistence basket of goods changed in the aftermath of the ban. Furthermore, by comparing the regions affected with official statistics on poverty in those regions, we may get a sense of which regions were the hardest hit.

**Figure 7: Official poverty rate in Russia for 2006-2009 compared with rise in prices of subsistence basket from July 2010 to March 2011**

	Official poverty rate				Average change to subsistence basket July 2010 to March 2011	Range of changes in price
	2006	2007	2008	2009		
Russian Federation	15.2	13.3	13.4	13.1	21%	0-32%
Central Federal District	17.8	16.4	14.4	15.0	24%	18-30%
North-Western Federal District	15.2	14.1	14.0	14.9	18%	11-24%
South Federal District	25.0	23.2	20.8	19.8	28%	27-32%
North Caucasian Federal District	25.4	21.1	18.8	18.0	23%	16-33%
Volga Federal District	20.2	18.3	16.8	16.6	27%	22-32%
Urals federal District	12.4	11.2	10.6	11.4	25%	15-31%
Siberian Federal District	23.1	21.1	18.8	20.5	16%	13-22%
Far Eastern Federal District	20.9	19.2	18.9	18.2	11%	0-13%

Reference: Federal State Statistics Department of the Russian Federation ([http://www.gks.ru/bgd/regl/b10\\_110/lssWWW.exe/Stg/01-10.htm](http://www.gks.ru/bgd/regl/b10_110/lssWWW.exe/Stg/01-10.htm)) (Reviewed May 2011)

As one would expect, there is no clear correlation between poverty rate and the price increases that followed the drought and export ban. The regions that experienced the worst price rises were those closest to the drought, including the Southern, Central, Volga and North Caucasus. However, the Southern federal district and the North Caucasus already had high poverty to start with, as well as high price rises.

Without more up-to-date and more detailed information it is very hard draw definitive conclusions about the breakdown of the impact on prices demographically. However, if we assume that the poorest were the hardest hit, because they are more dependent on food, then we can use historical information about the structure of poverty in Russia to draw some conclusions.

**Figure 8: Breakdown of Poverty in Russia by Age Group and Gender**

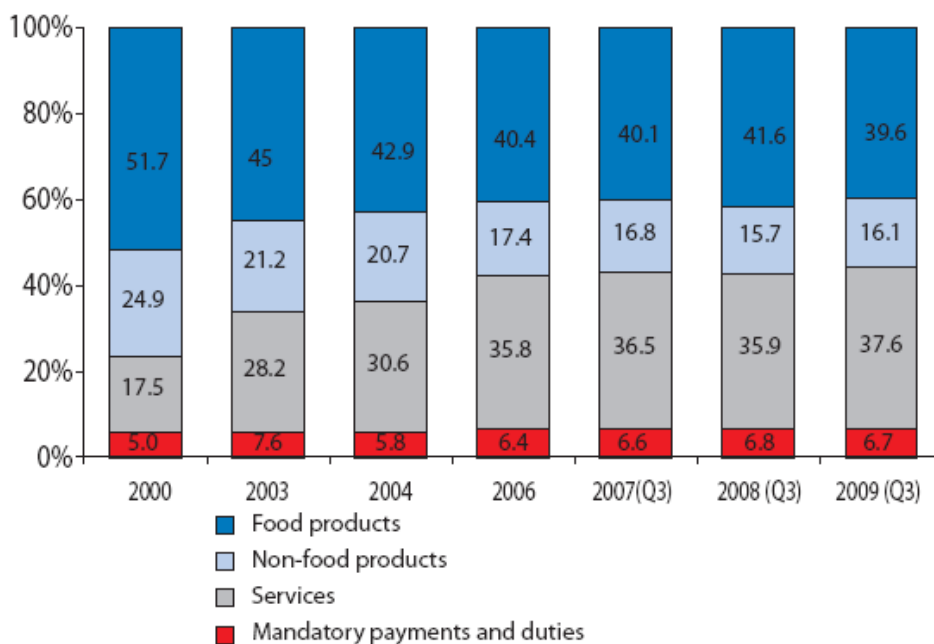
	2006	2007	2008	2009
Total	15.2	13.3	13.4	13.1
Children under 16	19.0	17.2	18.7	19.0
Children under seven	15.1	13.7	15.7	16.2
Children from seven to 16	21.7	19.9	21.2	21.5
Youth 16-30 years	15.3	13.2	13.5	13.5
Men 16-30 years	14.6	12.7	12.8	12.7
Women 16-30 years	16.1	13.7	14.2	14.3
Capable of working (age)				
Over 30	15.7	13.6	13.5	13.2
Men 31-59 years	14.4	12.5	12.5	12.2
Women 31-54 years	17.0	14.7	14.6	14.3
Population not capable of working				
Age - all	10.4	9.1	8.6	7.7
Men 60 and over	10.2	9.1	8.5	7.4
Women 55 and over	10.5	9.1	8.6	7.8

Reference: Federal State Statistics Department of the Russian Federation (2010), ([http://www.gks.ru/bgd/regl/b10\\_110/lssWWW.exe/Stg/01-10.htm](http://www.gks.ru/bgd/regl/b10_110/lssWWW.exe/Stg/01-10.htm)) (Reviewed May 2011)

From the figures above one can see that women are generally a little poorer than men. The difference is not great in the official statistics. That said, it is important to note that these statistics do not take into account the differences in gender roles in the average Russian household. As the main house-keeper, women may still feel the impact more keenly. But, since, children are generally a lot poorer, we can assume they were probably the hardest hit. Of course, this does not answer the question: what would have happened if the export ban had not been initiated?

As we have suggested, there is little evidence that the ban kept food prices low, but even if it did result in decreased prices there are two limitations to this kind of policy as a poverty alleviation strategy. First, grain and bread constitute a relatively small part of household expenditure, even in poor households. It is certainly true that poorer families tend to spend a larger proportion of their income on food. However, in Russia this proportion has been declining. One of the ways in which the Russian government calculates poverty levels is by calculating the cost of a basket of goods considered necessary to subsist. While expenditure on foodstuffs was over 50 per cent of that expenditure in 2000, it is now less than 40 per cent.

**Figure 9: Composition of the subsistence minimum 2000-2009**



Reference: UNDP (2010), *National Human Development Report in the Russian Federation: Millennium*

Forty per cent is still a fairly significant proportion of expenditure, but this does not tell us the importance of flour and flour-based products, most obviously bread. To isolate this we can use another 'basket' that the Russian government calculates, which focuses on food.

The subsistence basket allows us to calculate the significance of spending on specific foodstuffs in a subsistence household. This does show bread to be a very significant consumption item, representing about 20 per cent of food purchases, with potatoes representing 11 per cent, beef ten per cent and milk 11 per cent. However, even though this shows bread to be significant, if food consumption in total is 40 per cent of spending and bread is 20 per cent of that, then bread is worth less than ten per cent of household expenses in total. As a result, while we can say that increases in grain and in bread prices may be significant in Russia, they should not be debilitating unless they are very severe.

The second reason that spending to keep grain prices low may not be a very efficient strategy for helping the poor is that it is a universal benefit to consumers that is paid for by the state (in releasing grain at below market prices) and by producers (by depressing the price of the goods that they send to market). In terms of redistribution, all grain producers are harmed by the export ban (as even non-exporters will face lower domestic prices) and all consumers of grain are helped by it.

This has two problems. First, it is like placing a tax on food producers in favour of food consumers. Or rather, it is a tax on producers of grain and a help to consumers of grain (who might be producers of meat). This is somewhat arbitrary since it does not base itself on a calculation of the needs of either group. While grain production is still concentrated in large collectives, 20 per cent is produced by peasants and farming businesses and they are also harmed by this policy. Also, essentially 'taxing' producers (as will be suggested below) may hurt investment and potential job creation in some of Russia's poorest regions.

Second, and more importantly, it is a universal subsidy that helps all consumers of wheat. It is, therefore, significantly less effective in supporting the very needy than a subsidy that targeted them alone. As we will discuss below, it is clear that if the objective is to support vulnerable families, a cash payment to groups who are identified as vulnerable is likely to

have a far more material impact on needy families than a universal measure that has an uncertain and, at best a small, impact.

### International consumers

The export ban was clearly implemented to lower Russian wheat prices. However, it is worth considering the impact that the ban had on international prices and consumers, since this is the group most obviously harmed by the policy. Below are listed the top ten importers of Russian grain and the GDP per capita (in purchasing power parity terms) to give an indication of their relative wealth.

**Figure 10: Primary Export Countries for Wheat July 2008 – Feb 2009 (thousand MT) and their relative wealth in per capita GDP**

Rank	Country	Jul 08 - Feb 09	GDP per capita (\$PPP) World Bank (2009)
1	Egypt	3,156	5,673
2	Turkey	1,576	13,668
3	Azerbaijan	972	9,638
4	Pakistan	943	2,609
5	Syria	552	4,730
6	Iran	542	11,558
7	Bangladesh	459	1,416
8	Jordan	438	5,597
9	Yemen	386	2,470
10	Tunisia	327	8,273

Source: USDA Foreign Agricultural Service GAIN Report (2009) Grain and Feed Annual Report and World Bank (reviewed April 2011)

<http://databank.worldbank.org/ddp/home.do?Step=12&id=4&CNO=2>

Clearly, as large importers of grain, each of these countries was financially damaged by the increase in grain prices. However, in assessing the impact of the export ban the biggest hurdle is in distinguishing between food price increases which occurred for a range of reasons and the cost of those caused by the ban itself. The distinction is important because in a global commodity market, if an exporter bans its exports, the importing country should be able to transfer to another supplier fairly easily. Most major importing countries will have at least some grain reserves, so even if there is a time-lag in tendering new contracts this should not translate into an actual interruption of grain provision. It will, however, result in higher prices, and did so in this case.

Egypt, for example, imports about 50 per cent of its grain from Russia. It holds a grain store that is the equivalent of about four months of local consumption. So, when forward contracts for August and early September were cancelled, it simply added ten per cent to its future grain tenders and shifted to different international suppliers.<sup>39</sup>

Of course, the cost associated with this shift can be significant in the short-term. In Egypt's case it is reasonable to assume that they had contracted the purchase of the wheat in August at the export rates in July or around \$190 per ton. Replacement grain would have to be bought at a higher price. The August price was around \$250 per ton and continued to rise to February, where it peaked at \$340 per ton. So, if Egypt had imported all 600,000 tons of August's grain at the new – higher – prices, this would have amounted to a loss of \$36 million or an increase in price of 31 per cent. If, as it planned,

Egypt replaced cancelled Russian grain more gradually, over the following six months then the loss would have been far higher (because prices kept going up): amounting to \$78 million or a 68 per cent increase in price.<sup>40</sup>

The impact of these costs will, of course, depend on government response in an importing country. The Egyptian government made a commitment not to let the increase in grain prices affect the price of its cheapest, subsidised bread. As a result, the impact may not have been too great on the very poorest in the short-term. In comparison, in Pakistan, one of Russia's poorest customers, the price of wheat increased by 16 per cent. At the same time, subsidies were reduced. As a result, the impact was felt hardest by the poorest. Ultimately, according to the World Bank, this led to an increase in poverty of 1.6 per cent in the six months from June.<sup>41</sup>

This, of course, only includes the cost of the failed contract. Higher food costs have continued and so are far more burdensome on governments than this initial adjustment cost. In the case of Egypt, which subsidises grain and bread, if prices stay high then the impact would be considerable and could cost the government \$400-700 million. However, this is an ongoing cost and can only be attributed to the Russian export ban to the extent that one believes that the ban, rather than the drought, produced the dramatic price increases.

Distinguishing these two factors is more or less impossible, but one can certainly say that the ban was responsible for driving prices higher than the initial drought alone. By at least one indicator, in September grain prices went up by a further ten per cent over and above the August increases, even though the only change to the situation was the export ban. Prices stabilised at this level for two months. They then continued to rise to around \$350 per ton. We could assume that this ten per cent increase was the result of the ban. However, this probably understates the impact because the expectation of the ban was probably already built into the August price increase. Also, the extension of the ban from the end of the calendar year (as originally proposed) to the following summer, is also probably responsible for some of the price rises that followed.

## **2.3 Longer term impact**

### **2.3.1 Impact on global price instability**

One way in which export bans generally may be most damaging in the long-term is that they may make food price 'shocks' more commonplace and more extreme. While most explanations of rising food prices have tended to focus on the general global trends which increase demand for food while limiting supply, a range of analysts have stated that this rarely explains the timing or the severity of the food shocks. To understand these extremes, one needs to understand mistakes in public policy that have primed the market for overreaction and then facilitated that reaction when it happens. Chief of these mistakes are the protectionist inclinations of exporting countries in times of crisis.

Explanations of the different food crises tend to focus on a combination of immediate and long-term problems. For example, the International Food Policy Research Institute wrote in 2008, that the immediate causes of that year's crisis were 'rising cost of oil, biofuel subsidies in the US and Europe, the depreciation of the US dollar, the prolonged drought in Australia, and restrictions on the export of rice and wheat by various countries including Vietnam, India, Russia and Argentina'.<sup>42</sup>

These problems (and all explanations of price spikes), can be broken down into three different categories: the immediate and unavoidable (like the drought in Russia, flooding or other natural disasters), long-term trends and public policy decisions. Immediate disasters are of little interest as they are, we assume, unavoidable.

Long-term trends are generally used to explain the pressures that create a lack of balance between supply and demand. Three long-term trends are usually listed: global population growth, economic development and environmental degradation. An increasing population means more people need to eat. Rising income compounds this problem as wealthier people generally want to eat better, particularly consuming more protein-rich

diets. These diets create a demand for animal feed. Increased populations and development also lead to a rise in demand for fuels. As fuel is a key input of agricultural production, this increases the cost of production, and as food can be processed into biofuels, a higher fuel price encourages a higher production of biofuel and less food.

The problems of population growth are, in turn, compounded by environmental factors, as these help to explain the difficulties of expanding the supply of food to match this increase in demand. On the very highest level, global warming will lead to a warmer wetter planet with larger fluctuations in temperature and weather conditions. Rising sea-levels may result in the loss of agricultural land and at the same time as pressure on water resources will make it harder to irrigate land. Environmental factors also make it harder to expand production as overuse of chemical fertilisers or pesticides may result in diminished long-term productivity.

The third factor influencing price increases and instability is public policy. In particular, for our purpose, we are interested in the policy implemented by exporting countries when facing food price increases and/or price volatility. In the aftermath of the August ban, a range of commentators highlighted the role of isolationism in making small supply problems more extreme and more damaging than they needed to be.

Robert Parberg, for example, in a widely-cited piece for the Financial Times, argued that the 2010 food price spikes cannot be attributed to the Russian drought or to any of the long-term trends. Instead, he suggests that 'the real explanation for the price spikes of today and two years ago is a new and self-fulfilling fear in grain markets that even minor supply or demand shocks will trigger export restrictions by big suppliers'.<sup>43</sup>

Parberg goes on to argue that in 2007/8 it was the reaction to minor changes in supply that created the huge price spike as China, Malaysia, Indonesia, Egypt, Cambodia, Vietnam, Indonesia and India put a range of different export restrictions on different foods. This, he says, 'stabilised domestic prices in exporting countries but drove up the price for importers, which accelerated purchases, worsening the crisis'.<sup>44</sup> Similarly, he suggests, the memory of these export restrictions and the price rises that they produced make large importers, like Egypt, susceptible to panic-buying that exaggerates the effect of inevitable minor fluctuations in supply.

In this way, predictions of a poor harvest in Russia lead to dramatic increases in purchases and prices, even though this drop in production would not have a dramatic impact on global supply. This then triggers export bans in exporting countries, which in turn makes importers even more nervous and so generates a self-fulfilling prophecy.

This may also help to explain the persistence of high prices between harvests. Several commentators have highlighted that one of the reasons wheat prices have stayed so high is that large buyers are not just replenishing their food stocks, but looking to expand them, and this is also creating increased demand.

None of this is to suggest that the long-term pressures are not real. However, it does highlight that a one-third drop in Russia's harvest, which would not produce more than 20 per cent of global exports even in a normal year, should not result in a price rise trajectory that almost doubles global prices in six months, particularly when there is fairly good crop news elsewhere in the world. That outcome suggests that it is in the interest of large producers, particularly those that want to expand overall production and revenues long-term, to find a better way to manage the consequences of the inevitable fluctuations in their domestic production.

### **2.3.2 Impact on investment in grain production in Russia**

The irony of Russia's current policy is that it may be partially responsible for creating the historically high grain prices while, at the same time, trying to make sure that its own producers cannot benefit from it. The export ban, to the extent to which it was successful, created two major problems. Clearly, in reaction to historically high prices one would hope to see a strong push to increase supply, but there are two ways in which export bans reduce the likelihood of that happening.

First, companies in exporting countries are unlikely to enter into contracts to buy grain from Russian companies if the Russian government implements export bans when prices get too high, cancelling their contracts and eliminating their financial responsibilities to fulfill them. Arguing against the export ban, Javier Blas, in the *Financial Times*, cited the example of a similar export ban instituted by the US, facing high food prices in 1973. This embargo on soybean exports, he suggested, was extremely damaging to US exports. Similarly, in this case, he argued that Russia has damaged both its relations with its export markets and undermined the motivation for increases in wheat planting and production more generally.

In a market where there is more demand for grain than supply this may seem an unrealistic worry, and many of the analysts we spoke to in Russia seemed to feel that way.<sup>45</sup> But as many countries respond to higher prices, over-supply is still a possibility. In addition, even if they do not lose market, purchasers are less likely to use forward pricing or futures contracts with Russia if it is seen that these contracts offer no real protection from price variations. This will make life for Russia's customers and producers less predictable which will presumably be reflected in less favourable pricing.

The second, and far more substantial, problem is that Russia has made itself less attractive for large agricultural investors. Where the ban had an impact, prices of grain in Russia were lower than on the international market. As a result, Russian grain producers lost out by having to sell at lower prices or store their grain until the ban was lifted.

While local Russian wheat prices at first seemed to keep pace with international prices between September 2010 to February 2011, as we have already suggested, this now does not seem to be the case. As farmers and sellers started to believe that the export ban would probably stay in effect until the autumn, there was increasing pressure to sell stored grain, creating downwards pressure on prices. Dmitri Ryl'ko, from IKAR, suggests that internal grain prices may now be as much as \$100 per ton less than they are on international markets, and there are concerns that the situation may get worse.

This creates two problems for investors. Most obviously, lower prices mean lower incentives to expand production, exactly when the world market is offering the opposite signal. Perhaps equally damaging, it also adds an additional element of unpredictability to an already unpredictable market. Producers, planting in the autumn, were told that the market was going to open in the new year and would have judged their production accordingly. The change in policy to extend the ban almost certainly undermined reasonable predictions they made at the time. In future, they may reasonably demand far higher returns before they invest, to reflect the political risk that this policy creates.

This is particularly troubling because a significant expansion of Russia's land use for the production of grain, or investment to increase yield, could have an impact on global grain production and overall prices. As analysts have commented, in Russia, Ukraine, and Kazakhstan together, average annual grain area during 2001–08 was down by 30 per cent compared with 1987–90. Most of the reduced grain area was not lost to other crops, but became fallow....returning the unused grain area in this region to production. This could substantially increase world grain supplies and would put downward pressure on world prices, mitigating any future price increases and benefiting poor consumers.<sup>46</sup>

However, this will need significant expansion of investment. Wheat production, in the south and west of the country, benefits from its proximity to the Black Sea. Significant expansion of exports would require expansion of port and storage capacity, but far more significantly, it would need dramatic improvement in transport infrastructure to get it grain to port. In addition, bringing fallow land back into production may require considerable investment, including the clearance of land and renovation of local infrastructure, like irrigation.

During Russia's grain price surge of 2006–08, the area of cultivation did respond to some degree, rising over the period by about five per cent (Rosstat). Yet, in Soviet times, the regime pushed the grain area throughout the country on to marginal land, resulting in inefficient and high cost production. In order for grain area now to rebound substantially, world prices probably would have to rise again considerably, and remain high.



Furthermore, Russia would have to invest heavily in improving the physical and commercial infrastructure for storing, transporting and loading grain at ports for export.<sup>47</sup>

Expanding the area for agricultural production, and aiming to generate yields closer to European levels has already been suggested as an objective of future agricultural policy by President Medvedev. Investment on this scale would clearly need a combination of government and private finances. However, if the government is seen as placing an effective cap on returns to wheat investment, it will almost certainly take longer to happen.

### 3. Alternative policies

In the preceding analysis we have argued that the grain export ban seems to have achieved relatively few of its stated aims. The rise in grain prices may have slowed slightly in August and September but once producers adjusted their behaviour, it continued more or less in line with international prices. Even when grain prices did slow, market interruptions seem to have stopped any benefits from being passed on to consumers. In the process the policy has reduced incentives for local expansion of grain production. This damages Russia's potential exports, exacerbates world grain prices and, in the long-term, makes the meat industry (which also needs Russia to expand feed-production) less likely to become competitive.

The appeals of an export ban are obvious. It is relatively easy to implement, more or less free to the government and easy to explain to the population. In addition, if we think about it from the other side, it would be hard to explain to an electorate why one continued to allow the export of foodstuffs during a food crisis. At the same time, it plays into the general Russian tendency to see food security as primarily an issue of self-sufficiency.

This paper is claiming that, in spite of their apparent benefits, export bans do more harm than good. But that generates a clear secondary question. Faced with rising prices, what should a government do? Economic theory suggests that, generally speaking, it is far better to provide direct financial support than to manage prices indirectly through supply and demand, particularly in the form of import quotas or export bans. The main reason for this is that, as we have already suggested, supply management may not translate into the intended price changes and removes the usual market correction mechanisms.<sup>48</sup>

The best way to directly affect consumption opportunities for consumers, and production possibilities for producers, is to get the support as close to the consumer/producer as possible and to ensure it is linked to the outcome one most wants. In the case of meat producers, the closest point of support would be an output subsidy. A subsidy on feed-grain would achieve a similar objective but would be slightly less efficient because it would not encourage producers to use cheaper feed. In the case of consumers of bread, a cash subsidy would be the best way to compensate vulnerable households for the increase in spending associated with high food costs.

Of course, both of these systems lack the simplicity of an export ban and a universal subsidy would be expensive. One obvious way to limit the cost would be to limit the subsidy to people in particular categories, most obviously those receiving financial assistance from the state already and perhaps other groups like children and pensioners. One could further restrict it by only providing the increase to regions where the basket of agricultural goods increased by a particular amount in a given period, say two per cent in one month, or 10 per cent in six months.

As an alternative, if the government is adamant that it wants to affect food prices directly, then it probably needs to do so by making the food cheaper to produce and to be as close to the final product as possible (allowing for fewer interruption points and less price gouging). Subsidising flour would be better than subsidising grain (though either would be better than an export ban). Again, one could target regions where flour prices go up above a certain level.

This may require some kind of shift in thinking in the Russian government about what 'food security' means. Food security clearly needs to concern itself, first and foremost, with keeping food prices low enough that even the very poorest can afford to buy enough food and avoid erratic food prices. Self-sufficiency is rarely likely to be a wise strategy for achieving that end.

This is not to argue for a laissez-faire agricultural policy. The Russian economy as a whole has some good reasons to take a fairly interventionist line in its economy. While the Russian rouble has stayed fairly constant against the dollar and the euro, prior to the financial crisis of 2008, Russia experienced far higher inflation than either Europe or the

United States. As a result, in real terms, the rouble appreciated in value relative to other currencies. According to one calculation this could have amounted to a 100 per cent appreciation against the dollar and a 50 per cent appreciation against the Euro from 2000-2007 in real terms.<sup>49</sup> As a result, domestic goods were put at a disadvantage relative to imports. This is the expected pattern in a country that is so heavily dependent on oil and gas exports and is fairly characteristic of the phenomenon routinely referred to as the 'Dutch disease'.

To combat the Dutch disease and to ensure that Russia's non-oil economy is not damaged by its resource wealth, it is reasonable for the Russian government to use some of its oil-produced earnings to support promising sectors. To that extent, even with its current comparative disadvantage in meat it might be justifiable to support meat production in the medium term in order to make it viable long-term.

However, to do so with import restraints on meat and export restraints on grain is potentially damaging. Import restraints on meat have allowed large increases in meat prices that essentially constitute redistribution from consumers to producers. Similarly, controls on exports may have beneficial price effects in the short-term, but they are damaging to the economy and to investment potential long-term. This damages grain and meat production in the long-term. At the same time, the benefits they offer to most consumers are far smaller than the same redistribution would be if it targeted poor families.

Most important of all, the Russian government needs to keep focused on the achievable goal of long-term improvements in productivity and resource (particularly land) utilisation. As a USDA report said:

The 2010 drought and fires were a disaster for Russian agriculture; however, this crisis may provide an opportunity to make serious changes in the domestic agricultural policy if Russia wants to meet its food security targets. The government seems to understand the necessity, not only to support farmers in the difficult years, but to improve the support system and increase the efficiency and productivity of farming.<sup>50</sup>

Unfortunately, while the Russian government does seem to understand the need for long-term support, the policy reactions to the recent drought worked against some of these goals. Maybe that was unavoidable. Facing a (hopefully) once-in-a-century set of climatic conditions and the harsh political realities that come with it, the export ban may have been practically unavoidable. As Stephen Wegren comments, 'I fully expect that if they have a good grain harvest then they will return to the previous policy [of export]. It gives them prestige. It was a signal to the speculators that they can't get away with it and a signal to the people that they will be looked after'.<sup>51</sup>

The problem is that, now that the export-ban policy has been used once, how do we avoid doing it again? Russia needs to get back to normal market operation as soon as possible and to do that it is important that the country does not use this recent precedent as a means of regular market control in the future.

### **3.1 Banning Export Bans**

Russia is currently not a member of the World Trade Organisation, but since it is pursuing membership a review of how export bans would fit under the WTO rules is highly relevant. While the WTO is opposed to export bans in general, they can be applied to 'relieve critical shortages of foodstuffs or other products essential to the exporting contracting party'.<sup>52</sup> Since any significant rise in prices is liable to create shortages (by some definition) and since all shortages of foodstuffs are critical, this provision appears to undermine the WTO's impact on food export regulation.

Therefore, it is worth revisiting the question of how to limit the use of export bans. Ideally, exporting nations should work together in this regard because, as with many areas of international trade, collective action can provide a better architecture to alleviate short-term decision making. For this reason the WTO may be a good vehicle for structuring the

discussion. International regimes can be useful for ensuring collective compliance, but they can also help politicians sell unpalatable decisions to suspicious voters. If Russia (post WTO membership) is prepared to look at self-restraint as part of a broader WTO negotiation then it may be seen as one of the trade-offs that are necessary to benefit from free trade. Even more immediately, Russia could add even more pressure to its application for WTO membership if it led the charge on this issue.

With agricultural food prices rising sharply in 2008 and 2010, combating food price volatility has become a key priority. G20 agriculture ministers met for first time on 24-5 May 2011. One of the main themes was food security and price volatility. This reflects a growing realisation that public policy decisions can exacerbate problems of global food security.

Protectionist national policy responses to global market volatility can be explained in terms of domestic political pressures or historical experience. However, such reactions reveal the need for a system of global food and trade governance in which medium- and low-income countries can invest their confidence. Otherwise, each future period of volatility may lead to policy responses that exacerbate global volatility in order to protect ever stronger national interests.<sup>53</sup>

Any attempt to limit export bans in times of crisis will be politically difficult. As mentioned earlier, as a politician it is extremely hard to explain to voters that you are trying to keep prices down at the same time as you allow domestically produced food to be exported. Russia could be helped in this argument by papers like this one which highlight the failure of the most recent ban. This failure is already fairly apparent as people saw that prices continued to go up regardless of the ban. As a result it might now be easier to convince people that this is not an effective strategy in the future.

Furthermore, it is important to emphasise that this is not a *laissez faire* argument. The discussions on managing food-price volatility rarely advocate untrammelled free markets. It is almost certainly necessary to try and put structures in place to alleviate suffering if and when food prices rise. If these structures maintain the right incentive for farmers, then it should be possible to alleviate suffering in the short-term and still generate enhancements in production in the long-term. This is ultimately the only way to stabilise prices for Russian and international consumers, and diversify Russia's economy at the same time.

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