Inequalities in access to the food market: the city as a producer of norms in the fourteenth century (Low Countries)

by Alexis Wilkin

L'articolo esamina l'organizzazione diseguale del mercato del grano nei Paesi Bassi nel XIV secolo. Successivamente, analizza il modo in cui alcune città compensavano le loro difficoltà di accesso al cibo affermando la propria leadership sui centri demici secondari e sul loro *hinterland*, e il modo in cui la legislazione urbana garantiva specifici privilegi di accesso a determinate categorie di acquirenti o venditori. Infine, l'articolo discute la cautela che deve essere esercitata quando si cerca di collegare la fioritura della legislazione urbana nel XIV secolo al contesto di crisi ripetute tipico di quel periodo.

This article examines the unequal organisation of the grain market in the Low Countries in the fourteenth century. It looks in turn at the ways in which several towns compensated for their difficulties in accessing food by asserting their leadership over secondary towns and their hinterland, and at the ways in which urban legislation guaranteed specific privileges of access to certain categories of buyers or sellers. Finally, the article discusses the caution that must be exercised in attempting to relate the flowering of urban legislation in the fourteenth century to the context of repeated crises during that century.

Medioevo, secolo XIV, Paesi Bassi, mercato alimentare, diseguaglianze, legislazione urbana.

Middle Ages, 14th century, Low Countries, food market, inequality, urban regulation.

Alexis Wilkin, Université libre de Bruxelles, Belgium, alexis.wilkin@ulb.be, 0000-0001-9984-5799

Referee List (DOI 10.36253/fup_referee_list)
FUP Best Practice in Scholarly Publishing (DOI 10.36253/fup_best_practice)

Alexis Wilkin, *Inequalities in access to the food market: the city as a producer of norms in the fourteenth century (Low Countries)*, © Author(s), CC BY 4.0, DOI 10.36253/979-12-215-0705-8.14, in Davide Cristoferi (edited by), *Socio-Economic Inequalities during the Conjuncture of the Fourteenth Century. Sources and Methods, Dynamics and Representations (Italy and Europe, c. 1270-c. 1350)*, pp. 267-287, 2025, published by Firenze University Press, ISBN 979-12-215-0705-8, DOI 10.36253/979-12-215-0705-8

1. *Introduction*

The concept of inequality has many possible definitions.[1] Its use requires us to specify the analytical perspective adopted. In the most common sense of the term, in economic history, the concept of inequality is mainly applied to the uneven distribution of wealth or income, and the extent to which it is concentrated in a few hands: economists such as the precursor Pareto, Kuznets, Piketty and Milanovic, and historians such as Scheidel and Alfani, illustrate this perspective.[2] It is not the one on which this article is based. Other definitions of inequality take a broader view, distinguishing between 'inequalities of outcomes' (covered by economic history) and 'inequalities of opportunities'.[3] The latter category refers to factors that create or entrench situations of inequality between individuals or communities of individuals and can affect access to income and wealth. These factors can include gender, age, disability, etc. And these inequalities can also be created or maintained by legislation or administrative regulations, which rigidify the specific advantages granted to certain categories of individuals, to the detriment of others.[4] The reasons for these trade-offs are diverse: power relationships, shared beliefs or feelings of belonging, etc. Our article focuses on these 'inequalities of opportunity', by examining the way in which access to the food market was organised in an unequal manner in a particularly prosperous area of medieval Europe, the Low Countries. More specifically, we will focus on the trade in cereals, the staple food, up until the modern era.

The fourteenth century saw the consecration of the urban phenomenon, marked by the concentration of sometimes densely populated towns in a compact area. They gained considerable political autonomy and were at the origin of legislation that systematically regulated the food trade, as we shall see below. This was despite the fact that, in North-Western Europe, this was also the century of crises (the Great Famine of 1315-7, or the Black Death) which may have had a direct effect on inequalities, understood this time in the classic sense of the distribution of wealth and income. Despite the effects of the food and health crises, and despite the demographic contraction, the town remained a significant social phenomenon.

[1] I would like to thank Mathieu Arnoux (EHESS), Stef Espeel (University of Antwerp) and Lise Saussus (EHESS) for their valuable comments and suggestions, as well as the anonymous reviewer.

[2] On this subject, see the survey by Jackson, "Old Inequality," the recent volume edited by Nigro, *Disuguaglianza Economica nelle Società Preindustriali*, and especially in this one, Malanima, "Ineguaglianze economiche," 4-18 and Alfani, "Economic Inequality," 21-36. See also: Alfani, Gierok, Schaff, "Inequality in preindustrial Germany" and Alfani, Garcia-Montero, "Inequality in pre-industrial England."

[3] See in particular the United Nations clarifying note, prepared by Alfonso, LaFleur, Alarcó, "Concepts of Inequality."

[4] On gender, see De Pleijt, van Zanden, "Gender wage inequality," 611-38 and below.

Although the market is just one of many ways in which people gained access to food, it was certainly one of the most significant in the Late Middle Ages. From the eleventh-twelfth century, a 'commercial revolution' began to take place, one that has been particularly scrutinised by English historians.[5] The medieval urban market, and particularly the food market, was not left to its own devices, but was firmly framed by legislative and administrative control, a perspective now at the heart of historians' work inspired by the framework of the New Institutional Economics.[6] This activity has been analysed by numerous historians, who have pointed out the sometimes competing moral and economic rationales, and tried to unravel the determining factors. However, research has not systematically dissected the way in which the organisation of the market favoured certain sectoral interests. To do this, we need to go beyond the analysis that distinguishes between the interests of consumers – a category that is once again arousing the curiosity of economic historians – and those of sellers.[7] These interests sometimes converge: for example, consumers and sellers derive an undeniable benefit from the prosperity of the market. But they obviously diverge on the question of price, as sellers can benefit from the scarcity of transactions. Above all, the categories of sellers and consumers do a poor job of masking the fact that within each of these, certain sectors or human groups are privileged, to the detriment of others.

This contribution will: 1) focus on 'inequalities' in terms of access to infrastructures that facilitate trade organisation (geographical position; direct access to a rich hinterland). These inequalities, which arise from the interaction of human communities with geography, sometimes provoke a reaction. For example, urban communities sometimes adopt a proactive or even parasitic policy to compensate for the 'structural' disadvantages of their position. This policy of correcting certain disadvantages amplifies the 'natural' inequalities in access to food, from one space to another. 2) the second axis analysed will relate to the way in which urban regulations advantage or disadvantage certain categories of urban actors, creating de facto inequalities or preferential distortions within the city itself. It is not a question of pretending to identify an absolute consistency in practices, from city to city, or even within a given urban space – the texts in question rarely yield unilaterally to sectoral interests, but interweave concerns of general interest with specific concerns. Moreover, in such a short text, we will not claim to be exhaustive: we will choose specific examples taken from a few well-studied towns, in particular Liège, which we know well, and Flemish towns that are well covered by an

[5] Britnell, *Commercialisation*.
[6] Just one example of the institutional framework given to the market and its importance: Dijkman, *Shaping Medieval Markets*.
[7] On the subject of the medieval consumer, we refer in particular to the fine introductory pages of Petrowiste, "Consommateurs," which clearly shows the evolution of the question since Henri Pirenne's first reflections.

abundant historiography. We will conclude by returning to the chronology, showing the difficulty of inserting the regulations of the fourteenth century into the sequence of crises (famines and epidemics), remembering the limitations of legislative sources, and broadening our thinking by recalling the importance of non-market logics and other types of inequality in access to food.

2. *Meeting urban demand: structural inequalities in access and demographic tensions*

Medieval towns brought together within their walls a large number of food consumers who were only partly food producers.[8] This is despite the fact that, in many medieval towns, there were gardens and communal areas within the town or in peri-urban areas, forming a 'provisioning zone' (in French: *ceinture alimentaire*).[9] But this immediate adjacent production was insufficient to meet demand. In the Low Countries, as in many other places, towns quickly seized the power to regulate access to food, its quality and trade. This legislative and administrative phenomenon began at different times in different places (from the beginning of the twelfth century in Liège, where the bishop nevertheless continued to be a political partner; in the second half of the twelfth century in Flanders; at the end of the fourteenth century in Sint-Truiden, when the town's 'communal' autonomy was recognised), but crystallised during the period that concerns us here. The first half of the fourteenth century saw an acceleration in food supervision, accompanying the general trend towards the establishment of a political framework that accompanied the new town as an area with a large degree of autonomy.[10] It was above all in the fifteenth century that the assertion of higher powers – the Dukes of Burgundy a.o. – marked a reduction in this political autonomy, and saw certain central interventions in the management of supply affairs. The royal or imperial level, which was still predominant in the Carolingian era, has since faded away.

Regulating access to food in the town is also linked to one of the determining factors of demand, the number of consumers. For the Low Countries, the rate of urbanisation varies considerably, depending on whether you consider Luxembourg, which is virtually 'devoid of towns', or Flanders, which

[8] The subject of urban-rural relations is immense. We will limit ourselves here to a few key titles, most of which relate to the areas at the heart of our work: Epstein, *Town and Country*; Higounet, *L'approvisionnement des villes*; van Cruyningen, Thoen *Food supply, demand and trade*, 1-6 and Wilkin, "Organiser l'approvisionnement urbain," 2018.

[9] For the earliest periods, the fundamental work is that of Goodson, *Cultivating the City*; a rapid and not very analytical summary can be found in Leguay, *Terres urbaines*.

[10] In general, see Devroey, "Food and Politics" and Pinto, "Food Security." Over and above the differences in terms of the acquisition of decision-making powers, it should be noted that the urban legislation that has been preserved – it means the administrative decisions issued by the magistrate –, is sometimes very late. But it is maybe also a reflection of archival conservation.

represents the other end of the spectrum, i.e. one of the most urbanized areas in Europe, often compared to Central-Northern Italy in its economic development.[11] Providing population figures for the pre-Black Death period is a challenge, given the lack of eloquent and reliable tax sources. Population estimates often relate to the end of the fifteenth century, or even the sixteenth. Here are some regularly quoted figures: around 1356-8 – i.e. after the Black Death – the city of Ghent had around 64.000 inhabitants, which would indicate that it was probably even more densely populated before the epidemic; Bruges had around 46.000 inhabitants around 1338-40, before the Black Death,[12] and Ypres, circa 25.000 inhabitants around 1310. As much as the absolute figures, town by town, it is the aggregate level of urbanisation that determines a strong demand for food, especially in the Flemish context where, at the end of the fifteenth century, 36% of the population lived in towns. Elsewhere, if we set aside Luxembourg, which is almost entirely unurbanized (15% of the population living in very small towns), we find mainly medium-sized towns in Hainaut, Brabant and the Principality of Liège. Here the figures vary, but estimates for Mons and Valenciennes at the end of the fifteenth century range from 10.000 to 13.000 inhabitants; for Liège, estimates put the population at 20.000 to 25.000 before 1468, when the city was destroyed.[13] These figures should also be compared with others, such as the size of Paris in 1328, which had between 210.000 and 270.000 inhabitants, whereas most of the major Italian towns of the time had no more than 100.000 inhabitants.[14] More than absolute size, it was the concentration of demand in a small area that created significant pressure and a degree of inter-urban competition for access to food.

This population distribution already creates disparities – we won't say 'inequalities' in the strict sense here – in terms of demand for food. To this we must add other contrasts in terms of supply: on the one hand, in terms of the productive capacity of the natural hinterland of cities; on the other, in terms of their interconnection with more distant areas. Flanders is obviously particularly concerned. Admittedly, the performance of its agriculture has been underestimated, and sometimes painted a miserable picture.[15] Since the work of Verhulst, Thoen and Soens, the performance of some of its regions has been largely revised upwards.[16] However, it has long been known that, despite this productivity, the aggregate level of demand in certain urban centres has exceeded local capacity, necessitating the import of resources from further afield. The 'granaries' of the major Flemish cities were located in the

[11] Demographic estimates, always very random, in the various contributions collected in *Le réseau urbain en Belgique*.
[12] Figures proposed by Blockmans, "Tussen crisis en welvaart," 42-52.
[13] Vrancken-Pirson, "Contribution," 7-24.
[14] Bove, Gauvard, *Le Paris du Moyen Âge*, 7.
[15] Nicholas, "Of Poverty and Primacy."
[16] Thoen, Soens, "The Low Countries, 1000-1750."

neighbouring regions: Artois, Somme, Hainaut and Tournaisis, sometimes England and as far as the Baltic, which was more systematically involved at the end of the Middle Ages.[17] Or, in exceptional cases, Mediterranean countries: Basque, Catalan, Majorcan and Genoese traders could take advantage of high prices in the Low Countries to sell off certain stocks. An early example can be seen in April 1317, during the great famine of 1315-7: in Bruges,[18] Italian merchants were able to make up for local shortages by supplying 1.414 tonnes of grain for a sum equivalent to one year's annual municipal budget. This proactive policy helped to 'break' the cycle of hunger and encourage a return to normality.

For the rest of the Low Countries, we can be more cautious about the intensity of the contacts maintained by the towns with the most distant regions, at least in normal times, outside times of food shortages: it is clear that their hinterland was often sufficient for them, as Richard Unger suggests for part of inland Flanders. This hinterland was sometimes very rich: the best example of this is Hesbaye, which adjoined the city of Liège[19] and offered a fertile belt of silty soils that largely supplied the principality's main urban centre. Here, it was the wealth of the churches and the rents held by the bourgeoisie which provided most of the needs of the town and secondary towns during 'normal' times.

The supply and intensity of inter-regional or international contacts therefore depended on geographical conditions, the existence of a solid rural hinterland and a navigable river network capable of lowering transaction costs. In less populated areas, market integration was likely to increase in times of crisis. High prices could break the usually intra-regional dynamics of grain transfers, and encourage a 'contagion' of hunger through the market. Cereals would leave the areas where prices were lowest and head for more attractive markets, as in the case of Bruges in April 1317. However, the lull in prices allowed the market to re-fragmentation, as transaction costs once again exceeded the potential profit to be made from the sale of grain.

The 'first structural inequality' in terms of access to food is therefore a 'question of location': cities located on rivers or coasts have easier access to resources, in normal times as well as in times of crisis, at least if taxation on transport was not too heavy (taxes or tariffs). Moreover, urbanisation will become increasingly dependent on access to water, and towns that are ports or located on rivers have an undeniable advantage in their development.[20]

[17] Derville, "Le grenier des Pays-Bas médiévaux;" Bigwood, "Gand et la circulation des grains;" Neveux, *Vie et déclin*; Unger, "Feeding Low Countries Towns."
[18] Blockmans, Wubs-Mrozewicz, "Integration from the Seaside," 449.
[19] Unger, "Maritime Transport."
[20] de Vries, *European Urbanization*, 158-61. These considerations on imperfect market integration do not necessarily mean that cereal markets were totally disconnected: in neighbouring regions, we often find parallel valuations that show a common awareness of the availability of cereal stocks in the region. But the phenomenon of medieval price formation mechanisms remains complex: it depends not only on supply and demand, particularly market supply and

In addition, any detailed analysis of the ease with which towns could access food must take into account variables which, unfortunately, are not available for the first half of the fourteenth century: in addition to the general level of demand, linked to soil conditions and connectivity, we need to measure, for example, the importance of aristocratic and especially ecclesiastical possessions in the countryside, institutions located in or near towns which could be repatriated to the urban market, depending on the strategies of the churches. These can be a significant source of supply. David Herlihy had roughly estimated (based on Italian records) that the land wealth of the churches represented around 33% of the distribution of land under the *Ancien Régime*.[21] But there are in fact disparities between urban areas, and the relative proportion of supply that could be covered by this 'institutional' offer is probably variable. Bas van Bavel has also stressed the influence of the unequal distribution of property and the different operating regimes that go with it, on the future economic development of certain regions.[22] Our own calculations have shown that the theoretical production of the churches located in Liège, a clerical city, should be more than sufficient to meet urban demand in normal times – even if some of this demand was undoubtedly directed towards other secondary urban markets.[23] We have no such early figures for other towns in Brabant or the Namur region. In any case, this situation is exactly similar for towns experiencing strong demographic growth, such as Flemish towns, where the development of the craft sectors has boosted demand that cannot be met by religious or secular institutions alone.

3. *Cities that regulate; cities that dominate: the distortion of mechanisms for access to food*

To secure food access, towns were tempted to play an economic role, the first traces of which can be found in the twelfth century. They played this role both in 'ordinary' times (to act on the structural market) and in extraordinary times (circumstantial role, particularly in the context of food crises, high prices or famine), and influenced many aspects of the grain trade.[24] Of all these measures, the ones that interest us most are those in which certain

demand, but also on a number of other factors that we often find difficult to analyse: public intervention in the market or agreements between players; monetary phenomena (in particular the inflationary tendencies induced by the loss of real value of minted coins); multiple interventions by players (religious; institutional) who may sell at knock-down prices or below the market price; unequal access to information on stocks and prices, between local players, and from region to region, rumours and anticipations of poor harvests to come... Measuring these mechanisms econometrically remains very complex.

[21] Herlihy, "Church Property."

[22] van Bavel, *Manors and Markets*, 51-93; van Bavel, "Wealth Inequality."

[23] Wilkin, "Time constraints," 319-30.

[24] See Devroey, "Food and Politics;" Pinto, "Food Security," and Dijkman, *Shaping Medieval Markets*. On the case of Liège, see Wilkin, "Logiques rationnelles," 16-7: a first early example

towns tried to arrogate prerogatives to themselves at the expense of others, thereby reinforcing the inequalities between consumers and merchants in different towns. This is the first level of collective action, which affects the general availability of food. The most spectacular policy in this area was the most coercive: Douai's staple right (documented only in 1396, but undoubtedly older), was an attempt to capture the grain surpluses of Artois, a highly fertile and productive region. It made Douai the preferred supplier for other areas, particularly urban Flanders. No later than the first half of the fourteenth century, the city of Ghent also imposed a staple (*Stapelrecht*) similar to that of the city of Cologne, which had been in force since 1259. These grain staple required all grain passing through the city on the River Scheldt to stop for an extended period of time, and fixed quantities of the cargo's contents to be resold on the spot (in Ghent, this ranged from one-sixth to all of the grain in transit, depending on the period; around 1350, it was half).[25] This coercive enterprise made Ghent the largest grain market in Flanders – an activity that compensated for the gradual loss of influence of its cloth industry, forcing people from other towns and the countryside to head for the metropolis. Any attempt to bypass the system was resisted: in the fifteenth century, attempts by Ypres to gain alternative access to grain via the Yperlee and the village of Warneton were stifled.[26]

These well-known examples illustrate the 'second level of inequality' in access to food, this time largely forged by institutions and imposed by force and by towns whose economic, political and military power enables them to dominate the surrounding landscape and display a selfish attitude. They obviously mirror the attitudes of Italian cities seeking to project themselves beyond their walls, and dominating the *contado*. What effect does this have on consumers? The imperative of the staple certainly has disruptive effects on price formation. These have not yet been fully studied, sometimes due to a lack of data. Presumably, the coercive influx of large quantities of grain onto the cereals market guarantees fairly low prices for urban consumers. This is at least what we found for the fifteenth century, by comparing wheat and rye prices in Cologne, a staple town, and Liège, where there was no grain staple.[27] The former were almost always lower in the Rhine city than in the latter, at least when external events did not disrupt normal supplies (wars, weather events). The Cologne staple was the result of a proactive policy defined by the urban authorities; coupled with the city's favourable position on the Rhine, which enabled it to 'capture' commercial traffic, this resulted in consistently lower prices than in Liège, which had recourse to its very fertile hinterland

shows us the clerical city of Liège which, at the beginning of the twelfth century, took corrective measures against high prices by attempting to control – in vain – the maximum price of grain.
[25] Cf. Derville, "Le grenier des Pays-Bas médiévaux" and Bigwood, "Gand et la circulation des grains." For Cologne: Kuske, "Der Kölner Stapel;" Schwerhoff, "Der Kölner Stapel (1259-1831)."
[26] Bigwood, "Gand et la circulation des grains," 429-30.
[27] Bonnivert, Espeel, Wilkin, "Grain market integration."

for its ordinary supplies. The city of Liège, which would later trade with other commercial centres such as Charleville-Mézières, did not need the Meuse as its main import route for cereals, whereas the river was used to transport other commodities such as timber.

On the other hand, it is difficult to measure statistically the disadvantage incurred by secondary towns located not far from a town where a staple right exists. These small towns were ignored or bypassed by grain merchants who had to converge on towns such as Ghent or Cologne, by virtue of this staple right. The existence of a main grain market undoubtedly obliges merchants from secondary towns to go to the staple towns to obtain some supplies and then to bring back grain; the general effect of these 'detours' on the final level of the price paid in secondary locations is complex to assess: in addition to transport costs and possible transport taxes, there is the question of the influence of the general concentration of grain in the central location (the staple town) on the setting of price levels, which could thus be pushed down for local consumers, as has been suggested.

Lastly, the staple leads to other types of inequality between urban centres: it favours the city that benefits from it fiscally, by enabling it to levy taxes on trade (often on sellers and exporters, as in Douai). These additional revenues enable investment that strengthens the city's position. However, some nuances are here required: 1) while cereals may be taxed, indirect urban taxation is mostly collected on other products, such as wine and/or beer, and less on cereals. It is also unequal, since it is not levied on all city dwellers, as certain categories of the population are exempt from taxes, such as ecclesiastics.[28] This was another flagrant inequality in the management of transactions. 2) Local dwellers who enjoyed the legal status of burghers or *poorter* avoided the staple and taxation for the transport of their own grain, if they did not resell it in town 3) not all grain was covered by the compulsory staple.[29] The most prestigious of these, such as wheat, which made up the bulk of the staple, were at the heart of the system; rye, on the other hand, was also included, as it was the 'poor man's wheat'. Some types of wheats, particularly barley,[30] were not always targeted by the staple rights. Rye supplied the brewing sector, which

[28] For example: Billen, Boone, "Taxer les ecclésiastiques."

[29] There is analytical work to be done on this issue. Our research on Liège (Wilkin, "Time constraints") shows that legislation does not necessarily cover all products, sometimes proposing rules affecting the general interest of the urban community, or more specific interests: for example, legislation on the price of cereals and the variation in the weight of bread (see below) affects spelt (much consumed, even if the elites prefer wheat) and rye bread; wheat is not necessarily regulated. Other products, however, are the focus of attention: meat, salt and wine, for reasons that have to do both with taxation and the accessibility of these foods for the elite. Certain cereals (such as oats) are often ignored, except in times of famine. There are therefore 'legislative grey areas' that raise the question of who is really at the heart of administrative/legislative action, depending on the town and urban sociology.

[30] Bigwood, "Gand et la circulation des grains," 428; on rye and its consumption practices: Thoen, "Précis," 113-6. It should be noted that wheat was sometimes also available to the underprivileged. Brewers were often the victims of brewing bans in times of famine.

did not obtain that the security of supply was guaranteed by administrative constraint. According to local realities, it testifies to certain 'choices' in favour of the rich or of the poor, or to the lesser capacity of certain sectors to influence the legal and administrative frame.

While the staple is the most spectacular of the policies targeted, it is not the only one. Other levels of intervention can be identified and were to be found in many different locations, beyond the Low Countries, in France, England, Italy, Catalonia and Germany, among others. Again, the logic behind them is to protect urban access to food and the availability of cereals. In ordinary times, and even more so in times of famine, there is often a ban on speculative bulk buying and cross-selling, aimed at preventing speculation and protecting the consumer.[31] However, this observation needs to be qualified: sometimes towns granted privileged status or *de facto* monopolies to professional associations of grain merchants, or to related professional associations, such as boatmen's ones.[32] These monopolies or quasi-monopolies were unfavourable to consumers. They were therefore sometimes withdrawn in emergency situations, when the grain shortage needs to be remedied, when the number of grain sellers needs to be increased,[33] and when the quantities sold need to be increased.

In some towns, the organisation of supply and resale also tends to favour certain institutional vendors, for example in Liège, where the cathedral sellers are the only ones allowed to sell in the early hours of the morning – and this privilege was formulated in 1317, after the Great Famine, when the town had experienced a major shortage of grain![34] Or at certain times of the year, when the bishop – in episcopal cities – enjoys a temporary monopoly (*banvin*) to empty his stocks of grain or wine at times of the year when prices are high. Such measures are likely unfavourable to consumers, as they reduce the quantity of food available, while demand for grain is inelastic,[35] barring sudden demographic movements.

In short, we can see that urban policies that affect supply are the result of a compromise between contradictory interests. The ones of the town and of

[31] In addition to Devroey, "Food and Politics," we refer to a recently published book based on a doctoral thesis conducted at the University of Brussels, which summarises the arsenal of political measures adopted by the cities: Barla, *La gestion de crises*, 160-266, offers a precise typology of the interventions encountered in the fight against famine, taking the example of two cities in the Low Countries, one Flemish, the other from Hainaut.

[32] In Ghent, for example, and for the conflict with Douai: Bigwood, "Gand et la circulation des grains," 411-2.

[33] In the case of Liège, see Bonnivert's as yet unpublished doctoral thesis, "La crosse, le glaive et le pain," 258-9: until 1370, vendors from outside the town were forbidden access to the market without taking part. Presumably due to shortages, this provision was extended: initially limited to Saturdays, when sales by outsiders, wholesale or retail, were tolerated, from 1487 they were authorized on Wednesdays, Fridays and Saturdays. In several Flemish towns, farmers were allowed to sell their grain in specially allocated areas in the market squares, in parallel with the ordinary market.

[34] Wilkin, "Time constraints."

[35] Zylbergeld, "Le prix des céréales."

the prince are often of a fiscal nature.[36] The creation of certain major cereal markets, as obligatory resale outlets, also enhanced the economic attractiveness of the town, which in turn strengthens its other sectors of activity.[37] Obviously, the aim was also to guarantee the access to food of privileged groups and sometimes of the weakest ones as well – as when action is taken on the availability of rye. This was a key to political stability, as shown by Luciano Palermo for Rome and the Papal State, for example.[38] However, certain measures were not conducive to setting a very low price, as abovementioned temporary monopolies exemplify. Other examples are as follows: several regulations enhanced inequality between consumers and favour privileged groups. In Liège, a city with a clerical sociology, the clerics of the churches were able to buy before everyone else; or in many, if not all, localities, the city's 'bourgeoisie' enjoyed a concrete legal status and had priority access to cereals and meat at the start of the day on market days. This was the case for the *poorters* of Ghent, for example,[39] or for the *cives* of Liège, a category that is legally ill-defined in the earliest documents that provide information on it, but which probably refers to the elite. It was later in the day that other categories gained access to the market: non-burghers, often the poorest; but also foreigners, who could buy for their own consumption; and finally, merchants who re-exported goods, often in limited quantities, and who were the object of great mistrust.

We will be quicker to point out other measures, which in principle protect consumers as a whole: for example, the system whereby the weight of bread varies according to the price of grain, which guarantees a façade of price stability[40] (but makes market fluctuations and their concrete effects very visible). It was sometimes replaced later by a system that varies the price of the bread, but keeps the weight fixed. There have also been sporadic attempts to control prices (in times of crisis, often to no avail), and even some massive purchases and sales at knock-down prices by the urban community, which are fairly rare in the North, which rarely had 'public granaries'.[41] Lastly, there were provisions to regulate the quality of grain sold or flour; and almost everywhere, control was applied to capacity measurements and fraud prevention.

[36] The taxation of cereals did not generally form the core of the tax base – it was rather the taxation of wine or beer, which were also made from cereals, that brought in the most revenue. But the cities, be they Ghent, Liège or Cologne, value their position as merchants in the grain trade. The attractiveness of urban centres as trading centres for cereals also has a direct effect on general economic activity.

[37] Palermo, "Politiche dell'alimentazione."

[38] Palermo, *Mercati del grano*.

[39] Wilkin, "Time constraints," 323-5; Bigwood, "Gand et la circulation des grains," 439-40.

[40] The origin of this legislation can be found as far back as the Carolingian period, when the weight of bread depended on current prices, but the price remained fixed: Devroey, *La nature et le roi*, 372. See: Zylbergeld, "Le prix des céréales," 271-2, 275 and appendix II, A and B, 775; 778-85 for an example of legislation in the Liège region. For the modern period, see the important book by de Vries, *The Price of Bread*.

[41] For example, Barla, *La gestion de crises*, 182-97.

The layering and subtle mix of considerations therefore explain the existence of multiple inequalities in access to the market, for sellers and consumers alike, and which hit rural or out-of-town residents even harder, as they had second-hand access to the urban market, while certain groups of urban sellers and buyers enjoyed priority and guaranteed access to it. The provisions therefore sometimes benefit the sellers, sometimes the favoured consumers, or create a balance that tends towards one or the other, according to the context.

4. *The context of the fourteenth century and regulatory activity*

The final question that concerns us here is that of the temporal evolution of these provisions, their link with the socio-economic context of the pre-1400s, and the possible impact of the Great Famine or the Plague on their adoption. It is obviously tricky to draw 'causal' conclusions from the concomitance of phenomena. Although there are direct or indirect indications of regulatory activity in the twelfth century, the first urban economic legislation most often appears in the sources around 1250 or even later. 1250 was the time when the variability of the weight of bread, in Liège or Ypres, was linked to the price of grain and when interpretative grids (price of grain vs. weight of bread) became necessary: but these measures date back at least to a Carolingian background, as has already been pointed out! And the thirteenth century was not characterized by any major food crises, although we can assume that there was some pressure around 1250.[42]

Around 1300, the economic situation is that of a 'full' world, in which Malthusian tensions between resources and populations were at their highest, and where any accident affecting the quantity of food produced ('food availability decline', in Sen's terminology) could create tensions. Precisely, urban legislation became more extensive and detailed between 1300 and 1350. However, this period also marked the consecration of the urban autonomy in the Low Countries. So, we can just as easily defend the idea that the development of new regulation was the result of a growing legislative effort, linked to the more systematic use of the written word.

In fact, the two phenomena are not mutually exclusive. Moreover, we can go beyond this alternative by pointing out that, in any case, the management of supplies was one of the key areas in which the new urban communities were active.[43] Even during the plague in Tournai, the town regulation bear witness

[42] Barla, "'Pour la necessitet du povre peuple'," 95; Zylbergeld, "Le prix des céréales;" Zylbergeld, "Les régulations du marché;" Zylbergeld, "Contribution," *passim* and in particular 269-70. English examples in Davis, *Medieval Market Morality,* 233-41.

[43] An interesting breakdown of the nature of the provisions adopted in urban legislation in Clauzel *et al.*, "L'activité legislative," by centuries, sometimes very early when possible (as in Douai, where the importance of provisions relating to the food trade is great).

to sustained administrative activity in economic matters, and in particular food issues, which went beyond those relating to health issues.[44] Economic control gave the town a large part of its legitimacy.

A number of major urban 'laws' can undoubtedly be linked to the context of food tension, famine and high prices: in 1317, the major regulations governing the food trade in Liège came in the wake of the great famine of 1315-7. However, the regulations were not uniformly favourable to consumers and confirmed the dominant position of the clergy in the food market. Ghent's legislation appeared in the texts between 1337 and 1366; while Bigwood noted that the first provisions on the staple were explicit around 28 April 1350, its first mention may already have appeared around 1323, and its definitive organisation crystallized between 1358 and 1364. These texts were therefore drawn up in a context in which several major charters were to take effect. Flanders experienced four major food crises in the fourteenth century: in descending order of importance, in 1315-7; in 1339 to 1342 (especially in southern Flanders); in 1360-1; and finally, before and after the Black Death, in 1349-51.[45]

5. *Conclusions*

Medieval urban market was 'segmented' according to several lines which organized the access of buyers and sellers. The leverages of its organization were primarily spatial lines, with a multiplicity of different places of exchange allocated to the sale of certain products: meat, fish, cereals, fruit or vegetables, etc. The organisation of the market could also be reinforced by a play on 'temporality' as a way to regulate access by applying differentiated rhythms of access to selling and buying. To go further in the efficiency and fairness of this organization, it would be necessary to carry out a detailed analysis, on a case-by-case basis, of the contexts in which the regulations emerged, the specific sociologies of each of the cities and the bodies that control and issue the legislation, linking these observations with the local context, which is not possible within the tight framework of this article. Drawing absolute conclusions on the nature of these urban regulations is undoubtedly premature, as they would need to be subjected to a large-scale comparative study embracing the cities of the Netherlands, following the example of what is underway for Southern France and Italy.[46] The differences in logic encountered, which result in certain provisions or texts benefiting different social groups or individuals, are the result of several factors. power relations between social groups, and the stranglehold of certain sectors on the administrative process,

[44] Billen, Boone, *Bans and Edits*, 21-5 and 35.
[45] Espeel, "Prices and crises," 114-41.
[46] See the publications of the research program on Mediterranean communal statutes coordinated by Didier Lett, currently underway.

first and foremost. Sometimes the contradictions reflect a complicated genesis: certain decisions were initially adopted on an (often weekly) *ad hoc* basis (as in Tournai),[47] to resolve a specific and very peculiar situation. But the specific can form the basis for more perennial legislation of broader interest. In this way, singular decisions have accumulated over time. In other cases, urban statutes and by-laws are the product of a genuine, well-considered codification, or a complete overhaul of previous regulations (as in Soignies). A true typological study of urban bylaws should therefore be undertaken, as the genesis of these bylaws could perhaps help to explain certain inconsistencies.

We also need to broaden the scope of our analysis: 1) firstly, by looking at the economic efficiency of the policies implemented in towns, which is the subject of much debate. In some cases, voluntarism, even selfish voluntarism, pays off: it has been pointed out that Cologne's position and staple had brought benefits to the local inhabitants in terms of low prices, in particular. But what level of control was actually applied on a daily basis to prevent cheating? We refer to James Davis' pessimistic assessment, for example, of the punishment for fraud.[48] This is difficult to substantiate for our regions, given the lack of judicial sources prior to the modern era.

2) In the case of market inequalities, the question of market segmentation, already raised by historiography,[49] needs to be stressed. Markets were spatially and temporally segmented, as pointed above. But the existence of quality standards and strict regulation provided a normative framework that could nonetheless be reconciled with the legitimate existence of a market for products of lesser quality or not even new. According to the mentality of the authors of regulation, it was important to avoid confusion between new products or those of more prestigious status, and the 'altered' or second-hand goods. It brought another level of segmentation, between first-quality and new items, and 'secondary quality' or second-hand products (outside the food sector: second-hand goods, especially clothes, or metal).[50] Even in the case of food, there were markets for these products of lesser quality, as in Mons, where mediocre, less noble or older meats were sold to the underprivileged, in a place physically separated from the "first-rate butcher"[51] by a distance of at least 12 metres. The existence of certain foodstuffs that are invisible in official market regulations also raises the question of a segmented market. Some cereals, 'less central' or prestigious, sometimes appear in the regulations or

[47] Billen, Boone, *Bans and Edits*, passim, with also some preliminary reflections on the genesis of the urban regulation.
[48] Davis, *Medieval Market Morality*, 269-70; 455-7 shows the complexity of the arrangements between moral imperatives, and the fluctuating and flexible practices that oscillate between the interests of the protagonists.
[49] To repeat the typology of Petrowiste, "Consommateurs."
[50] Cf. the chapter of Todeschini.
[51] Cf. Devillers, *Bans de police de la ville de Mons*, 20: these are not dated (between the thirteenth and the fifteenth centuries), but the writing refers to the thirteenth or early fourteenth century.

disappear from them, depending on the context. Not all commodities were regulated with the same vigour: the most prestigious were almost always: wheat or spelt, depending on the relative importance that these cereals might have in terms of local 'food cultures'.[52] Some products with a more modest status, but which are sometimes socially very important, are also mentioned, such as rye, which in Ghent is one of the two products of the staple. Barley is less frequently mentioned (although it receives a great deal of attention in the small town of Sint-Truiden, where the brewing of beer is an essential economic and fiscal issue),[53] and oats are very often ignored, as they are often used for animals, but also to make bread for the poorest people or during famine.[54] Depending on the case, many other products or cereals fall outside the regulated categories,[55] such as millet and einkorn... This is also the case for peas and vegetables.

Market segmentation is especially embodied in the contrasts between the formal markets officially regulated and the informal markets, those that exist on the periphery of the market governed by a normative framework: they are central to any consideration of equal access to the market. By its very nature, informal market is almost invisible, or at any rate less controllable.[56] There are indeed different types of activities, which straddle the two types of market, and are more or less legitimate and supervised. The activity of peddlers is more easily identifiable in the Early Modern sources; they sell in the city but also on its outskirts; the selling in shops is tolerated but less appreciated by the authorities, because it is less easy to monitor, by definition. Selling even occurs in places where other activities were normally centralized (e.g. inns, where meals and accommodation were provided), but where sometimes products (wine, grain, meat) were traded outside the control circuits. Inns also acted as meeting places for merchants, which made it possible to conduct transactions. Illicit and fraudulent activity took also place in private homes or in the immediate suburbs. 'Regraters' who bought goods outside the market, often outside the town, and then speculated on their resale inside or outside the walls were also systematically targeted by regulations. All of these

[52] Spelt is not necessarily a 'second-class' cereal, as is sometimes written. On this subject, for the period we are dealing with here: Genicot, "La limite."
[53] For example, in Straven, *Inventaire*, 214.
[54] Cf. Wilkin, "Famine et paupérisation," 238: in 1124, Charles the Good, Count of Flanders, had oat bread made. It was still used to feed certain populations until the end of the *Ancien Régime*.
[55] Even more so in times of famine. Despite the probable rush to more modest types of wheat in times of famine, which served as substitute foods, very little is known about the circulation of more modest cereals (einkorn, millet, buckwheat and even spelt, which had a more complex status, depending on the place and time): their price was not always regulated and organized. And in times of famine, are they given to the poorest, or traded? Not to mention the destination of certain products, such as barley, which was brewed or fed to animals... but not always. I owe these comments to Mathieu Arnoux, whom I would like to thank.
[56] On this subject, see: Nigro, *Il commercio al minuto*; Blondé *et al.*, *Buyers and sellers*. In general, see many contributions in Davis, *A Cultural History*.

activities are more or less on the edge of prohibition, although they are not always strictly illegal. In the symbolic hierarchy of activities, they were the least liked. However, according to historians, they may well have been among the most frequented. There would therefore have been two parallel market systems: a 'public' market, taxed and controlled, which guaranteed constant and fair access to food and served as public insurance for subsistence; and an informal market, which eluded historians and archaeologists until proven otherwise, which took place in many interstitial places. By definition, the existence of a market that exists alongside the formalized market, in a more or less socially accepted way, creates disparities and inequalities between those who play the game and those who bypass it.[57]

3) We need to think beyond the market and reintroduce into the analysis the question of inequality in its most common sense, and thus integrate debates on the evolution of living standards/real wages, before and after the famine and the plague.[58] The sources often contain only the isolated wages of day labourers or wage earners, paid by the day or by the task, with no statistics on individual unemployment levels and annual occupation rates; and indirect considerations on the ability of wage earners to negotiate in order to increase the value of their work, as in the chronicles. The question of the effect of immigration to the town and its corrective effect on the demographic decline 'within the town' is crucial: because immigration makes it possible to compensate for the demographic decline in the urban workforce, and therefore prevents real wages from rising. And above all, because the question of compensatory labour, particularly for women, for example in agriculture, has a debated impact on male and female wage levels, in England as in the Netherlands.[59] In short, the crisis is not necessarily improving the situation of the weakest workers, or their access to food. It should also be noted that the level of women's real wages for less-skilled workers may have been higher in northern Europe (a.o. in Antwerp), even if the trend would have been less positive after 1500, and thus that they had there a better access to the food market.[60]

4) Finally, non-market and individual food allowances (other types of 'entitlements') often escape analysis. There are many possible levels of reflection here: food distributions to the poor – which we believe, in the Low Countries, to be relatively marginal in relation to the scale of poverty[61] – need to

[57] Cf. the chapter of Todeschini.
[58] On this question, in general, see: Sosson *et al.*, *Les niveaux de vie au Moyen Âge*. The problem has not really been taken up again for the Low Countries. Interesting case study in: Espeel, Geens, "Feeding inequalities," 403-10.
[59] Munro, "Wage-Stickiness, Monetary Changes." On women's work, see lastly: Vervaet, "Women and Wage Labour," 204, footnotes 2 to 5, with reference to the relevant literature on the fourteenth century context. On the effects of the plague, wage levels and competitive or non-competitive advantages for certain less affected regions, see: Blockmans, "The social and economic effects of plague;" Cohn, "After the Black Death."
[60] De Pleijt, van Zanden, "Gender wage inequality."
[61] This is another subject to be revisited. For England, see: Dyer, "Did the rich really help the poor?"

be measured at their true value. The self-consumption of annuities paid in kind to the town inhabitants, who bought themselves a form of security, is another factor that needs to be clarified, even if they were able to sell them on the market. For the Low Countries in the sixteenth century, it has been estimated that between 20% and 40% of peri-urban or rural land was owned by the burghers of the towns,[62] a phenomenon also documented in the city of Cologne, for example.[63] Hospital annuities were often used to provide the bourgeoisie with a form of food security in their old age.[64] Lastly, other types of non-market access to food (domesticity, dependence on churches, access to intra – or peri-urban communal resources) should also be taken into account.

In short, these are all spheres of the economy whose importance cannot be denied in terms of access to food security, and which escape any analysis that focuses on the market. Here again, there must be many variations from one area to another, depending on the intrinsic characteristics of each town (sector of activity; institutions present, and their relationship with redistribution and economic paternalism; geography and nature of the relationship between the town and its immediate rural surroundings). The analysis of inequalities in access to food is therefore a complex undertaking that requires a broad view, not exclusively dependent on a focus on the market which, in the *Ancien Régime*, was an important but not the only means of access to subsistence.

[62] See: van Bavel, van Cruyningen, Thoen, "The Low-Countries, 1000-1750," 174.
[63] Irsigler, "Getreidepreise," 581-2.
[64] See in particular: Pauly, *Peregrinorum, pauperum.*

Works cited

Alfani, Guido. "Economic Inequality in Preindustrial Europe, 1300-1800: methods and results from the EINITE project." In *Disuguaglianza economica nelle società preindustriali: cause ed effetti / Economic inequality in pre-industrial societies: causes and effects*, ed. by Giampiero Nigro, 37-64 (Datini Studies in Economic History, 1). Firenze: Firenze University Press, 2020. https://doi.org/10.36253/978-88-5518-053-5.07

Alfani, Guido, and Hector García Montero. "Wealth inequality in pre-industrial England: A long-term view (late thirteenth to sixteenth centuries)." *Economic History Review* 75, no. 4 (2022): 1314-48. https://doi.org/10.1111/ehr.13158

Alfani, Guido, Victoria Gierok, and Felix Schaff. "Economic Inequality in Preindustrial Germany, ca. 1300-1850." *Journal of Economic History* 82, no. 1 (2022): 87-125. https://doi.org/10.1017/S0022050721000607

Alfonso, Helena, Marcelo LaFleur, and Diana Alarcón. "Concepts of Inequality." *Development Issues* 1, ONU, Department of Economic and Social Affairs, October 2015. https://www.un.org/en/development/desa/policy/wess/wess_dev_issues/dsp_policy_01.pdf

Barla, Nicolas. "'Pour la necessitet du povre peuple'. La gestion des crises alimentaires dans les Pay-Bas meridionaux en periode d'affirmation des pouvoirs urbains et princiers (XI^{e}-XV^{e} siècle) : chronologie des crises, analyse historiographique, étude de cas (Lille et Mons au XV^{e} siècle)." PhD thesis, Université libre de Bruxelles, 2020. file:///Users/davidecristoferi/Downloads/These_Nicolas_Barla_Tome_I_These_avec_interligne.pdf

Barla, Nicolas. *Pour la necessitet du povre peuple. La gestion des crises alimentaires à Lille et Mons au XV^{e} Siècle*. Brussels: Académie Royale de Belgique, 2022.

Bigwood, Georges. "Gand et la circulation des grains en Flandre, du XIV^{e} au XVIII^{e} siècle." *Vierteljahrschrift für Sozial – und Wirtschaftsgeschichte* 4, no. 3 (1906): 397-460.

Billen, Claire, et Marc Boone. *Bans et Édits pour la Ville de Tournai en Temps de Peste (1349-1351). Les transcriptions retrouvées de Frédéric Hennebert*. Brussels: Commission Royale d'Histoire, 2021.

Billen, Claire, et Marc Boone. "Taxer les ecclésiastiques. Le laboratoire urbain des Pays-Bas méridionaux (XII^{e}-XVI^{e} siècle)." En *El dinero de Dios. Iglesia y fiscalidad en el Occidente Medieval*, ed. por Denis Menjot, y Manuel Sánchez Martínez, 307-22. Madrid: Instituto de Estudios Fiscales, 2011.

Blockmans, Wim. "The Social and Economic Effects of Plague in the Low Countries: 1349-1500." *Revue Belge de Philologie et d'Histoire* 58, no. 4 (1980): 833-63. https://doi.org/10.3406/rbph.1980.3301

Blockmans, Wim. "Tussen crisis en welvaart : sociale veranderingen 1300-1500." In *Algemene Geschiedenis der Nederlanden*, vol. 4, *Middeleuwen*, red. Dirk P. Blok, 42-52. Haarlem: Fibula-van Dishoeck, 1980.

Blockmans, Wim, and Justyna Wubs-Mrozewicz. "Integration from the Seaside: A Comparative Synthesis." In *The Routledge Handbook of Maritime Trade Around Europe 1300-1600: Commercial Networks and Urban Autonomy*, ed. by Wim Blockmans, Mikhail Krohm, and Justyna Wubs-Mrozewicz, 446-80. London-New York (NY): Routledge, 2017.

Bonnivert, Antoine. "La crosse, le glaive et le pain : évêques et accès à la nourriture dans l'espace rhéno-mosan (XIII^{e}-XV^{e} siècles)." PhD thesis, Université Libre de Bruxelles, 2020.

Bonnivert, Antoine, Stef Espeel, and Alexis Wilkin. "Grain Market Integration and Institutional Agency: Cologne versus Liège (Fifteenth Century)." In *Market Integration in Medieval Europe: Analysis of Prices*, ed. by Pere Benito, and Antoni Furió. València: Publicacions de la Universitat de València, forthcoming.

Bove, Boris, et Claude Gauvard, éd. *Le Paris du Moyen Âge*. Paris: Belin, 2014.

Brittnell, Richard H. *The Commercialisation of English Society 1000-1500*. Cambridge: Cambridge University Press, 2009.

Clauzel, Denis, Isabelle Clauzel-Delannoy, Laurent Coulon, et Bertrand Haquette. "L'activité législative dans les villes du nord de la France à la fin du Moyen Âge" Dans *Légiférer dans la Ville Médiévale. « Faire Bans, Edictz et Statuz »*, éd. par Jean-Marie Cauchies, et Éric Bousmar, 293-330. Bruxelles: Presses universitaires Saint-Louis, 2001. https://doi.org/10.4000/books.pusl.20554

Cohn, Samuel K. "After the Black Death: Labour Legislation and Attitudes Towards Labour in Late-Medieval Western Europe." *Economic History Review* 60, no. 3 (2007): 457-85. https://doi.org/10.1111/j.1468-0289.2006.00368.x

Davis, James, ed. *A Cultural History of Shopping in the Middle Ages*, London: Bloomsbury, 2022.
Davis James. *Medieval Market Morality: Life, Law and Ethics in the English Marketplace, 1200–1500*. Cambridge: Cambridge University Press, 2011. https://doi.org/10.1017/CBO9780511763366
De Pleijt, Alexandra M., and Jan Luiten van Zanden. "Two worlds of female labour: gender wage inequality in western Europe, 1300-1800." *Economic History Review* 74, no. 3 (2021): 611-38. https://doi.org/10.1111/ehr.13045
de Vries, Jan. *European Urbanization, 1500-1800*. London-New York (NY): Routledge, 2013 (first ed. 1984).
de Vries, Jan. *The Price of Bread: Market Regulation in the Dutch Republic*. Cambridge: Cambridge University Press, 2019. https://doi.org/10.1017/9781108639590
Derville, Alain. "Le grenier des Pays-Bas médiévaux." *Revue du Nord. Histoire et archéologie* 69, no. 273 (1987): 267-80. https://doi.org/10.3406/rnord.1987.4293
Devillers, Léopold. *Bans de police de la ville de Mons du XIII^e^ au XV^e^ siècle*. Mons: Dequesne-Masquillier et fils, 1897.
Devroey, Jean-Pierre. "Food and Politics." In *A Cultural History of Food in the Medieval Age*, ed. by Massimo Montanari, 73-90. London: Bloomsbury, 2012.
Devroey, Jean-Pierre. *La nature et le roi. Environnement, pouvoir et société à l'âge de Charlemagne (740-820)*, préface de Patrick Boucheron. Paris: Albin Michel, 2019.
Dijkman, Jessica. *Shaping Medieval Markets. The Organisation of Commodity Markets in Holland, c. 1200-c. 1450*. Leiden: Brill, 2011. https://doi.org/10.1163/ej.9789004201484.i-447
Dyer, Chris. "Did the rich really help the poor in Medieval England?" En *Ricos y pobres: opulencia y desarraigo en el Occidente medieval. Actas de la XXXVI Semana de Estudios Medievales de Estella, 20 al 24 de julio de 2009, 307-22*. Pamplona: Gobierno de Navarra, 2010.
Epstein, Stephan R., ed. *Town and Country in Europe 1300-1800*. Cambridge: Cambridge University Press, 2001. https://doi.org/10.1017/CBO9780511523267
Espeel, Stef. "Prices and crises. The grain economy in fourteenth-century Flanders." PhD thesis, University of Antwerp, 2021.
Espeel, Stef, and Sam Geens. "Feeding inequalities. The role of economic inequalities and the urban market in late medieval food security: the case of fourteenth-century Ghent." In *Disuguaglianza economica nelle società preindustriali: cause ed effetti / Economic inequality in pre-industrial societies: causes and effects*, ed. by Giampiero Nigro, 389-428 (Datini Studies in Economic History, 1). Firenze: Firenze University Press, 2020. https://doi.org/10.36253/978-88-5518-053-5.25
Genicot, Léopold. "La limite des cultures du froment et de l'épeautre dans le Namurois au bas Moyen Âge." *Namurcum* 22 (1947): 17-23.
Goodson, Caroline. *Cultivating the City in Early Medieval Italy*. Cambridge: Cambridge University Press, 2021. https://doi.org/10.1017/9781108773966
Herlihy, David. "Church Property on the European Continent, 701-1200." *Speculum* 36, no. 1 (1961): 81-105. https://doi.org/10.2307/2849846
Higounet, Charles, éd. *L'approvisionnement des villes de l'Europe occidentale au Moyen Âge et aux temps modernes. Cinquièmes Journées Internationales d'Histoire 16-18 Septembre 1983*. Auch: Presses universitaires du Midi, 1985. https://doi.org/10.4000/books.pumi.21742
Irsigler, Franz. "Getreidepreise, Getreidehandel und städtische Versorgungspolitik in Köln vornehmlich im 15. und 16. Jahrhundert." In *Die Stadt in der europäischen Geschichte. Festschrift Edith Ennen*, hg. von Werner Besch, Klaus Fehn, Dietrich Höroldt, Franz Irsliger, und Matthias Zender, 571-610. Bonn: Ludwig Röhrscheid, 1972.
Jackson, Trevor. "The New History of Old Inequality." *Past and Present* 259, no. 1 (2023): 262-89. https://doi.org/10.1093/pastj/gtac009
Kuske, Bruno. "Der Kölner Stapel und seine Zusammenhänge als Wirtschaftspolitisches Beispiel." *Jahrbuch des Kölnischen Geschichtsvereins* 21 (1939): 1-46.
Leguay, Jean-Pierre. *Terres urbaines. Places, jardins et terres incultes dans la ville au Moyen Âge*. Rennes: Presses universitaires de Rennes, 2009. https://doi.org/10.4000/books.pur.120960
Munro, John H. "Wage-Stickiness, Monetary Changes, and Real Incomes in Late-Medieval England and the Low Countries 1300–1500: Did Money Matter?" *Research in Economic History* 21, no. 1 (2003): 185-297. https://www.economics.utoronto.ca/munro5/REH-21MunroWageStickiness.pdf

Malanima, Paolo. "Ineguaglianze economiche. Le certezze e le incertezze." In *Disuguaglianza Economica nelle Società Preindustriali: Cause ed Effetti / Economic Inequality in Pre-Industrial Societies: Causes and Effects*, ed. by Giampiero Nigro, 4-18 (Datini Studies in Economic History, 1). Firenze: Firenze University Press, 2020. https://doi.org/10.36253/978-88-5518-053-5.05

Neveux, Hugues. *Vie et déclin d'une structure économique: les grains du Cambrésis (fin du XIV^e^-début du XVII^e^ siècle).* Paris: École des Hautes Études en Sciences Sociales, 1980.

Nicholas, David. "Of Poverty and Primacy: Demand, Liquidity, and the Flemish Economic Miracle, 1050-1200." *American Historical Review* 96, no. 1 (1991): 17-41. https://doi.org/10.1086/ahr/96.1.17

Nigro, Giampero, cur. *Il commercio al minuto. Domanda e offerta tra economia formale e informale secc. XIII-XVIII / Retail trade. Supply and demand in the formal and informal economy from the 13th to the 18th century* (Atti delle «Settimane di Studi» e altri Convegni, 46). Firenze: Firenze University Press, 2015. https://doi.org/10.36253/978-88-6655-751-7

Palermo, Luciano. *Mercati del grano a Roma tra Medioevo e Rinascimento.* Roma: Il Centro di Ricerca, 1990.

Palermo, Luciano. "Politiche dell'alimentazione e carestie nello Stato della Chiesa: un modello di lungo periodo (secoli XIV-XVIII)." In *Alimentazione e nutrizione secc. XIII-XVIII. Atti della Ventottesima Settimana di Studi, 22-27 aprile 1996*, a cura di Simonetta Cavaciocchi, 325-38. Firenze: Le Monnier, 1997.

Pauly, Michel. *Peregrinorum, Pauperum ac Aliorum Transeuntium Receptaculum: Hospitäler zwischen Maas und Rhein im Mittelalter.* Stuttgart: Franz Steiner Verlag, 2007.

Petrowiste, Judicaël. "Consommateurs et marchés locaux à la fin du Moyen Âge : un état de la question." Dans *Faire son marché au Moyen Âge*, éd. par Judicaël Petrowiste, et Mario Lafuente Gómez (Collection de la Casa de Velazquez, 166). Madrid: Casa de Velázquez, 2018. https://doi.org/10.4000/books.cvz.5360

Pinto, Giuliano. "Food Security." In *A Cultural History of Food in the Medieval Age*, ed. by Massimo Montanari, 57-72. London: Bloomsbury, 2012.

Le réseau urbain en Belgique dans une perspective historique (1350-1850). Une approche statistique et dynamique, Actes du 15^e^ Colloque International. Spa, 4-6 Sept. 1990 (Collection Histoire, Série in-8°, 86). Brussels: Crédit Communal, 1992.

Schwerhoff, Gerd. "Der Kölner Stapel (1259-1831). Werden und Wandlungen einer alteuropäischen Institution." *Jahrbuch des Kölnischen Geschichtsvereins* 80, no. 1 (2009-10): 43-69. https://doi.org/10.7788/jbkgv.2010.80.1.43

Sosson, Jean-Pierre, Claude Thiry, Sandrine Thonon, et Tania van Hemelryck, éd. *Les niveaux de vie au Moyen Âge : mesures, perceptions et représentations.* Louvain-la-Neuve: Academia-Bruylant, 1999.

Straven, François. *Inventaire analytique des archives de la ville de Saint-Trond*, vol. 1. Saint-Trond: Moreau-Schauberechts, 1886.

Thoen, Erik. "Précis d'histoire du seigle en Flandre du XII^e^ s. au XVIII^e^ s. : culture et consommation." Dans *Le seigle (Secale cereale): histoire et ethnologie,* éd. par Jean-Pierre Devroey, Jean-Jacques Van Mol, et Claire Billen, 101-16. Treignes: Ecomusée de Treignes, 1995.

Thoen, Erik, and Tim Soens. "The Low Countries, 1000-1750." In *Struggling with the Environment: Land Use and Productivity*, ed. by Erik Thoen, and Tim Soens, 221-60 (Rural Economy and Society in North-Western Europe, 500-2000, 4). Turnhout: Brepols, 2015. https://doi.org/10.1484/M.RES-EB.5.108039

Unger, Richard W. "Feeding Low Countries Towns: the Grain Trade in the Fifteenth Century." *Revue Belge de Philologie et d'Histoire* 77, no. 2 (1999): 329-58. https://doi.org/10.3406/rbph.1999.4360

Unger, Richard W. "Maritime Transport and the Integration of Low Countries Grain Markets in the Late Middle Ages." In *Food Supply, Demand and Trade: Aspects of the Economic Relationship Between Town and Countryside (Middle Ages-Nineteenth Century)*, ed. by Piet Van Cruyningen, and Erik Thoen, 101-22 (Comparative Rural History of the North Sea Area, 14). Turnhout: Brepols, 2012. https://doi.org/10.1484/M.CORN-EB.4.00058

van Bavel, Bas. *Manors and Markets. Economy and Society in the Low Countries, 500-1600.* Oxford: Oxford University Press, 2010.

van Bavel, Bas. "Wealth inequality in pre-industrial Europe: What role did associational organizations have?" *Economic History Review* 75, no. 3 (2022): 643-66. https://doi.org/10.1111/ehr.13137

van Bavel, Bas, Piet Van Cruyningen, and Erik Thoen. "The Low-Countries, 1000-1750." In *So-*

cial Relations: Property and Power, ed. by Bas van Bavel, and Richard W. Hoyle, 169-98 (Rural Economy and Society in North-Western Europe, 500-2000, 1). Turnhout: Brepols, 2010. https://doi.org/10.1484/M.RES-EB.5.108833

van Cruyningen, Piet, and Erik Thoen, ed. *Food Supply, Demand and Trade: Aspects of the Economic Relationship Between Town and Countryside (Middle Ages-Nineteenth Century)* (Comparative Rural History of the North Sea Area, 14). Turnhout: Brepols, 2014. https://doi.org/10.1484/M.CORN-EB.5.105953

Vervaet, Lies. "Women and Wage Labour in Rural Flanders in the Fifteenth and Sixteenth Centuries." *Agricultural History Review* 67, no. 2 (2019): 203-26. https://bahs.org.uk/AGHR/ARTICLES/67_2_Vervaet.pdf

Vrancken-Pirson, Irène. "Contribution à l'étude critique de la destruction et de la reconstruction de Liège en 1468." Mémoire de licence en Histoire, Université de Liège, 1946-7.

Wilkin, Alexis. "Famines et paupérisation. Évêques et abbés face à la détresse, entre paternalisme et économie politique." Dans *Économies de la pauvreté au Moyen Âge*, éd. par Pere Benito, Sandro Carocci, et Laurent Feller, 219-42 (Collection de la Casa de Velazquez, 194). Madrid-Rome: Casa Velazquez-École française de Rome, 2023. https://doi.org/10.4000/books.cvz.41915

Wilkin, Alexis. "Logiques rationnelles et lutte contre la faim dans l'Europe médiévale du Nord : réflexions sur l'autonomisation des champs spirituels et économiques et sur la mémoire des crises, IX^{e}-XIII^{e} siècles." *Varia Historia* 39, no. 80 (2023), https://doi.org/10.1590/0104-87752023000200010

Wilkin, Alexis. "Organiser l'approvisionnement urbain : gestion des flux alimentaires, régulation des espaces d'échanges. Quelques réflexions en guise de conclusion." Dans *Approvisioner la ville. Flux alimentaires et circulations urbaines du Moyen Âge au XIX^{e} siècle*, éd. par Arnaud Knaepen, Christophe Loir, et Alexis Wilkin, 191-204. Brussels: Éditions de l'Université de Bruxelles, 2018.

Wilkin, Alexis. "Time Constraints on Market Activity and the Balance of Power in Medieval Liège." *Continuity and Change* 30, no. 3 (2015): 315-40. https://doi.org/10.1017/S0268416015000363

Zylbergeld, Léon. "Contribution à l'étude des ordonnances du pain du XIII^{e} siècle : l'exemple de la « Brodtaxe » de Lübeck (1255)." *Revue belge de philologie et d'histoire* 60, no. 2 (1982): 263-304. https://doi.org/10.3406/rbph.1982.3377

Zylbergeld, Léon. "Le prix des céréales et du pain à Liège dans la première moitié du XIII^{e} siècle." *Revue Belge de Philologie et d'Histoire* 51, no. 2 (1973): 271-332, 761-85. https://doi.org/10.3406/rbph.1973.2961

Zylbergeld, Léon. "Les régulations du marché du pain au XIII^{e} siècle en Occident et l'"Assize of Bread' de 1266-1267 pour l'Angleterre." Dans *Villes et Campagnes au Moyen Âge: Mélanges Georges Despy*, éd. par Jean-Marie Duvosquel, et Alain Dierkens, 791-814. Liège: Éditions du Perron, 1991.

Alexis Wilkin
Université libre de Bruxelles
alexis.wilkin@ulb.be
0000-0001-9984-5799