Harvest crises and dearth crises: a comparison of the causes and effects of the food crises of the 1840s and 1850s in Belgium

Wouter Ronsijn (wouter.ronsijn@ugent.be)
Ghent University, EED Research group

Introduction

The 1840s and 1850s were both decades of food crisis in Belgium. That much is obvious from developments in mean annual grain prices (see Graph 1). In the 1840s, prices peaked in 1846 and 1847. In the 1850s, prices reached similar or even slightly higher levels for four consecutive years, from 1853 until 1856. For the entire nineteenth century, only in 1817 did grain prices reach higher levels than in the 1840s and 1850s (see Graph 8). The causes and effects of the food crisis of 1845-1847 in Belgium are well understood, especially for Flanders (Vanhaute 2007; Vanhaute and Lambrecht 2011). The food crisis of the 1850s, in contrast, has received much less attention up to now and is less well understood (Delfosse 1983; Delfosse 1990; Ronsijn 2009; Herment 2011).

In France, according to Herment (2011), both the food crises of the 1840s and 1850s mainly affected the urban population, with that of the 1850s having the greatest impact. In this paper, I will argue that the situation in Belgium was different in several respects. In Belgium, the crisis of the 1840s had the greatest impact overall, while the impact of the crisis in the 1850s was smaller. However, town and countryside suffered different fates in those decades. The countryside suffered more than the towns in the 1840s, when the food crisis was caused by a harvest failure. Conversely, the towns suffered in both the 1840s and the 1850s, because both were decades of high grain prices, the first the result of the harvest failure, the second the result of a disruption in the international grain trade. Both crises show how precarious the balance between domestic food production and demand had become, and how dependent Belgium had become on food imports. What happened in the 1850s shows that Belgium could face a food crisis even when domestic harvests were normal, because grain prices in Belgium were determined by international market conditions, not national harvest results.

To study the impact of international market conditions on domestic prices in Belgium means to study international and national market integration, which has received considerable attention in the past years (Federico 2012; Dobado-González, García-Hiernaux et al. 2012; Bateman 2011; Jacks 2005; Jacks 2006). To explain that development, this paper will particularly focus on developments in the volume and nature of demand, on domestic production and the organisation of trade.

Graph 1: Prices of wheat, rye and potatoes in Belgium, 1831-1860

![Graph showing prices of wheat, rye, and potatoes in Belgium, 1831-1860](Prices in fr. per 100 kg. Based on: Gadisseur (1990: 756, 760))
A harvest crisis and a dearth crisis: different causes of the food crises during the 1840s and 1850s

What happened in the 1840s was a ‘classic’ food crisis: a harvest failure. The immediate cause of the food crisis of the 1840s was the potato blight, which made its first appearance in 1845, and the failure of the rye harvest in 1846. Graph 2 shows annual land productivity in Belgium of wheat, rye and potatoes for the period 1845-1860. The drop of productivity levels in 1845 and 1846 is clearly visible. When potatoes were hit in 1845 by the *phytophthora infestans*, a fungus imported from America, the effects were disastrous. In both East- and West-Flanders, where the potato was a crucial element in the diet of the population, about 90 per cent of the crop was lost. Moreover, that year more potatoes than usually were planted to compensate the meagre harvest of wheat and colseeded, that had suffered from the severe winter of 1844-45. The following years, the blight kept attacking. With the exception of 1849, ‘normal’ potato harvests were only reached again around the middle of the 1850s. In 1846, the failed potato harvest was accompanied by a failed rye harvest. All cereals had suffered from the bad weather of that year. While the loss of wheat and other grains was rather modest, the loss of rye was significant. With a considerable loss of two staple crops, potatoes and rye, there was a real threat of famine (Vanhaute 2007: 130-131).

Within Belgium, inland Flanders was hit particularly badly by the harvest failure of the mid-1840s, because it coincided with a structural crisis on the countryside (Vanhaute 2007; Vanhaute and Lambrecht 2011; Vanneste 1997). Until then, the rural population of inland Flanders was able to survive by combining subsistence agriculture on small or miniature holdings with spinning and weaving flax. In the 1830s and 1840s, it became clear that the linen industry, an important source of income for many rural households, could no longer compete with England’s modern industrial production. Many families on the Flemish countryside were engaged in spinning and weaving flax, as a part-time or full-time activity, to supplement the meagre incomes from their small plots. The linen they produced had until then been sold on international markets, who were now flooded by English products. In Flanders, the raw material, flax, was expensive because of export, whereas prices of the finished product, and thus revenues, dropped.

The crisis in the linen industry and the harvest failure came at a time when the Flemish rural economy had reached its limits. Families on the Flemish countryside needed to make a living on ever smaller holdings. Moreover, an ever larger proportion of farmland was leased, for which ever increasing lease prices needed to be paid. The increasing fragmentation of farms was partly made possible by the introduction of the potato, which could feed more people on the same area, compared to grain. Next to that, Flemish agriculture was renowned for its impressive productivity, which however, came at the cost of a high labour input. Despite all those efforts, many families needed to seek out additional incomes. Many lived at the edge of poverty. When in 1845 and 1846 harvests failed, they were easily pushed over that edge (Vanhaute 2001; Vanhaute 2007; Thoen and Vanhaute 1999).

While the food crisis of the 1840s was clearly the result of a harvest failure, that of the 1850s, in contrast, had different causes. It is difficult to speak of a harvest crisis in the 1850s. According to Delfosse (1990: 71), the harvests between 1853 and 1856 in Belgium were only meagre, and particularly those of 1853 and 1855 were below average. According to the data in Graph 2, the harvest of 1853 and 1855 were indeed below average, but still far above those of 1845 for potatoes and 1846 for rye. Furthermore, the cereal harvest of 1854 was one of the best in the decade, while potato harvests by the middle of the 1850s started to return to normal levels for that time.

Even though there was no harvest failure in the 1850s, Belgium did face a dearth crisis that decade. Rather than the national harvest, it was the international situation that caused dearth. On the one hand, harvests outside Belgium were mediocre or below average as well. In France, harvests in the mid-1850s were only mediocre or below average, while the harvest of 1853 would have been far below expectations, causing a shortage comparable with that of 1846 (Horii 1984: 375-377; Herment 2011: 198-201). On the other hand, countries resorting to import to complement insufficient harvests were confronted with the consequences of the Crimean War, fought out from 1854 until 1856 between Turkey, supported by Great-Britain and France, and Russia. One of the results of this conflict, was that the Baltic and Black Sea Ports were closed for cereal exports to Western Europe¹.

---

¹ PROBe, East-Flanders 1870-…:: 4A/355/2: Letter (Brussels, 23.09.1854) from the minister of Interior to the governor of East-Flanders
In the 1840s, when the failure of the potato harvest became clear, the government responded quickly by adjusting the conditions for import and export. No later than September 1845, imports of cereals, potatoes and other food were declared free of duties, while their export was prohibited. That customs regime was partly maintained until 1850. At the same time, different other measures were taken, including purchasing food abroad, financial support for local administrations and for public works. The main effort, however, came from local administration and institutions for poor relief, who received the financial support of the central government (Vanhaute 2007: 138-139, 144; Vanhaute and Lambrecht 2011: 173-175; Delfosse 1983: 22-24).

Response in the 1850s was much more hesitant, and export prohibitions were only declared after considerable discussion. The 1850s were characterised by a deep division on the customs policy between supporters of a free-trade regime, often with interests in the expanding industrial sector, on the one hand and prohibitionists, often with interests in agriculture, on the other hand. After the mediocre harvest of 1853, imports of foodstuffs were declared duty free in August, while exports continued to be permitted, except the export of potatoes which was prohibited in October. An export prohibition of cereals was only emanated one year later, at the end of November 1854. That customs regime was maintained until February 1857 (Delfosse 1983: 22-24; Delfosse 1990: 73-74, 83-93; Van Dijck 2008: 327-329, 333-334).

Graph 2: Annual land productivity in Belgium, 1845-1870

![Graph 2: Annual land productivity in Belgium, 1845-1870](image)

Data in quintal (100 kg.) per hectare. Wheat and rye on the left axis, potatoes on the right axis. Based on: Gasisseur (1990: 532, 536)

**Differential impact of harvest crises and dearth crises**

The difference between the 1840s as a harvest crisis and dearth crisis, and the 1850s as a only dearth crisis, is also reflected in the differential impact of both types of food crisis. Under the assumption that the countryside was predominantly composed of producers of food, and that the towns were predominantly composed of buyers of food, the countryside can be expected to be sensitive to a reduction of output, while the towns can be expected to be sensitive to rising prices. Data on demographic patterns in rural and urban municipalities in Belgium show that the countryside suffered most in the 1840s, while the towns suffered most in the 1850s. Conversely, the towns were affected by the high prices caused by the harvest failure in the 1840s, whereas the high prices of the 1850s had much less impact on the countryside.
Graph 3 shows developments in natality and graph 4 developments in mortality in Belgium between 1841 and 1860, differentiated between rural and urban municipalities. Natality declined considerably during the crisis years of both decades, for both town and countryside. However, in the 1850s natality dropped below the levels of the 1840s in the towns, whereas it remained above the levels of the 1840s on the countryside. Regarding mortality, the peak in 1849 in the towns, caused by a cholera epidemic, is particularly striking. Apart from that peak, mortality in the 1850s rose in the towns to a level close to that of the 1840s, whereas on the countryside the rise in mortality in the 1850s was less outspoken, and came later than in the towns. These demographic indicators suggest that both town and countryside suffered from the food crisis in the 1840s, but that the food crisis of the 1850s mainly affected the towns.

That conclusion is also supported by developments in rural and urban poverty, shown for the province of East-Flanders between 1841 and 1859 in graph 5. Here, the number of officially registered poor is used as an indicator of poverty. In the 1840s, the number of registered poor rose from about 17 to 24 per cent of the population in the towns, whereas it doubled from less than 15 to almost 30 per cent of the population on the countryside. In the 1850s, in the towns, the number of registered poor rose again to almost 25 per cent of the population, surpassing the levels of the 1840s. On the countryside, in contrast, the crisis years of the 1850s merely interrupted the decline after the peak levels of the 1840s in the number of registered poor.

With these data on demographic patterns and poverty, a cautionary note is in order. The countryside, or at least the Flemish countryside, went through a structural crisis in the 1840s. If the harvest crisis of the 1840s had a higher impact on the countryside than on the towns, it is because the harvest crisis came at a time when the Flemish countryside was particularly vulnerable. In addition, differences between town and countryside in the relative number of registered poor also reflect differences in the financial means of public institutions for poor relief. Urban institutions for poor relief usually could rely on better financial backing than those of the countryside. Consequently, if the food crisis of the 1850s had less impact on the countryside in terms of mortality, natality and poverty, it is partly because the resources of rural institutions for poor relief were depleted, or because the most vulnerable people had already either died or migrated to the towns.

However, other arguments still support the conclusion that the towns were hit harder by the food crisis of the 1850s than the countryside. The structural crisis in rural Flanders was not fully overcome by the 1850s, and the countryside remained fairly vulnerable in that decade. Furthermore, that the most vulnerable people on the countryside had already suffered death by the 1850s, could also be said of the towns, which faced the cholera epidemic of 1849.
Collective violence over food in the 1840s and 1850s

The differential impact on town and countryside of the food crises of the 1840s and 1850s also appears from the occurrence of food riots in both decades. What follows is an attempt to bring the main occurrences together, focussing on East- and West-Flanders and surroundings².

As early as October 1846, dearth gave rise to discontent in Antwerp. Placards and pamphlets protesting against high prices were found and these led to gatherings³. ‘Instigating’ pamphlets were also found in several places in March 1847. That month, riots broke out on the markets of Wavre, Courtrai and

² Unless otherwise mentioned, the overview that follows is based on: Jacquemyns 1929: 324-329; Deneckere, 1997: 86-95 and the overview in the Moniteur Belge, 09.08.1847, Rapport au roi, Annexe XXI: Note relative aux désordres locaux
³ PROR, Microfilm B80; Gazette van Audenaerde, 25.10.1846, 12th year, N° 43, p. 3, 1st column
Grammont. In Grammont, for example, a basket of potatoes was overthrown and its contents distributed by the people. In addition, in a village between Menin and Ypres, a grain transport was looted by a gang of women and boys. A ship loaded with grain was looted in the village Sint-Martens-Latem (Velle 1994). In Renaix, the same happened to the house of a grain trader. That same month, several bakeries in Bruges were looted. In April, the house of a baker was plundered in Hooglede and on the market in Ghent, a chariot of potatoes was overthrown and the potatoes distributed. In May, there were again bread riots in Brussels, Oudenaarde, Ghent and Tournai. Later, in June, there was protest against bakers in Antwerp, Tongeren and Ostend. Finally, markets were disturbed in Antwerp in June and Ghent in July 1847.

In spite of all that, the general perception is that collective violence over food was rather rare in the very expensive winter and spring of 1847. Collective actions were the exception, individual actions the rule (Jacquemyns 1929: 329; Vanhaute 2007: 137).

Based on what is known at this moment about collective violence around food in the 1840s and 1850s, can be said that there were at least no less riots in the 1850s than in the 1840s. Throughout the 1850s there were several seemingly isolated incidents. On August 30 1853 there were riots in Liege, caused by the dearth of grain. A manufacture of weapons was attacked in the events. Later that year, on September 21, a crowd gathered in front of the house of a grain merchant in Saint-Nicolas, destroying a few windows and tiles, and a fence. On October 3 uproar arose on the potato market of Brussels after one buyer proposed to buy all 50 bags offered for sale, at 9 fr. per 100 kg. The chief of police only permitted that transaction after all other consumers had been able to buy their provisions. In May 1855 a certain Enoch D’hondt was arrested in Saint-Nicolas for disturbing the market and mistreating the police officers. One day in July of that year, on the vegetables market in Ghent, several baskets of potatoes were overthrown because their prices were thought to be excessively high (Deneckere 1997: 94). End September 1856 there was a ‘women’s uproar’ in Ghent, against a woman preacher who proposed a far-reaching form of thrift.

Apart from these isolated incidents, there was a wave of food riots through East- and West-Flanders in 1854. Whereas the riots reported in 1847 took place over a period of five months during the winter and spring, those of 1854 occurred within a timeframe of about three weeks, from the end of August until the beginning of September. Many of the disturbances were targeted against merchants, and seem to have been a response to the perception that, while the harvest of 1854 was a clear success, prices did not drop to ‘normal’ levels when that harvest was offered for sale.

Trouble began on Saturday August 19 1854 on the market of Tournai. Two merchants cause the price of grain to rise and were chased by an angry crowd, threatening to throw them into the Scheldt river, which the police could prevent. One week later, on Saturday August 26 1854 on the market of Ypres, a French tradesman bought large quantities without underbidding, which ended the initial drop in prices on the market. He was surrounded by working class people, but police succeeded in maintaining order. On August 28 there were riots on the market of Courtrai when two merchants, after refusing to buy rye at 19 fr. per hl., later agreed with another farmer to buy rye at 21 fr. These merchants had to flee to a nearby inn. Another merchant, when leaving this inn, was chased and beaten. The day afterwards, the local and state police were unable to prevent the looting of a grain trader’s house. The same week, there were gatherings in Menen.

---

4 PROR, Microfilm B80: Gazette van Audenaerde, 14.03.1847, 13th year, N° 11, p. 3, 1st column
5 PROR, Microfilm B80: Gazette van Audenaerde, 21.03.1847, 13th year, N° 12, p. 3, 1st column. The Moniteur Belge speaks only of an attempt to pillage a grain transport in Gheluvelt.
6 PROR, Microfilm B80: Gazette van Audenaerde, 25.04.1847, 13th year, N° 17, p. 3, 1st column
7 Tournai: PROR, Microfilm B80: Gazette van Audenaerde, 16.05.1847, 13th year, N° 20, p. 3, 1st column; Oudenaarde: Ronseijn (2005)
8 RL, JB119: Gazet van St. Nicolaes, 16.10.1853, 1st year, N° 40, p. 3, 2nd column
9 CASN, Modern archive, 298: Letter (Sint-Niklaas, 22.09.1853, N° 519) to the governor; RASLW, A2: Kroniek ‘Van Aalst’, boek II, p. 266; Buvé (1967).
10 RL, JB119: Gazet van St. Nicolaes, 09.10.1853, 1st year, N° 39, p. 3, 2nd column
11 RL, JB119: Gazet van St. Nicolaes, 27.05.1855, 3rd year, N° 21, p. 2, 3rd column
12 RL, JB119: Gazet van St. Nicolaes, 28.09.1856, 4th year, N° 39, p. 3, 2nd column
13 PROR, Microfilm B81, Gazette van Audenaerde, 27.08.1854, p. 3, 2nd column; 03.09.1854, p. 2, 2nd column
Seven bakeries were looted. On August 30, a gathering of workers on the market of Lokeren could be kept in hand by local and state police, but in the afternoon and evening several merchants were attacked on the street by women and children. On August 31, the first market riot in Saint-Nicolas took place. In the night between September 4 and 5, notes were distributed in Bruges’ labouring neighbourhoods, inviting the workmen to gather on the Maeleveld to think about means to improve their situation. Some of those notes contained threats against the rich. On September 5 and 6 there were severe riots in Brussels after one woman bought bread that apparently did not have the required weight. People gathered in front of the bakery where it was sold, windows were broken and the shop was overrun by the crowd. On September 7, the markets of Oudenaarde and for the second time Saint-Nicolas were the scene of riots. Also in Malines there would have been disturbances.

Food riots are complex phenomena, and their occurrence should be interpreted carefully. Still, based on their occurrence in the 1840s and 1850s, it is possible to say that urban populations were at least affected by the food crises of both decades. Food riots in both decades were mainly urban phenomena, while the only disturbances over food on the countryside occurred in the 1840s. At least, that is the impression so far, which may be biased due to underreporting of rural food riots.

Population growth and agricultural output in Belgium, nineteenth century

To summarise the findings on the food crises of the 1840s and 1850s so far, there are several indications to support the conclusion that, firstly, the food crisis of the 1850s was not in the first place the result of a harvest crisis, as it was in the 1840s, but the result of a dearth crisis, caused by disruptions in production and trade outside Belgium, and secondly, the food crisis of the 1850s mainly affected the urban population (i.e. the population mainly sensitive to price shocks), whereas the food crisis of the 1840s affected both the urban and rural populations.

If the urban population in Belgium suffered from a dearth crisis in the 1850s, caused by disruptions in production and trade outside Belgium, it means that the country by that time was, firstly, sensitive to shocks on the international market for grain, and secondly, that mechanisms existed within Belgium that transmitted international price shocks to domestic grain prices.

Belgium became sensitive to shocks on the international grain trade, because Belgian agriculture in the nineteenth century did not succeed in keeping up with population growth. After the middle of the eighteenth century, the southern Netherlands went through a phase of rapid demographic growth. In the century between 1750 and 1850, the population doubled from more than 2.2 million to more than 4.4 million inhabitants. After the middle of the nineteenth century, population growth continued, albeit at a slightly slower pace. By 1900, the population of Belgium had almost reached 6.7 million inhabitants.

Population growth did not lead to urbanisation, on the contrary. Measured as the proportion of the population living in municipalities of 5.000 inhabitants or more, the degree of urbanisation fell back from 21.8 per cent in 1750 to 20.5 per cent in 1800, and remained stable at about 20 per cent until 1850. Likewise, measured as the proportion of the population living in municipalities officially recognised as towns, of which there were 86 in Belgium in the nineteenth century, the degree of urbanisation remained constant at about 25 per cent of the population between 1806 and 1846.

---

14 RL, JB340: Gazette van het Land van Waes, 03.09.1854, 13th year, N° 36, p. 2, 1st-2nd column (Describes the events of Courtrai, Menin and Ypres, without mentioning dates)
15 PROBe, East-Flanders 1850-1870: 1403-16: Original of letter (Ghent, 02.09.1854) from the governor to the minister of Interior
16 RL, JB119: Gazet van St. Nicolaes, 2nd year, N° 37, 10.09.1854, p. 3, 1st column
compared to 1806, there were almost 1.4 million more mouths to feed: about 1 million more on the countryside, and 0.35 million more in the towns (Goossens 1993b: 364).

For Belgian agriculture, it became difficult to live up to that task. According to the research of Goossens (1993b), agricultural output grew in the first half of the nineteenth century, but population numbers grew faster. As a result, per capita agricultural production declined, increasing the threat of a Malthusian crisis. Developments in arable production show an increasing emphasis on basic food production. The production of industrial crops declined, to the benefit of both potatoes and wheat. The simultaneous rise in the production of the more highly valued wheat and the cheaper potato indicates a polarisation in consumption patterns. The rise in potato production was one of the main factors by which a Malthusian crisis was averted. Per hectare, potatoes can feed twice as many people as cereals. The appearance of the potato blight in 1845 showed how dependent the population had become on that tuberous plant (Goossens 1993a: 240-242, 248; Segers 2001).

The performance of agriculture in the third quarter of the nineteenth century was described by Blomme (1993a: 32) as "sluggish growth ending in straightforward stagnation during the 1870s." Growth in output slowed down, while there were no fundamental changes in the output structure of agriculture before the last quarter of the nineteenth century. According to Blomme, a severe food crisis like that in the 1840s could be averted because no harvest failures comparable to those of 1845 and 1846 reoccurred, while cereal imports became more significant. Nonetheless, Blomme called the cereal imports still modest in the 1850s, although they rose quickly in the decades that followed. Due to those imports, agriculture could gradually release the priority of basic food production. Domestic cereal and potato production remained important in the third quarter of the nineteenth century, but room could be made for industrial crops and fodder crops, to feed growing numbers of livestock (Blomme 1993b: 281-282).

Particularly the towns seem to have felt the consequences of the fact that agricultural production could not keep up with population growth. According to Scholliers (1992: 158), food consumption in the middle of the nineteenth century was notably smaller in the towns than on the countryside. Segers (2001) found that the per capita food consumption dropped in the towns during the first half of the nineteenth century, not only in the industrial centres but also in the smaller towns. Others have interpreted the frequent jumps in cereal prices between the 1820s and 1870s as a sign of structural tensions on the food market in Belgium (Van Dijck 2004: 312-313).

Data on imports and exports confirm that cereal imports were substantial by the 1850s, although they were indeed fairly modest compared to the levels of imports later in the nineteenth century. Between 1750 and 1850, during the period when population numbers doubled, Belgium evolved from a grain exporting to a grain importing country. In graph 6, data from several sources are combined to reflect imports and exports of wheat and rye in the (southern) Netherlands between 1759 and 1843. The data are difficult to interpret due to the political changes of the time. The southern Netherlands or Belgium only existed independently in the eighteenth century until 1795 and in the nineteenth century after 1830. In between, the southern Netherlands were first joined to France (1795-1815) and later to the northern Netherlands (1815-1830). The data in the graph from 1815 to 1830 are for the whole United Kingdom of the Netherlands but do not include the volumes of wheat and rye the northern and southern Netherlands trade among each other.

The data show that the southern Netherlands in the second half of the eighteenth century regularly exported both wheat and rye. Exports at that time accounted for about 5 to 7 per cent of the annual harvest of bread grains and buckwheat, and were mainly sent to the northern Netherlands. Vandenbroeke believes the southern Netherlands obtained an important position on the international grain market. Exports undoubtedly continued to take place after 1795, when the southern Netherlands were annexed to France. At that time, exports were directed to the French interior (Vandenbroeke 1979: 83-84; Vandenbroeke and Vanderpijpen 1981: 187-188; Vanderpijpen 1983: 203-292).

It was probably not until the post-Napoleonic depression hit agriculture that exports came to a standstill. At that time, Western European markets were flooded with Eastern European and Russian grain, while there was overproduction of grain in the Netherlands. According to the data in graph 6, during the food crisis of 1816 to 1817, the United Kingdom exported a large volume of wheat while importing an even larger volume of rye. After the subsistence crisis of the late 1810s, grain prices collapsed and exports apparently came to a standstill, only to reappear only briefly in the late 1820s, when they were again overshadowed by imports. To what extent exports during this period came from the southern or the northern Netherlands is difficult
to determine. However, exports were important for the agricultural sector in the southern provinces, according to Goossens. Conversely, the agricultural policy of king William I was designed to support the growing industrial sector as well as the commercial interests of the agricultural sector in the northern provinces, which benefitted from imports. As a result, the effects of the post-Napoleonic depression were aggravated. Those effects were visible in agricultural output. The period between 1817 and 1825 was a time of depression and stagnation for Belgian agriculture, during which output declined. Yields in the Dutch period were lower than in the French period. Farmers in East-Flanders reportedly reduced their output deliberately (Goossens 1993a: 245; Goossens 1993b: 161-165, 202-205; Bieleman 2008: 148-149; Kint 1989: 138-139).

Later data suggest that most of the imports during the time of the United Kingdom were destined for the northern Netherlands. However, as production declined in the wake of the post-Napoleonic depression, imports quickly became necessary for Belgium as well. While domestic production recovered and expanded after 1825, and was reoriented towards primary food production, imports of food rose as well, particularly from the 1840s onwards. Still, the level of imports remained comparatively low until the late 1860s (see Graph 7). Until the late 1860s, net imports of wheat, which made up the bulk of imports, did not exceed 150,000 tons per year, whereas after the 1860s they would grow to reach the tenfold by the beginning of the First World War. While grain imports were important, during the dearth crisis of the 1850s imports made up only about 11 per cent of the domestic bread grain harvest: 15 per cent for wheat, spelt and maslin, and 5 per cent for rye.

Even though bread grain imports were limited compared to domestic production or to import levels later in the nineteenth century, Belgium did become dependent on the international trade in bread grains. By the 1840s, Belgian consumers had to compete with those of other importing countries in northwest Europe over the same scarce resources. As a result, Belgian consumers had to pay the same prices for those resources.

In Graph 8, mean annual wheat prices in Belgium are compared with those of Amsterdam, London and France during the nineteenth century. Graph 8 leaves little doubt that the high grain prices paid by Belgian consumers during the food crisis of the 1850s and even that of the 1840s were determined by international market conditions rather than the state of the domestic harvest. At the beginning of the nineteenth century, the international grain trade was disturbed by the Napoleonic wars and the Continental Blockade, raising grain prices to a high level. After the Napoleonic period and the subsistence crisis of 1816-1817, agricultural prices collapsed, yet they collapsed much more in Belgium and the Netherlands (Amsterdam) than they did in Great Britain (London), resulting in a substantial price gap between the continent and London in the mid-1820s. However, during the second quarter of the nineteenth century, prices in Belgium (and Amsterdam and France) started to converge with those of London. The price difference between Belgium and London gradually declined between roughly 1825 and 1845. By the middle of the nineteenth century, wheat prices were the same on both sides of the canal. Only at the end of the nineteenth century did prices diverge again.

The process of price convergence in the second quarter of the nineteenth century was likely shaped by the different national trade regulations. The process of convergence was probably accelerated by the abolition of the Corn Laws in Great Britain in 1846. Based on Graph 8, it seems that the Corn Laws succeeded in keeping London grain prices within a certain margin and at a comparatively high level. When they were abolished in 1846, consumers in London, in the long run, apparently did not pay significantly lower prices compared to what they had been paying in the three preceding decades. It appears that the part of the grain price British consumers paid as import duties, now went entirely to the grain merchants. On the continent, the British Corn Laws had protected consumers in importing countries in the North Sea area from the higher purchasing power of British consumers until 1846. Consequently, after 1846, continental consumers who likewise depended on the international grain had to pay similar prices as those in London, even though their purchasing power was probably considerably lower than those of Great Britain.
Graph 6: Imports and exports of wheat and rye in the (southern) Netherlands, 1759-1843

Wheat imports and exports (last)

Rye imports and exports (last)

Data for the United Kingdom of the Netherlands (1815–1830) do not include trade between the northern and southern Netherlands. Belgian data for wheat include spelt and maslin. Data in last (1 last = 30 hl.) Based on:
- Belgium (southern Netherlands): data for 1759-1791 from Gachard (1850: 48-49); data for 1835-1843 from Degrève (1982: 304-305, 309-310)
- (northern) Netherlands: 1814: Recueil de pièces relatives à la liberté illimité du commerce des grains: publié par ordre du Roi, La Haye, Imprimerie d’État, 1823; 1831-1843: Daadzaken betrekkelijk de graanwet, en aanteekeningen uit statistiek en geschiedenis, graanbouw en graanhandel betreffende, Groningen, C. M. van Bolhuis Hoitsema, 1847: Annex A
Graph 7: Imports and exports of cereals in Belgium, 1835-1913

Table 1: Bread grain production and imports in Belgium, 1840s and 1850s

<table>
<thead>
<tr>
<th></th>
<th>Average production (hl.)</th>
<th>Imports (hl.): Average 1852-1856</th>
<th>Imports as percentage of production (%)</th>
<th>1850s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat, spelt, maslin</td>
<td>6.493.396  8.475.731</td>
<td>1.276.172</td>
<td>15,1</td>
<td></td>
</tr>
<tr>
<td>Rye</td>
<td>5.293.191     6.065.716</td>
<td>331.144</td>
<td>5,5</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>11.786.587    14.541.447</td>
<td>1.607.316</td>
<td>11,1</td>
<td></td>
</tr>
</tbody>
</table>

Belgium and the national and international grain trade, mid-nineteenth century

By the middle of the nineteenth century, grain prices in Belgium were determined by international market developments, rather than by domestic production. In other words, Belgian grain markets were internationally integrated.

Market integration can manifest itself in two ways: co-movement of prices and convergence of prices (Federico 2012). Recent research by Dobado-González e.a. (2012) has shown that grain market integration across the Atlantic improved significantly in the eighteenth century, was interrupted with the French revolution and Napoleonic wars, after which integration resumed. Earlier, Jacks has argued that there was a considerable improvement in price-convergence in the years before the middle of the nineteenth century, while recognising that this might also be a return to a state of normalcy after the shocks caused by disturbances in the French period. He believes an international market of wheat emerged around 1835, which, according to him, would be consistent with earlier studies that have emphasised that, on the one hand, parts of Europe became grain deficient after 1836, while on the other hand internationally responsive production and trade patterns emerged around 1830 (Jacks 2005: 399).

In Belgium, the French period not only separated two periods of on-going market integration, but also one period in which Belgium participated in the international grain market as a net exporting country (second half of the eighteenth century) from another period in which Belgium became a net importing country (second quarter of nineteenth century). Among the markets within the southern Netherlands, grain market integration improved in the course of the eighteenth century, although Buyst e.a. have emphasised that prices responded slowly to shocks and transaction costs remained high. Trade flows between markets frequently reversed and there were periods when trade between the main markets was unprofitable (Dejongh, Van Campenhout et al. 2000; Buyst, Dercon et al. 2006). Still, at the beginning of the nineteenth century, according to Jacks (2005: 394), intra-national market integration in Belgium was strong and improving.
Within Belgium, grain market integration in the second quarter of the nineteenth century was at least partly the result of a reorganisation of the grain trade, presumably mainly geared towards feeding the industrialising and urbanising regions. The reorganisation of the grain trade within Belgium, with grain circulating on a larger scale within Belgium, under pressure of rising domestic demand, might offer a better explanation for intranational market integration than merely improvements in transport. Dejongh e.a. (2000) have pointed to the improvement and expansion of the network of paved roads as the main factor contributing to intranational market integration. Conversely, according to Buyst e.a. (2006), road construction did not make a significant contribution, at least not in the second half of the eighteenth century. Regarding international market integration, Jacks (2005: 395) has also pointed to the improvement of market integration well before technological improvements in transportation, and suggested a reorganisation of trade among the possible explanations.

There were different ways in which the grain produced in Belgium reached consumers, and among these, formal trading was possibly only of comparatively minor, though growing, importance. Firstly, many consumers relied at least partly on their own production (which also includes institutions such as hospitals that exploited their domains directly); secondly, grain also circulated between larger farmers and their labourers as part of informal, reciprocal exchange relations; thirdly, it is possible that leases were still partly paid in kind, with part of the grain produced (with leasehold being the predominant mode of exploitation in Belgium); and finally, grain could be formally sold, either by farmers who carried it to the public markets or by merchants who bought supplies at the farm gate. In all likelihood, the importance of these different ways in which grain was distributed differed greatly from one region in Belgium to the next. However, because of industrialisation, the distribution of grain through formal trade probably rose. During the phase of industrialisation, the number of wage labourers rose, many of which were concentrated in the Walloon industrial basins around Liège-Verviers and Mons-Charleroi (Brabander 1984; Greefs and Blondé 2005). As a result, the number of people who relied on a wage to obtain access to food rather than through other kinds of entitlements increased, and which meant that the formal market for grain expanded.

For the 1850s, the available data on the sale of grain on public markets in Belgium is exceptionally rich. For most of that decade, prices and trade volumes of wheat and rye on the 34 main grain markets in Belgium is published in the Bulletin administratif du ministère de l'Intérieur. The 34 markets include the nine provincial capitals, and all 34 are municipalities officially recognised as towns, except for two of them, Aubel and Waremme. The location of these markets, as well as their trade volumes are shown in Map 1. Only for Liège are the trade volumes not included, because the data seem unreliable. All these markets were located in the main bread grain producing areas of Belgium (see Map 2), which were also the most densely populated areas. Together, these 33 markets for which data seem reliable make up 68 per cent of the population of the 86 official towns in Belgium plus Aubel and Waremme in 1856.

On the 33 markets, about 19,000 hl. of wheat and 10,000 hl. of rye were sold on average every week from September 1856 until August 1857. For the entire harvest year, that was about one million hl. of wheat and half a million hl. of rye. Among these markets, Leuven was by far the largest wheat market, with 2.649 hl. of wheat traded on average per week, while Hasselt was the largest rye market, with an average weekly trade volume of 1.538 hl. of rye.

Of course, the 33 markets for which data are available are only a sample of markets. How much grain was traded on other public markets is difficult to estimate. Still, considering that these markets were recognised as the main grain markets, and that the sample includes 68 per cent of the population of the towns in Belgium plus Aubel and Waremme, and assuming the main grain markets were usually the towns, it is safe to assume that these data make up the bulk of the grain sold on public markets in Belgium. Extrapolating these data based on the population included in the sample, results in a crude estimation of the sale volume of 1,47 million hl. of wheat and 0,76 million hl. of rye being sold every year on the public markets of the towns in the 1850s. Relative to the total volume of wheat and rye harvested in Belgium, according to the agricultural census of 1856, about 25,6 per cent of the wheat harvest and 12,6 per cent of the rye harvest appeared on the markets (compare with Goossens (1993b: 158-159)). Grain sold on public markets was undoubtedly domestic grain. According to these estimations, the volume of the grain trade on public markets was only about twice as large as the volume of grain imported, which casts a new light on the significance of imports. It were those public markets that served to determine the official mean price of wheat and rye in Belgium, and whose prices were published throughout the country.
However, by the 1850s, weekly public markets were gradually losing their role as the main outlet for agricultural products. For the nine provincial capitals except Hasselt and Arlon, data on trade volumes in 1856-57 can be compared with those in 1813 for wheat, and with 1836-37 and 1844-45 for wheat and rye.\footnote{1813 based on data collected by Goossens, listed by Buyst e.a. (2006); 1836-37 and 1844-45 based on: Bulletin administratif ministère de l’Intérieur; More data on supplies in Brussels and Ghent given by Vandenbroeke (1972; 1973)} Trade volumes of wheat rose, in some cases even substantially, between 1813 and 1836-37, except in Antwerp. After the 1830s, trade volumes started to drop on several markets, although that was not a linear process. By the 1850s, the grain trade had declined in Brussels and Ghent, and had even become insignificant on the markets of Antwerp and Namur. It should perhaps not be surprising that Antwerp, where most of the cereal imports in Belgium arrived, was one of the cities where this development started early. The decline of trade volumes probably started earlier in the larger cities. In the smaller towns in Flanders, at least in Kortrijk, Oudenaarde and Saint-Nicolas, supplies of bread grains generally grew between the 1820s and 1850s, only to decline from the 1860s onwards (Devos 1990; Ronsijn 2012a; 2012b). Trade volumes on public markets declined because towns and cities were increasingly supplied by tradesmen who bought supplies on the countryside, at the farm gate. According to Michielsen ([1938]: 67), who made a study of the commercial infrastructure in Belgium in the eighteenth and nineteenth century, wholesale buyers came at the house of farmers only in 'turbulent' times. However, since the balance between domestic production and consumption needs became increasingly precarious after the 1820s, such ‘turbulent times’ occurred with greater frequency. In 1828, when grain prices reached their first peak since the post-Napoleonic depression, the mayor of Oudenaarde attributed the drop in supplies of the market in part to the opportunity countrymen currently had, because of the price rise, to sell grain at the farm gate.\footnote{CAO, Modern Archive, Outgoing correspondence: Letter (Oudenaarde, 17.10.1828, N° 307) to the governor} Furthermore, when grain was sold outside public markets, it was increasingly sold by weight, rather than by volume as was customary on the markets. The main indicator of the quality of grain was its specific gravity. For bakers, the specific gravity determined to a large extent how much flour could be extracted from a given volume of grain, and hence how much bread could be baked with it. For Colson (1846), who described every aspect of the baking trade in the middle of the nineteenth century, the specific gravity of grain was the main criterion to distinguish good grain from poor. The specific gravity of grain could differ according to the kind of grain, the soil in which it was grown, the skills and efforts of the producer and the weather during the time it grew. As a result, it differed from one harvest year to the next, from one region to the next, and from one producer to the next. The specific gravity of grain increasingly became a factor taken into account in the grain trade around the middle of the nineteenth century. In 1858, a royal decree became effective by which grain prices in the official mercuriales were no longer to be indicated per hectolitre, but per 100 kilogram.\footnote{Royal decree of 28.10.1857} According to the minister, the sale of grain per weight was already practiced on most markets in Belgium.\footnote{Circular letter (Brussels, 08.11.1857) from the minister of Interior to the governors (Mémorial administratif, 1857 (82), p. 1030); PROBe, East-Flanders 1870-…, 4A/580: Letter (Brussels, 08.11.1857) from the minister of Interior to the governor} Earlier, in 1854, the market places producing mercuriales had already been ordered to add the specific gravity of grain sold on their markets to their weekly bulletins.\footnote{CAO, Modern Archive, OUD 744.2-65: Letter (Ghent, 01.07.1854) from the governor to the mayor and aldermen of Oudenaarde} When the sale of cereals by weight was discussed in 1846, the chamber of commerce of Aalst acknowledged in 1846 that in the wholesale trade, it had become the custom to trade grain per mass of 80 kilogram.\footnote{PROBe, East-Flanders 1830-1850, 2912: Letter (Aalst, 16.11.1846) from the chamber of commerce to the governor; See also Colson (1846: 45); See also: RL, JB119: Gazet van St. Nicolaes, 06.08.1854, 2nd year, N° 32, p. 2, 3rd column} In 1857, the governor of East-Flanders had found that “l’usage s’est introduit dans nos campagnes d’y vendre les grains en poids et plus à la mesure, et que c’est seulement sur
The transition from selling grain per volume to selling it per weight seems to be symptomatic of the grain trade taking place, firstly, on a larger geographical scale, and secondly, more through intermediaries. Those intermediaries had two sources of supplies: grain they could buy at the farm gate, and grain they could obtain from importers. Concluding transactions by weight rather than by volume permitted them to better compare the quality they obtained from both sources of supplies. As long as mostly local grain was sold on local markets to local consumers, buyers could ascertain the quality of the grain themselves, and could know better what to expect, since the specific gravity of grain was to a large extent determined by local soil and weather conditions, both of which were known to local buyers, at least to those regularly buying grain.

When grain started to circulate on a larger geographical scale, and passed through a greater number of hands before it reached the consumer, a more specific description of the grain the consumer ordered was needed (Velkar 2010).

In all likelihood, those intermediaries made a substantial contribution to market integration within Belgium. Conversely, their behaviour could also be perceived as deceitful speculation, keeping prices artificially low. That perception existed during the 1850s, and grain merchants were often among those targeted during the food riots in the 1840s and 1850s. Throughout the 1850s, towns were repeatedly asked to notify any fraudulent commercial operations that were punishable by the Criminal Code.

In addition, a peculiar idea circulated in 1847 and 1854 to prevent speculation by placing all the main grain markets in Belgium on the same time and same day. In November 1854, the minister of Interior asked the advice of the Chambers of Commerce and of the main market towns on the latter project. The idea to place all the main grain markets on the same time and same day was defended by some as a measure to prevent speculation, because they believed this way, markets would be held in isolation from other markets, and prices on one market would be formed without being influenced by other markets. As such, the project was actually aimed against market integration, or at least against price integration.

The discussion on this proposal between administrative bodies was found for East-Flanders. In East-Flanders, all consulted bodies opposed the idea (with the exception of Ronse). On the one hand, if the project would succeed in 'isolating' markets, it would lead to important differences in price levels. On all markets, they argued, prices would form merely according to current supply and demand conditions. Unable

---

25 PROBe, East-Flanders 1870–…, 4A/580: Original of letter (Ghent, 13.06.1857) from the governor to the minister of Interior
26 Prisons: PROBe, East-Flanders 1870–…, 4A/580: Original of letter (Ghent, 13.06.1857) from the governor to the minister of Interior; Military: Already in the 1830s, the minister of War enquired about the specific weight of grain: PROBe, East-Flanders 1830-1850, 2916: Letter (Brussels, 07.12.1833) from the minister-director of War to the governor; Letter (Brussels, 10.02.1836) from the minister of War to the governor; see also Colson (1846: 77-78)
27 CAO, Modern archive, OUD 744.2-1: Original of letter (Oudenaarde, 16.10.1855, Reg. A/25, N° 23.960) from the mayor to the public prosecutor; Original of letter (Oudenaarde, 15.01.1856, Reg. A/25, 24.204) from the mayor to the public prosecutor; OUD 744.2-3: Letter (Oudenaarde, 13.10.1855) from the public prosecutor to the mayor and aldermen of Oudenaarde; Original of letter (Oudenaarde, 31.10.1855, Reg. A/25, N° 23.998) from the mayor to the public prosecutor; Original of letter (Oudenaarde, 17.11.1855, Reg. A/25, N° 24.033) from the mayor to the public prosecutor; Letter (Oudenaarde, 15.01.1856, N° 142) from the public prosecutor to the mayor and aldermen of Oudenaarde; Original of letter (Oudenaarde, 05.02.1856, Reg. A/25, N° 24.264) from the mayor to the public prosecutor; Original of letter (Oudenaarde, 22.02.1856, Reg. A/25, N° 24.309) from the mayor to the public prosecutor; OUD 744.2-5: Letter (Oudenaarde, 02.09.1853) from the public prosecutor to the mayor of Oudenaarde; Original of letter (Oudenaarde, 03.09.1853, Reg. D, N°142) from the mayor to the public prosecutor; CASN, Modern archive, 298: Letter (Sint-Niklaas, 21.11.1853, N° 649) to the governor; 299: Letter (Sint-Niklaas, 24.10.1855, N° 776) to the public prosecutor of Dendermonde; Letter (Sint-Niklaas, 10.11.1855, N° 808) to the public prosecutor of Dendermonde; Letter (Sint-Niklaas, 29.11.1855, N° 858) to the public prosecutor of Dendermonde; Letter (Sint-Niklaas, 27.12.1855, N° 929) to the public prosecutor of Dendermonde; Letter (Sint-Niklaas, 28.06.1856, N° 1.305) to the public prosecutor of Dendermonde
30 PROBe, East-Flanders 1870–…, 4A/355
to predict prices (because those of other markets could not be taken as reference), rural producers would avoid markets. The current system, where prices evolved smoothly from one market to the next, on different locations and days, and where rural producers were able to visit several markets per week, taking prices from other markets as reference, was much more trusted31. On the other hand, most believed it would not be possible to ‘isolate’ markets. Instead of being influenced by other markets held days earlier, markets would still be influenced by those of the week before32. Tradesmen would manage to receive price data by telegraph, which placed them in a better position than the countrymen who would not be informed33. In addition, tradesmen could send out factors to different markets, acting by uniform orders34. Finally, grain trade by sample or on stock exchanges would not be affected by the measure35. Whether markets could be isolated or not, all agreed that the measure would mainly lead to a relocation of the grain trade, both to a concentration of trade away from small markets onto large (or vice versa), and to an increase of trade outside markets. Tradesmen or bakers, who were able to buy provisions every day on successive markets, would no longer be able to do so, unless they bought directly on the countryside. By the latter, the problem would merely be displaced36. In general, the project was hardly taken seriously37.

31 PROBe, East-Flanders 1870-…, 4A/355: Letter (Ghent, 29.11.1854) from the mayor and aldermen to the governor; Letter (Ghent, 20.11.1854) from the Chamber of Commerce to the governor; Letter (Dendermonde, 27.11.1854) from the Chamber of Commerce to the governor; Letter (Saint-Nicolas, 24.11.1854) from the Chamber of Commerce to the governor; Letter (Deinze, 18.11.1854) from the mayor and aldermen to the governor
32 PROBe, East-Flanders 1870-…, 4A/355: Letter (Deinze, 18.11.1854) from the mayor and aldermen to the governor
33 PROBe, East-Flanders 1870-…, 4A/355: Letter (Saint-Nicolas, 24.11.1854) from the Chamber of Commerce to the governor; Letter (Dendermonde, 17.11.1854) from the mayor and aldermen to the governor
34 PROBe, East-Flanders 1870-…, 4A/355: Letter (Aalst, 21.11.1854) from the mayor and aldermen to the governor; Letter (Aalst, 20.11.1854) from the Chamber of Commerce to the governor; Letter (Lokeren, 15.11.1854) from the mayor and aldermen to the governor
35 PROBe, East-Flanders 1870-…, 4A/355: Letter (Sint-Niklaas, 24.11.1854) from the Chamber of Commerce to the governor
36 PROBe, East-Flanders 1870-…, 4A/355: Letter (Ghent, 29.11.1854) from the mayor and aldermen to the governor; Letter (Dendermonde, 27.11.1854) from the Chamber of Commerce to the governor; Letter (Saint-Nicolas, 24.11.1854) from the Chamber of Commerce to the governor; Letter (Deinze, 18.11.1854) from the mayor and aldermen to the governor; Letter (Eeklo, 18.11.1854) from the mayor and aldermen to the governor; Letter (Lokeren, 15.11.1854) from the mayor and aldermen to the governor; Letter (Ninove, 18.11.1854) from the mayor and aldermen to the governor; Letter (Geraardsbergen, 18.11.1854) from the mayor and aldermen to the governor; Letter (Oudenaarde, 18.11.1854) from the mayor and aldermen to the governor; Letter (Saint-Nicolas, 16.11.1854) from the mayor and aldermen to the governor; Letter (Aalst, 21.11.1854) from the mayor and aldermen to the governor; Letter (Oudenaarde, 18.11.1854) from the mayor and aldermen to the governor; Letter (Aalst, 20.11.1854) from the Chamber of Commerce to the governor
37 The Gazet van St. Nicolaes took over from the Journal de Liège: “In tyden van gebrek ziet men altoos eene menigte allerhande ongerymdheden als opperste middelen voor den dag brengen; het ouden van al de markten op eenen dag is eene van die algemeene geneesmiddels.” RL, JB119: Gazet van St. Nicolaes, 03.12.1854, 2nd year, N° 49, p. 3, 1st column; PROBe, East-Flanders 1870-…, 4A/355: Letter (Oudenaarde, 18.11.1854) from the mayor and aldermen to the governor
Map 1: The main grain markets in Belgium, 1850s

Trade volumes in hl., average weekly supply during the harvest year September 1856-August 1857. Based on: Bulletin administratif du ministère de l'Intérieur, 1856-57

Map 2: Bread grain production in Belgium, 1846

Area under bread grains (wheat, spelt, maslin, rye), as percentage of the total cultivated area, 1846. Based on: Agriculture recensement général, 1846 (HISSTAT data)
Conclusions

While the 1840s and 1850s were both decades of food crisis in Belgium, they were two different types of crisis, with different causes and different effects. The food crisis in the 1840s was mainly the result of a harvest crisis, the combined effect of the potato blight in 1845 and following years, and a failure of the rye harvest in 1846. While this caused a deficiency of food on the countryside, it caused prices in the towns to rise. In the course of the second quarter of the nineteenth century, domestic food production in Belgium could no longer keep up with population growth, creating a precarious balance between domestic supplies and consumption needs. To supplement domestic production, imports became increasingly important and started to have a significant effect on prices. That explains why another food crisis occurred in the 1850s, even when domestic harvests were not notably bad. Internationally, grain prices rose in the 1850s because of harvest failures elsewhere in Europe, while the grain trade was disturbed due to the Crimean War. By that decade, Belgian grain prices merely followed international grain prices, which in the Belgian towns resulted in a food crisis whose effects were comparable with that of the 1840s, while the countryside at that time remained relatively unaffected.

That grain prices by the middle of the nineteenth century merely followed the international market, places the hesitant governmental response in a different light. There was little the Belgian government could do to influence international grain prices. Perhaps only import subsidies could have lowered domestic grain prices.

By the middle of the nineteenth century, the grain trade in Belgium appears to have been under stress. The food crisis of the 1850s was not the result a significant but temporary production deficiency (a harvest crisis), but of a modest but structural production deficiency. Within Belgium, domestically produced grain began to be traded on a larger scale by grain merchants, who at the same time also increasingly relied on imported grains, to feed the urbanising and industrialising areas.

References


Abbreviations

CAO: City Archives Oudenaarde
CASN: City Archies Saint-Nicolas
PROBe: Public Records Office Beveren
PROR: Public Records Office Ronse
RL: Royal Library