

# A Recipe for Emigration: Grain price fluctuations and Italian emigration from 1870-1913

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*The episode of mass migration from Italy between 1870 and 1913 is perhaps one of the most recognisable in modern times. In this essay Rebecca Fryer investigates the relationship between grain prices and Italian emigration in this period. She first outlines the significance of grain as the staple food of the agrarian Italian economy at the time. Next, Rebecca draws on an extensive body of evidence from previous research to display the large role grain prices have played in this migration, through their effect on wages, prices and employment. She concludes by highlighting the relevance of these kinds of relationships to policymakers in the present day, citing the potential of climate change and population pressures to increase pressure on the supply of staple foods and employment in Africa, and the subsequent migration patterns which could follow as a consequence.*

## Introduction

Volatility in the price of foodstuffs has always been a major concern of economists. A key facet of this is the two competing desires of major stakeholders. While farmers want to secure fair and sustainable prices for their produce, consumers want to secure cheap unrestricted access to food staples. This creates a precarious dynamic in regards to the regulation of the price of food stuffs which has captured the attention of both governments and their people. There is a need to protect the producer but also a countervailing force of a need to protect the consumer. This trade-off is an exceptionally tricky one and if significant numbers of the population are involved in agricultural production this adds another prob-

lematic dimension. Thus it is essential for economists to examine the impacts of changes in the prices of essential food stuffs. This paper argues that the dynamic change of the price of grain, the staple food in the Italian diet was fundamental in explaining migration flows from 1870 to 1913 in Italy. As Italy became increasingly integrated as a nation in the 1870s and with the European system so too did its grain prices (Cohen and Federico, 2001). This integration led to fall after fall in the price of grain before protectionism was embraced and with it grain prices rose again. With so much of their economy dedicated to agricultural work and the production of grain it is important to recognize the catastrophic instability that changes in the price of grain had on the Italian economy and its role in promoting widespread migration.

Significance of Grain Italy and grain have a particularly fascinating history. From trade with the Mongols to the reign of Mussolini the price of grain has been a major source of conflict in Italy. Many important shifts in the Italian economy can be charted by changes in their price of grain (Toniolo, 2013). With the fall of the maritime states importance in the European trade Italian nobles looked inwards moving into agriculture and away from trade and maritime ports in a movement known as the *terra ferma*.

Indeed, The Crisis of Tana in 1343 whereby the Khan of the Golden Horde decided to revenge Italian conquest by imposing a blanket ban of all exports of grain from all the Italian city states highlights the Khan's understanding of Italian reliance on grain and thus how best to hurt the Italian economy (Luzzatto, 1969). The Napoleonic conquest of Italy led to massive grain shortages, sharp price increases as well as famine and strife (Cohen and Federico, 2001). With the late development of industry Italy was very much still an agrarian society focused on the growing of grain by its unification. When the world's markets integrated and economies opened up to a significantly less expensive bountiful supply of grain from the New World, Italy was not prepared. See figure 1 below from Gray, Narciso, and Tortorici (2017) using data from *Annuario Statistico Italiano* showing Italy's changing trade position from a net exporter of wheat to a net importer. At this point the government sought to protect the Italian grain producers from cheap foreign grain. In order to protect their economy Italy raised protectionist tariffs on most agricultural products (O'Rourke, 1997). As a result, the timing of rapidly falling grain prices and unprecedented Italian migration can be seen to be instinctively tied. It was not till World War I that Italy would begin to buffer these shocks to their economy and thus differentiate its exports through industrialization (Cohen and Federico, 2001). In the meantime, from unification up until World War I Italy experienced major emigration flows. It's estimated that in 20

years 3.2 million Italians emigrated to the US alone (Cohen and Federico, 2001). Given the Italian economy's focus on agriculture and their dependence on grain it is evident that changes in grain prices and their resulting effects on income, wages and employment significantly contributed to the factors encouraging Italians to emigrate.

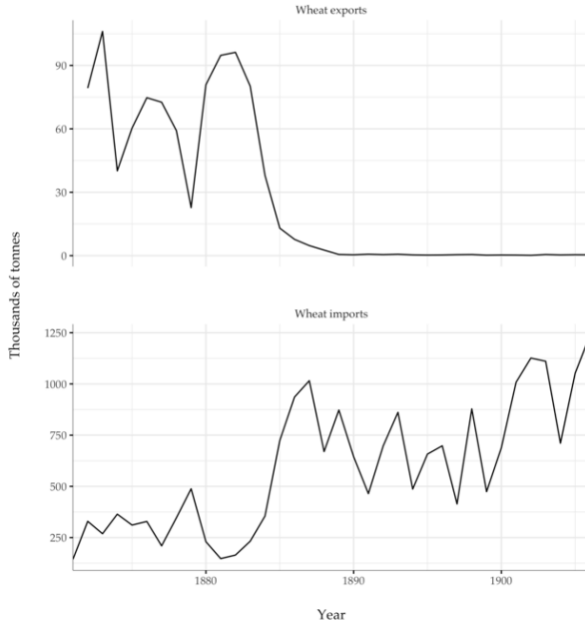


Figure 1

Factors determining migration Neoclassical literature on explaining migration flows generally posits that migration can be explained when the potential for an increase in income as a result of migrating, or the wage differential weighted by the cost of transport and the likelihood of finding employment is positive (Todaro, 1969). However Moretti (1999) finds these explanatory variables weak in determining migration timing from Italy and quite often he finds actually the opposite result. He posits that the presence of existing social networks in potential host countries also contributed as a strong determinant in migratory patterns from Italy. Based on Moretti's research he offers that the fact that a poor villager in Southern Italy decided to migrate to the United States or Brazil in 1912 has as much to do with 1912 wage differentials as it does with the migration decisions of those who left the year before him.

That is, he believes that Italian migration is tied to the flow of previous

migrants and their beliefs in expected earnings and outlook on finding success abroad. This implicitly fits into this essay's thesis that migration was majorly impacted by the insecurity in grain prices from falling grain prices and then rising grain prices as a result of protectionism. The rapidly changing prices and their effects on food prices and wages seriously affected the average Italian agricultural worker at first weakening their income and with the imposition of protectionism in turn financing their move.

Faini and Venturini (1994) use data from southern European countries in the period of 1962-1988 to investigate the effect of positive income shocks on relatively poorer and relatively richer countries propensity to migrate. In their model they include a wide variety of regressors including wage differential, origin country per capita income as well as the income of the lowest quintile of the origin population doing this in order to inform the potential for understanding the financial constraints of migration. They find in the case of a relatively poorer country like Italy at the time, that a positive income shock, which Italy experienced from protecting grain prices, will increase the likelihood of migration. They find that income shocks for the very poorest gave them just enough capital in order to cover the transport and regulatory costs of moving. This explains why even as the wealth gap between Italy and the destination countries began to close as a result of protecting grain why emigration still increased.

Spitzer (2016) also finds strength in the role of agriculture as a proxy for determining income shocks and thus migration flows. He finds that it is a statistically significant factor in determining Jewish migration from Russia along with the existence of immigration networks was also a major factor in explaining migration. He conducts a variety of regressions beginning with a difference regression which compares migration between regions with pogroms and pogrom absent regions. As a result, the common belief that the 1881-1914 wave of Jewish immigration from Russia was driven solely by the Pogroms is refuted, and instead finds a much more complex explanation for the pattern of migration driven by instability in the price of the staple food.

## **Role of Stable Food Prices**

In O'Rourke's (1997) paper the European Grain Invasion he takes an in depth look at the effect of significantly less expensive grain imports entering the European market and particularly the effectiveness of protectionist policies on this grain. He draws attention to the level of protectionism that was employed across Europe but particularly in Italy where the government felt extreme measures were necessary. See figure 2 below which demonstrates the growth of Ital-

ian agricultural tariffs when compared across Europe overtime (Lehmann and O'Rourke, 2010). While O'Rourke does not explicitly test this in his model he suggests that the key economic events of the next forty years and particularly the unprecedented levels of autonomous European mass migrations were a direct result of this grain invasion. Using a sector specific model of trade O'Rourke analyses the effects of new world grain entering the European market. He finds that when the quantity of labour demand in food production falls, that the wages of these workers fall and so labour moves from food production to industry. But the implications of this for Italy is important, due to the late development of industry there was no industry for them to move into. The lack of alternative means of employment is essential in considering the fluctuating price of grain as a major push factor for the average Italian worker in increasing their propensity to migrate.

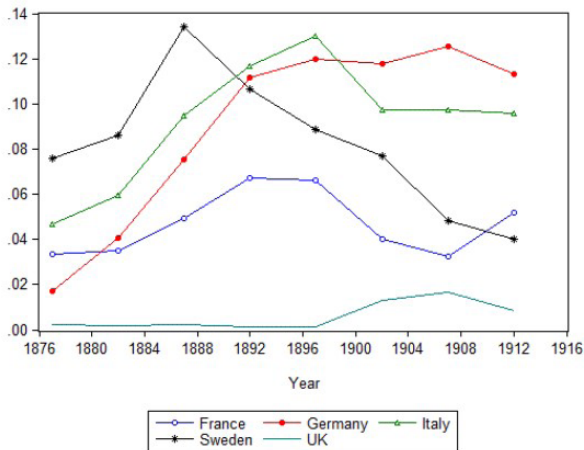


Figure 2

Persaud (2017) also finds support for the role of the price of staple foods in explaining migratory patterns in India. He uses data from Indian 19th century indentured servitude migration and looks at price changes and the migratory consequences of swings in the price of the food staple in India, rice. Likewise, he finds that instability in the price of the staple food, rice was a driving factor in increasing migration. He found this factor particularly strong for migratory patterns of the lowest caste. According to Persaud, this is because while many castes had formulated strong support networks which could weather price volatility the lowest castes often lacked these networks. This echoes Faini and Venturini's findings that the very poorest Italians were unlikely to move despite their financial

status.

Gray, Narciso, and Tortorici (submitted manuscript, 2017) greatly inform our argument finding Italian migration to be a function of agricultural prices. Their work studying the determinants of Italian migration from 1876- 1913 finds agricultural market integration and its resulting prices changes to be a major explanation of Italian migration along with other literature's findings on the importance of migrant networks and landholding structures. Essentially they posit that migration was possible due to rising agricultural incomes which released substantial portions of the population from a poverty trap at different times. Another key finding of theirs is that the increasing volatility of agricultural prices over time also increased emigration.

## Conclusion

In conclusion, this paper has argued that the price of grain is a major explanatory factor in understanding the pattern of Italian migration from 1870-1913. Grain has proved to be a major export of the Italian economy up to the 1880s as well as a major source of income for the Italian economy. Thus, the onset of the Agrarian Crisis in the 1880s meant Italy was hit hard by the fall of the price of grain. With the cost of transport falling, the forces of globalization brought cheap new grain into Europe. Suddenly Italy found itself going from a net exporter of grain to a net importer of grain as a result of falling international prices. The Italian government began a major land reclamation project, as well as a project of imposing duties and tariffs on the import of key grains like wheat (Cohen and Federico). As a result, protectionism created a higher grain price and thus a higher nominal wage, giving the poorest in the Italian economy a positive shock in their income which facilitated their migration. This particular narrative of Italian migration finds extensive empirical support in both neoclassical migration literature as well as more complex international theories on the impact of the changing price of food staples on migratory patterns. The fact that Italian grain price literature complements the mainstream Italian migration literature which draws heavily on income shocks, wage ratios between the region of origin and country of destination and the presence of Italian network only further strengthens its case.

It is important to investigate the role of food prices as a factor in migration today for three key reasons; to highlight the issue of prices, wages and employment security in acting as a push factor in migration, to demonstrate the need to promote diversification in a country's main products and exports, as well as to inform policy makers of the potential outcomes of price changes in major products in an economy. While today's major migrations are largely a product of war and

conflict we must be ready for future migration factors. Some scientists have posited that with climate change and increasingly severe climate patterns our ability to grow certain staple crops may change and there is potential for food prices to become a driving factor in the global economy and the decision to migrate. This makes it even more important to reflect on the role of the price of a food stable in past migratory flows.

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