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Shifting Sources of Wheat Supply for MENA Countries: the Rise of the Black Sea

Abstract

The Black Sea countries of Russia, Ukraine, and Kazakhstan play an increasingly important role in supplying wheat to the global market, and to the Middle East and North Africa (MENA) countries as well. This policy brief shows evidence of this trend in the wheat GVC and explores its implications for food security in MENA, which appear to be important.

Keywords

Wheat sourcing, volatility, MENA, Russian Federation, Ukraine

Increasingly, the Russian Federation and Ukraine have become influential exporters of wheat

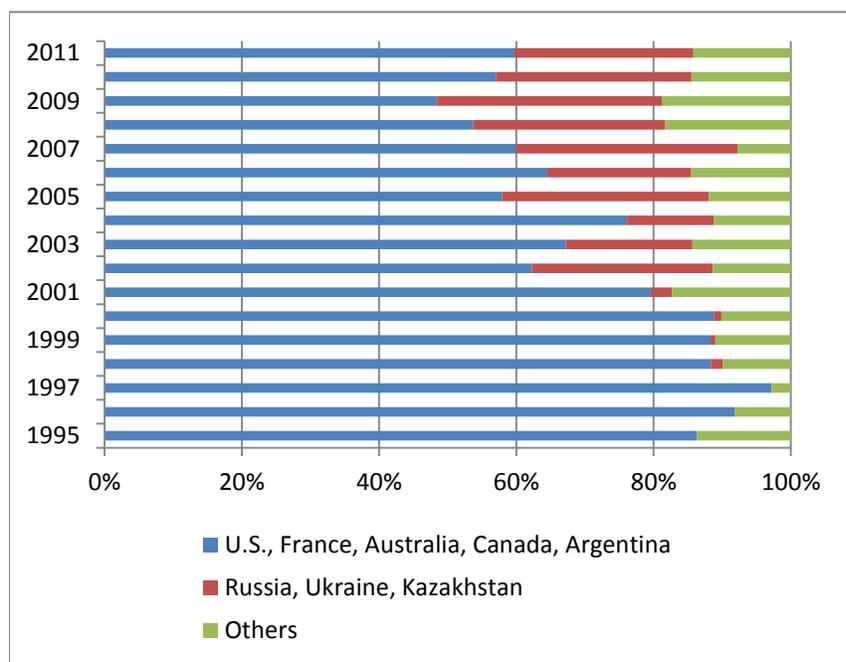
Introduction

The world’s bread basket has long been supplied by a few dominant countries – especially the United States (US), Canada, Australia, France, and Argentina. Although the wheat supply is, by nature, somewhat unpredictable (affected by droughts, etc.) these traditional supply countries have been fairly stable sources of wheat over time in terms of quantity and price.

Our research suggests that, starting in the early 2000s, this has started to change. Increasingly, Black Sea countries, especially the Russian Federation and Ukraine, have become influential exporters of wheat to the Middle East and North Africa (MENA) region (see Figure 1). Russia’s growing political relations with some MENA countries and significant Chinese land investments in the Black Sea countries also suggest a need to investigate how food security challenges in MENA countries are related to broader geopolitical trends with emerging economies.

This policy brief examines the shift in sourcing towards the Black Sea countries, documenting the trends and exploring questions for further study. We argue that this shift has important consequences for food security and stability in MENA countries downstream in the wheat global value chain, as relationships between governments, firms, and other actors are reconfigured in this process.

Figure 1: Wheat export shares to the MENA region



Source: FAOSTAT, 2014. Export shares in quantity (tonnes).

Changes in Wheat Sourcing

Two of the most significant trends in the wheat GVC over the last decade are:

- Global quantities of wheat traded have increased 27% from 2000-2011 (FAOSTAT, 2014)
- Black Sea countries have emerged as major suppliers of this additional demand for imported wheat

MENA countries are part of these trends, as MENA wheat imports (in terms of quantity) increased by 18% from 2000-2011 (FAOSTAT, 2014). One of the grain experts we interviewed from the Food and Agriculture Organization described these changes as a “fundamental shift”:

I see some fundamental changes taking place with the Black Sea region taking the dominance and some big firms, especially Cargill, actually acquiring more land and influence in places like Ukraine, and to some extent even Russia.

By relating the changes to land acquisition, the expert also suggests that land governance structures in supplying countries play a key role in shaping the geography of the GVC. It is also important to note that the multinational traders that have historically dominated wheat trade are still playing a lead role in the growth of wheat exports from the Black Sea region.

Over the last decade, production and exports of wheat have expanded in the Black Sea Countries (Table 1). Ukrainian wheat exports were 19 times higher in 2011 than in 2000, and Russian wheat exports over the same period increased by a factor of 35 (FAOSTAT, 2013). By comparison, average change among traditional exporters was -1% (Figure 2, on the right).

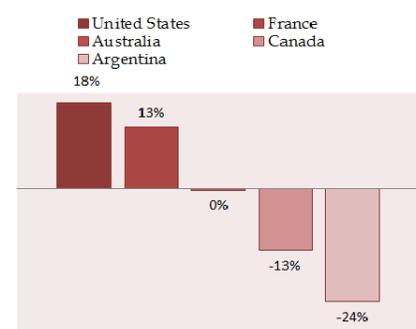
- In 2011, the Russian Federation was the top exporter of wheat to Egypt, Iran, Israel, Lebanon, Libya, Tunisia, and Yemen.
- Egypt’s imports of wheat from the Russian Federation increased from 1.4 million tonnes in 2002 to 4.8 million tonnes in 2011 (FAOSTAT, 2014).

Table 1: Wheat Production in the Black Sea (tonnes)

Countries	2000	2011	Change	Average annual change
Kazakhstan	9,073,500	22,732,000	151%	8%
Russian Federation	34,455,488	56,239,990	63%	5%
Ukraine	10,197,000	22,323,600	119%	32%

Source: FAOSTAT, 2013.

Figure 2: Change in Wheat Exports in Major Exporting Countries, 2000-2011



Source: FAOSTAT, 2014. Quantity in tonnes.

Despite growing consumer demand for and trade in wheat globally, the major wheat exporting countries have decreased exports in the last decade or have had relatively slow growth.

Volatility in Global Wheat Markets

Wheat sourcing from the Black Sea countries has been affected by frequent production shocks and unpredictable trade policies over the last two decades. The standard deviation of annual wheat production, a measure of variation from the average, in Black Sea countries for that period was approximately 22%, which is much higher than 9, 11, and 13%, respectively, for France, the U.S. and Canada (Figure 3).

Figure 3: Standard Deviation of Annual Wheat Production, by Country (1995 – 2012)

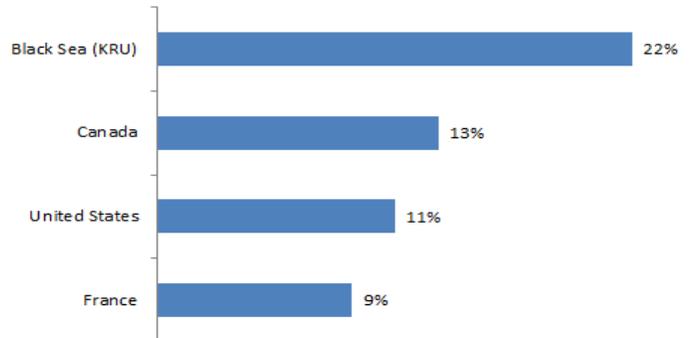
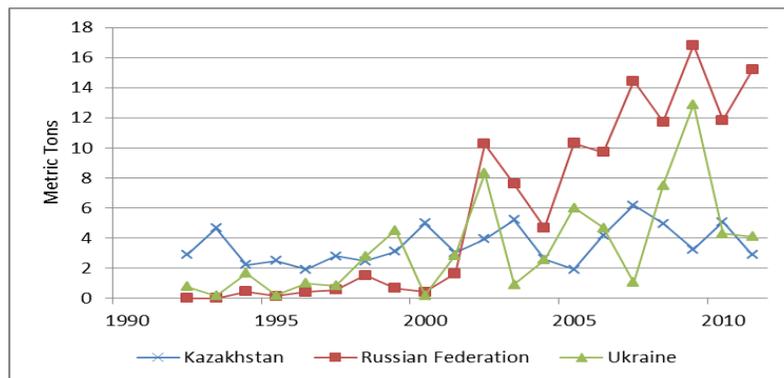


Photo: Daniel Jolivet, Creative Commons.

Source: FAOSTAT, 2014.

Unlike these traditional wheat exporters, the Black Sea countries have also demonstrated unpredictable trade policies and administrative controls imposing export restriction¹, particularly, during the global food crises in 2007/08 and 2010/11.

Figure 4: Wheat Exports Black Sea Countries



Source: FAOSTAT, 2014.

Annual wheat exports from the Black Sea region are volatile (Figure 4), and these countries are expected to further increase wheat export market shares in the near future². This may contribute to increased food security risk for the MENA countries, particularly those heavily reliant on wheat and grain imports from Black Sea. Understanding the structure of wheat value chain in the Black Sea region and the drivers of supply trends there is, therefore, critical for analyzing food security in the MENA region. As a region heavily dependent on imported grains, MENA is acutely affected by geographic and price shifts.

¹Abbott, Philip C. (2012). "Export Restrictions as Stabilization Responses to Food Crisis." *American Journal of Agricultural Economics*, 94(2): 428-434.

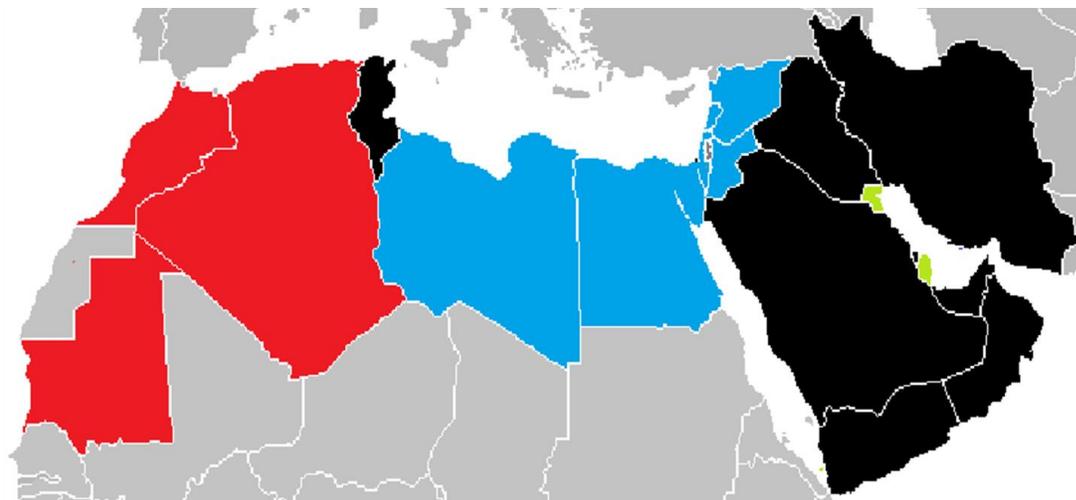
²Liefert, Olga, William Liefert and Luebehusen Eric. (2013). *Rising Grain Exports by the Former Soviet Union Region: Causes and Outlook*. United States Department of Agriculture.

Conclusions

As figure 5 illustrates several countries in MENA region are heavily dependent on the Black Sea region for wheat imports. The dramatic growth of wheat exports from the Black Sea countries has shaped global wheat GVCs in important ways. Due, in part, to proximity and price, MENA countries have increased wheat imports from the Black Sea region, with the Russian Federation becoming the top trading partner in several MENA countries. Due to higher volatility in the Black Sea region, in terms of production and political stability, this supply shift is likely to impact the price and flows of wheat into MENA countries in important ways. It is critical to conduct further study how these global dynamics in the wheat GVC shape food security and distribution systems in MENA countries.

One of the key questions is: how does the shift to the Black Sea affect food security in MENA countries?

Figure 5: Major importers to MENA by sub-region, 2007-2011^{3,4}



France ■ Russia ■ Australia ■ No stickiness ■

For more information please visit <http://sites.duke.edu/minerva/>
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³ Source: FAOSTAT 2014, total tonnage of wheat exported

⁴For figure 5, major importer is defined as a country or region being the principal supplier to a MENA country for at least four of the five years from 2007-2011. No stickiness reflects three years or less from 2007 to 2011 where a country or region was the principal supplier.