The Low Countries

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Introduction¹

An area of great geographical diversity and political fragmentation, the Low Countries present a basket case for the evolution of capitalism. Here we see not just a number of successive, distinctive phases of economic growth, but also a highly interesting contrast between a considerable degree of economic integration and continuing regional variations in the structure of factor markets. We distinguish four growth phases, beginning with Flanders' heyday during the late Middle Ages which culminated around 1300 in Bruges becoming northwestern Europe's leading entrepôt. The second upswing started during the late fifteenth century with the rise of Antwerp as a commercial metropolis and

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international financial centre. Following the Dutch Revolt and the political split between north and south the economic centre of gravity shifted away from Brabant and Flanders to Holland initiating a third phase of dynamic growth there, while the southern Netherlands endured an era of comparative stagnation. However, towards the end of the eighteenth century positions reversed. The south entered a new, fourth phase, entrepreneurs in Liège and Ghent pioneering an industrial transformation, while the north languished until a belated industrialization manifested itself during the later nineteenth century (Van der Wee 1963, 1988; Mokyr 1976; De Vries and Van der Woude 1997; Lis and Soly 1997; Aerts 2004; Van Zanden and Van Riel 2004).

Now one might have expected the area's geographic diversity and political fragmentation to have handicapped the development of capitalism, that is to say, the switch from autarkic or tributary modes of production to voluntary market exchange of goods, labour, land, and capital. We argue in this chapter, however, that diversity and fragmentation promoted capitalist development, in two distinct ways. First, the abundance of navigable waterways crisscrossing the area stimulated competition and regional specialization based on the market exchange of farm products, raw materials and manufactures as well as, on a more moderate scale, labor and capital (Van Bavel 2010a; Blockmans 2010). The second way, closely connected to the first one, was the nature of the interregional competition itself. Historians have often emphasized the negative effects of urban rivalry on economic performance, but there were marked benefits to competition notably in the realm of contracting institutions. Since almost any part of the area was accessible in more ways than one, cities had to remain on their toes if they wanted to keep position in commercial networks, so both urban councils and territorial overlords possessed a keen interest in developing institutions to support market exchange. (Davids 1996: 100-112; Stabel 1997; 161-172;, Dijkman 2011; Gelderblom 2013). For this purpose contracting institutions were borrowed from nearby regions and adapted to local circumstances.

Cross-country connections

Geography forms the basis of the Low Countries' diversity.² Northern and western parts of the area are flat and lie low, partly below sea level, but as one moves east and notably south the land becomes first gently undulating and then mountainous towards the Meuse valley. Most areas have easy access to the sea, either via inlets or by way of the rivers and, increasingly from the early Middle Ages, man-made canals that crisscross the country. Soil types vary from rich clay and loam to marshy peatlands, poor sand soils, and rock-strewn hillsides. A widely different patterns of settlement and exploitation across the area reflected this diversity of soils. Combined with the ease of transporting surpluses, this variety stimulated specialization and exchange between regions, and in time also the emergence of bigger settlements.

The southern part already possessed cities in Roman times, but following the empire's collapse most of them disappeared with the exception of the southern tip of Flanders, where walled settlements at Cambrai, Tournai, and Arras held on long enough to take part in the urban revival which started to manifest itself from the seventh century onward. In the Meuse valley fortresses remained and served as a basis for a repopulation at places like Huy, Namur, Tongeren, and Maastricht (Van Bavel 2010a: 102) Elsewhere, notably in the area north of the river Rhine which had escaped the Roman conquest, the urban revival favoured more recent nodes of settlement, such as castles, manors, episcopal seats, or abbeys. Whatever their origin, the early emerging cities shared one salient characteristic. They were all situated to profit from passing trade, i.e. at navigable water. A finely woven network of cities emerged, linked by waterways and serving hinterlands with market facilities and administrative functions. One such cluster centred on Ypres, Lille, Arras, and Cambrai in the southern Flanders-Artois area, another on Bruges and Ghent in northern Flanders, a third one along the Meuse river, and a fourth one emerged a little later on the eastern side of the Zuiderzee.

² Cf. Van Bavel 2010a: 15-50 for the definitive statementand references to the older literature.

Over time these cities gained considerable freedom of action in shaping the local institutional framework for the organization of exchange. Thegrowth of cities offered opportunities which overlords, be they clerical or temporal, could not afford to let go, such as a boost to tax income, the possibility to raise debt, the provision of key services such as administration and education, and support against rival lords. As a consequence all cities benefitted from the protection and favors of their overlords. In return, overlords bestowed privileges on the cities in their territory (Dijkman 2011: 389-392; Van Bavel 2010: 110-113.). These privileges ranged from fairly simple economic benefits such as a trade entrepôt, a weekly local market or a regional fair, to comprehensive codifications of a city's legal and administrative rules, usually referred to as city charters.

Urban charters resulted from combining the bottom-up shaping of institutions within the cities and by the communities themselves with a top-down contribution from the overlords concerned. However they also show a third, horizontal factor driving the institutional dynamics of medieval cities, and that is the collaboration and competition between cities. The articles of city charters were usually lifted from other codifications, resulting in families of related, very similar sets of rules stretching across the Low Countries. There were at least six such families. Some of the more extended networks, like the well-known one fanning out from the Deventer charter drafted before 1230*, linked up to fifteen cities together in a common legal framework. This often transcended the boundaries between territories on purpose, cities importing charters from elsewhere so as to emphasize their independence, distance themselves from powerful neighbours, and position themselves differently on regional markets (Van Engen and Rutte 2008: 74-78. Zutphen for instance did not in 1190/1290? adopt the charter from nearby Deventer granted some seventy years before, but the one from Roermond, more than 100 kilometres to the south as the crow flies.

Cities not only fashioned their relationship with overlord after each other's examples, this initial emulation also led to a more continuous calibration of institutional arrangements between towns. The links between the members of a charter family were more or less regularly maintained by a custom called 'hofvaart', literally court trip, in which officials from affiliated cities visited their

parent city to discuss points of law. Thus magistrates from the island Texel at the northern tip of Holland would consult their immediate forebear Alkmaar. If that failed to settle the matter, Texel and Alkmaar officials travelled together to Haarlem, the next one up, and if necessary with their Haarlem colleagues to Louvain in Brabant, the parent of them all. Though the *hofvaart* mechanism must have helped to achieve a degree of legal homogeneity between the members of one family, the number of city charter families suggests that heterogeneity continued to be the norm, but the point is really that city officials across the Low Countries knew well enough how things worked elsewhere and had a choice if they wanted to stimulate trade by optimizing local conditions.

Thus the city charter families are a striking manifestation of the information flows which facilitated the exchange of legal concepts and other institutional arrangements between the diverse regions of the Low Countries. These families were possibly the most important conduit, but definitely not the only one. Overland trade routes were another one. City officials along the Dutch section of the cattle route from Denmark to Cologne and Brabant met regularly to smooth trade flows Benders 1998: 63, 64, 73, 74; Gijsbers 1999: 33-38). The church was yet another, different one. Financial techniques like the short-term lease, the *rente* or real estate bond and the property mortgage spread between monasteries in a way which suggests these organizations exchanging information on how to best to manage resources. (Vercauteren 1947: 226-227; Van Bavel 2009: 192-194; Rijpma 2012: 160-167). The guilds, on the other hand, do not appear to have organized regular information flows by having trainees travel around, as they did in for instance France or Germany, but given the scale of migration and notably the high mobility of artisans they probably saw no need to. (Lucassen 1987; Epstein and Prak 2008: 16-17; Lis and Soly; cf. Stabel, 'Guilds' 198-204). Consequently the process of administrative harmonization and centralization which the Dukes of Burgundy introduced when they began to shape the various regions of the Low Countries into a more coherent territorial unit during the 15th century really came on top of much older structures which had linked them together.

Land markets

Though Low Countries land markets were, as elsewhere, somewhat shielded from competition because land cannot be shifted, they were not immune to competitive pressures. The relative ease of communication and the ready availability across the Low Countries of an array of commercial institutions for marketing agricultural produce meant that the economic and social effects of land reclamation, new institutions governing access to land, new crops or farming techniques, new forms of demand, or the opening of new markets would be felt from one region to the next. Throughout the Low Countries farmers stood to gain from specialization but the extent to which commercial opportunities were captured varied greatly, as , differences in soil quality and in social property relations dampened the impact in this region, tweaked the effects in that, resulting in wide differences in land markets across the Low Countries (Hoppenbrouwers and Van Zanden 2001; Van Bavel 2010a).

During the early Middle Ages no such thing as clearly defined and absolute property rights to land existed. Rather, as a rule various parties held different kinds of rights to a particular plot, such as the right to exploit it, to use a part or all of it in a particular season or all year round, to receive a share of its produce, to alienate it, to have a say over its alienation amounting to pre-emption or even retrospective purchase, to have the right of way, or the right to inherit any or some of these rights (Godding 1987: 150-151). Those rights overlapped with each other and might be bundled with similar or other rights to other plots, and they might depend not on written but on oral traditions, so transferring them was difficult (Van Bavel 2010a: 51-52) The degree of this fragmentation of property rights to land differed across the Low Countries. In some areas, notably parts of Flanders, Brabant, and the Guelders river delta, well-organized lordly manors occupied most or all of the land and claimed possession of most of the rights, or else at least power over them in the form of binding transfer procedures. Elsewhere, Holland for instance, manors were weaker and the fragmentation

consequently greater. Or they might be entirely absent, which was the case in Friesland and the sandy regions of marginal farming in Drenthe, eastern Overijssel, the Veluwe, and the Campine. There rights to land tended to remain undifferentiated, often communal, sometimes until well into the 19th century.

From the 11th century onward the manorial framework fell into decline until by 1400 only a few relics remained, even in areas where manorialism had been strong (Van Bavel 2007: 289-290). We do not know all the causes of the manorial decline, but it had at least partly natural origins. Here, soil erosion undermined the manors' economic viability, there flooding wiped their land away, elsewhere subsidence and rising groundwater tables forced farmers to let the land return to wilderness. Contributing factors include the rise of cities which, by offering an escape to hard-pressed peasants, siphoned off the manorial labour supply. Aspiring monarchs also strained manors by rolling back feudal prerogatives, for instance setting up public courts to replace the manorial jurisdiction over property disputes. The response of manorial lords to these challenges varied rather, both in its timing, its precise form, and in its specific consequences, but everywhere it had the same generic effect, that of giving an impetus to properly defining different rights to land, including ownership and tenure, thereby opening up access to land to competitive pressures, that is to say, boosting market-oriented farming by having tenants increase productivity in order to compete for land. We will first analyze why and how lordly responses varied, and then discuss their impact on the emergence of land markets.

The patterns of response, the likely motives behind them and their effects are best understood by looking at the available options. Large landowners in the Middle Ages could exploit their holdings in three different ways, analytically alternative modes though in practice landowners often mixed elements of them (Van Bavel 2009: 200-202). Firstly, they could run the land as a manor, recruiting labour by exacting manorial services from the peasants in their territory. Second, they could exploit their land themselves with hired labour. Third, they could lease out their lands to peasants, either in hereditary or in limited tenure. A fourth option crept in through the desire to reclaim land derelict through flooding or rising water tables. In such cases the territorial

prince to which such land had reverted licensed one or more entrepreneurs to reclaim it, granting them full ownership of the soil in return for a token recognition payment. In the Flanders coastal area the reclamation was as often as not undertaken by urban investors who then rented out the plots to peasants on short leases, but the Holland-Utrecht peatlands area was reclaimed and settled by owners-occupiers from the eleventh century onwards (Van der Linden 1956; Thoen 1988; Van Bavel 2010a; Dekker and Baetens 2010).

Now the transition from feudalism to market orientation meant landlords moving increasingly from option one to options two, three, and/or four: they needed to find ways other than the manorial exchange of service for safety to attract labour for exploiting the soil. The short term lease of option three, and option four, were most conducive to widening the access to land. The spread of short-term leasing is the best proxy we have for gauging when and where landlords moved, and into which direction. Where the manorial system was strong, landlords as a rule stuck to the first and second options as long as they could. But their success in doing so depended rather on circumstances, more specifically on what happened in their immediate surroundings. In urbanized counties such as Artois, Flanders, and Brabant, for instance, landlords moved early towards a mixed exploitation. As often as not they succeeded in reinforcing their position, though sometimes they lost it through disastrous timing. Landlords in parts of southern Flanders and Artois let out their land in hereditary leases at fixed rents before a period of high inflation set in from the late twelfth century, so manorialism in these areas declined quickly without producing the rise of short-term leasing associated with it elsewhere (Thoen 2001; Van Bavel 2009: 200-201). As a consequence of this and other circumstances the balance between various modes of exploitation differed considerably between the regions and even within regions. By 1500 short term leasing dominated in Flanders, covering an estimated 80-90 per cent of the soil against only 30 per cent in Brabant and 40-50 in Artois. However, within Flanders itself the percentage of soil under short term leases ranged from under 40 to over 90 (Van Bavel 2009: 191).

By contrast, for a long time the exploitation of peasants through manorial services remained strong in the eastern part of the Guelders delta. At the same time landlords in the western part faced mounting competition for labour from the free ownership offered to settlers in the nearby Holland-Utrecht reclamation area, so they changed tack and started leasing early (Van Bavel 2009: 202). Conversely, Holland's early market orientation is linked to the absence of manorialism tied to the dominance of peasant ownership (Van Bavel and Van Zanden 2004). However, the short lease spread slowly there, averaging 30-40 per cent in 1500, because landowners found it difficult to enforce such terms in an environment used to hereditary leases or full ownership. Only when the government started backing landowners during the sixteenth century did the short lease find wider adoption (Van Bavel 2009: 199-200). Short time leasing spread widely in one area without manors, coastal Friesland, where by 1500 it covered 80-90 per cent of the land, so the necessary better definition of property rights did not depend on them being derived from feudal origins. But adjoining Groningen, also without manors and with very similar soil conditions had a totally different land market dominated by hereditary leases and only 30 per cent short term leasing (Van Bavel 2009: 191, 199-200). Neither Friesland nor Groningen were urbanized, at least not nearly to the same degree as for instance Flanders or Brabant, so the presence of cities was at most a contributing factor in some cases. not a decisive one.

Summing up, judging by the spread of short-term leasing manorialism had been replaced by other, more market-oriented forms of exploitation across the entire area by 1500, opening up access to land. This is not to say that the land market worked smoothly everywhere, we simply do not know. Though short-term leasing must have stimulated a better definition of property rights and other rights to land, the sale and purchase of real estate and especially farm land often remained difficult until well into the 19th century on account of the variety of parties which a transaction might have to involve (Godding 1987: 150). In areas where manorialism had been strong it was expensive, too, landlords putting a levy of 10-16 per cent on land transfers. Land sales rose slowly in the Early Modern Era, but even in the most dynamic regions they rarely affected more than

2 per cent per year of all land (Van Bavel 2003a: 130-131, 134-135). Indeed, perhaps short-term leasing spread because it avoided the complications of transferring ownership. Attitudes towards the buying and selling of land also needed to change, and the pace of change is likely to have differed considerably from one place to the next. Even in a commercial centre like Ghent the idea of treating real estate like other commodity penetrated rather slowly (Howell 2010: 19-42). Our key point is really that conditions in the Low Countries were so diverse that, by the time manorialism had finally disappeared in 1500, these factors had produced widely different land markets, even in neighbouring areas. The uneven spread of short leases underlines that necessary legal and economic concepts had spread over the entire country, but local conditions determined whether or not they were applied.

We may thus conclude that, while there were plenty opportunities for market-oriented production throughout the Low Countries the creation of wellfunctioning land markets to capture the gains from agricultural specialization depended on a combination of four factors: first, property rights and contracting institutions such as the relative strength of manorialism and legal concepts such as the short-term lease; second, social property relations, say the power of large landowners or the presence of urban investors on the market; third, conceptions about the nature of land and the proper order of society, for instance the resistance to treating land similarly to movables, or Holland's dominant peasant propietorship retarding the spread of short leasing; and fourth, local contingencies, like soil quality, environmental constraints or the unfortunate timing of hereditary leases in parts of southern Flanders and Artois. Different combinations of these four basic determinants produced very different outcomes: in Flanders land reclamation reinforced urban power over the surrounding countryside, while in Holland it bolstered the position of owners-occupiers against both feudal lords and neighbouring cities. This particular difference in power balance proved enduring, for Holland's large-scale reclamations during the seventeenth century, though financed by urban merchants, did not really strengthen the position of the cities concerned (Van Zwet 2009). However, similar outcomes did not necessarily have similar roots: short-term leasing in

Friesland originated in, and led to, social property relations totally different from those in the Guelders delta. We will now examine labour markets to see what impact these differences in agricultural organization had on labour relations.

The rise of wage labour

One of the key differences between feudalism and capitalism is the extent to which people work for wages.³ Feudal manors and similarly self-supporting economic units such as monasteries usually possessed a number of artisans and workshops for leatherworking or textile production within their domain, but this labour would be bound to the lord and earn no wages beyond the manor's produce consumed. We can thus gauge the advance of capitalism in the Low Countries by considering the switch from feudal services to labour paid in kind or in money.⁴

From the thirteenth century onwards the importance of wage labour rose steadily everywhere in the Low Countries. But its timing and rate of growth differed markedly between regions and even within regions. During the sixteenth century wage labour had risen to an estimated third of all labour performed in the Low Countries, but its incidence still varied greatly, between peaks of more than 50 per cent in Holland and the Guelders river area to at most 25 per cent in inland Flanders (Van Bavel 2003b). This disparity was largely the result of the way in which property rights to land evolved. In areas where peasants were able to hold on to land, their holdings fragmented to such an extent that households soon possessed far more labour than their farmsteads required, pushing individual members into other employment for part or most of their time.⁵ These

³ For the rise of wage labour as a key element in the transition debate, compare Van Bavel 2010b, with references to the older literature.

⁴ This can be done by looking at the relative importance of coins minted for wage payments in various regions: Lucassen.

⁵ Underlying this analysis is the distinction between a peasant model and a specialization model, as drawn by De Vries 1974: 4-17. For the various permutations of these two models within the Low Countries: Hoppenbrouwers and Van Zanden (2001). In a more detailed study of Brabant in the sixteenth century Limberger (2008) actually finds the coexistence within one region of both models.

peasant economies possessed a large and hidden labour reserve, the extent of whose employment depended on the fluctuations of business in the wider economy (Hoppenbrouwers 1992: 264-273). Over time the phenomenon of peasants working part-time in other sectors disappeared. It characterized the Holland economy until the late sixteenth century, but continued in inland Flanders for another two centuries, in Twente and the northern part of Brabant until after 1800, and in eastern Brabant, Drenthe, and the Veluwe, with their poor sandy soils, later still (Hoppenbrouwers 1992:, 498-499, 678; Stabel 2001: 146-147, based on Thoen 1988; Van Bavel 2007: 289-294, with references to the older literature).

Textiles, especially linen weaving, dominated inland Flanders, where it may have provided up to 40 per cent of the population with additional income, but this region was also for tapestry weaving, which in the sixteenth century may have employed another 5 to 10 per cent of the rural workforce part-time (Van Bavel 2003b: 1120-1122). These peasant families combined grain growing for subsistence, with some marketing of cash crops and work in the manufacturing sector. Tapestry weaving was mostly waged work, but in linen weaving and in the preparation of wool for urban cloth production peasants worked as independent craftsmen with their own capital and tools, though, for reasons that will become clear soon, their remuneration lay considerably below what waged urban craftsmen earned (Van Bavel 2003b: 1145-1150). Elsewhere textile production, though important, dominated to a lesser extent. Brabant, for instance, had an important brickmaking industry near Antwerp, and peasant households in the Holland area between Rotterdam, Leiden, and Utrecht also supplemented their income with seasonal work in brick works (Limberger 2001: 163-165; Hollestelle 1961: 38-44). For a long time Holland's fishing and shipping sectors also provided a ready source of part-time peasant employment (Boon 1996: 150-162). During the eighteenth century thousands of cottagers in the Liège hinterland produced nails (Van Bavel 2003b: 1110).

In other areas the decline of feudalism consolidated the land into large farms and eliminated peasant holdings, structuring rural labour in an entirely different form. The rise of short-term leasing in the Guelders river area, for

instance, concentrated leaseholds in the hands of increasingly wealthy tenant farmers and forced the remainder of the rural population off the land and into wage labour (Van Bavel 2006). Between the fourteenth and sixteenth centuries wage labour developed similarly in Friesland farming and in the coastal Flanders manufacturing sector. Textiles again drove developments in the latter region, employing the rural population of the Nieuwkerke area to produce heavy woollens and at Hondschoote to weave says during the fifteenth and sixteenth centuries (Stabel 2001: 143-146). Some villages even worked their way up to urban settlements on the back of textile production, as happened to Duffel in Antwerp's Brabant hinterland as a result of large-scale serge weaving (Limberger 2001: 161-163). In Holland the switch from an economy based on peasant byemployment to wage labour occurred only during the sixteenth century, when commercialization led to the rise of large-scale and specialized farms employing local landless labourers supplemented by seasonal migrant workers (De Vries 1974; Van Bavel 2007: 289-294).

However, property rights to land were not the only factor shaping the labour market structure, the balance of economic and political power between cities and countryside mattered as well (De Vries 1974). Flanders' four major cities, for instance, subjected the labour markets in their hinterlands to their specific interests, which explains the low wages earned by the independent peasant cloth producers. Urban power effectively bridled some of the potential for economic growth and upward mobility in inland Flanders created by its easy access to foreign markets. By contrast, peasants in late medieval Holland also combined subsistence farming with waged work, but they had a much stronger economic position because the regional labour market offered them a range of options in several sectors, from primary production in fishing, dairy farming, and peat digging, via secondary sector activities in cloth production and brick making, to the service sector of shipping and even the public sector of digging and diking. Moreover, the markets for the goods and services produced by peasants were not under urban control. Towns and even small villages competed in creating outlets, a key characteristic of Holland's rural economy which offered peasants a good

chance to maintain themselves as independent producers and service providers (Van Bavel 2003: 1124, 1143; Dijkman 2011).

The continuing importance of peasant production was one of the reasons why, until well into the Early Modern Era, most people were self-employed, whether as farmers, artisans, service providers, skilled or unskilled workers, at least part of their time (Du Plessis and Howell 1982; Van Zanden 1993; Brenner 2001). When needed they would supplement that with wage labour or work swapped for one thing or another: payments in kind or in services, say access to a piece of land, or the use of a cart, a boat. As a result labour markets were heavily segmented. Wage labour formed only a part of the way in which people earned their living, and they would switch in an out of it depending on the availability of work, the wage offered, other opportunities, and personal circumstances such as family composition or specific needs.

However, from the later sixteenth century economic growth in the northern Netherlands boosted a bigger and more continuous demand for labour. The maintenance of dikes and sluices had always absorbed some peasant labour, but now a series of ambitious land reclamation projects recruited large numbers of wage labourers (Van Bavel 2007: 297; Van Zwet 2009). Shipping also scaled up. The sector had always been strong in the northern Netherlands, based on the comparative advantages of the rural labour surplus, a widespread willingness to invest private savings in partenrederijen or shipping companies, and the need to import grain to make up for the lack of local supplies caused by deteriorating soil conditions. By 1650 Holland boasted the largest merchant marine of Europe with over 3,000 ships connecting ports from Archangel in northern Russia to Constantinopel and Aleppo in the Levant. Shipping had become a multi-million business employing thousands of sailors drawn from all over the Netherlands, and drawing migrant workers from Germany and Scandinavia as well (Van Lottum 2007). Employment in fishing, whaling, and in river shipping reaching out as far as Westphalia must have numbered in the thousands of workers as well.

Concentrated in the ports of the Meuse estuary around Rotterdam, the ports on the western side of the Zuiderzee, and the coastal towns of Friesland and

Zeeland, the maritime labour market also had to meet a strong demand for sailors and soldiers from the navy and from the Dutch East India Company VOC. During the initial stages of the Dutch Revolt the break-away provinces in the north could still successfully defend their independence with a motley fleet of fishing vessels and merchant men modified for warfare, but from the 1590s the fledgling Republic built up a navy manned by regular sailors and soldiers. Supplemented in wartime with converted merchant ships, employment could peak at some *** men in the sixty out of a hundred years of armed conflict involving the Dutch during the seventeenth century (t Hart, Brandon). The Republic's standing army numbered about *100,000 men in peacetime, which could almost double during war (Zwitser, Staatse leger). Only the VOC recruited manpower on a similar scale. During the seventeenth century the company operated a fleet of *** ships shuttling between Europe and Asia and another *** ships stationed in Asian waters (Parthesius). Together with the men sent out to staff the numerous trading posts this required *** men embarking annually in Dutch ports on company ships. Between 1602 and 1795 the VOC employed a total of 975,000 men. Though aggregate maritime demand for labour was thus very high, the sector was not labour intensive. The ton-per-man ratio of merchant ships and fishing boats was very high and continued rising, sailors averaging *** per ship in ****, and only **** on herring busses. Barges on the heavily used inland transportation network of towboats were typically run by a shipmaster and one helper, with a single urban official keeping tabs on income and expenditure (De Vries, *Barges*, ***).

The industrial sector which arose in tandem with the Republic's commercial expansion also exerted a growing demand for labour, notably in the processing of imported foodstuffs and raw materials (De Vries and Van Der Woude 1997: 522). By the mid-sixteenth century timber, beer, herring, and salt were well-established sectors, soon followed by newer branches such as sugar, diamonds, dyewoods, silk, a little later also coffee, tobacco, and import substitution industries such as madder (check Brusse about the Betuwe). Processing industries were economically the most dynamic sectors in the northern Netherlands, and at the same time the most vulnerable. From about

1650 their competitive edge in the export markets for low-quality manufactures was blunted by the adoption of mercantilist trade protectionism by Britain and France on the one hand and on the other by soaring urban wages. Some sectors successfully changed tack by transferring production to the countryside of Twente and Brabant and reorganizing it as putting-out networks to cut cost. Others, such as those grafted on the colonial trade and on specialized farming, continued to thrive in urban environments, entrepreneurs seeking to cut wage bills with new technology. By contrast, textile manufacturing in the southern Netherlands responded entirely differently to the rise of trade protection. Producers consolidated and switched successfully to luxury fabrics for both domestic and foreign markets (Van der Wee 1988: 324-327, 330-335, 368-370). During the sixteenth century Oudenaerde tapestry weaving stood out, workshops counting scores of workers co-existing with single-worker units (Stabel 1995: 191, quoted in Stabel 2001: 151), but with consolidation fairly large production units staffed with wage labour became the norm (chk Lis on Lier, Ryckbosch, Verviers, De Peuter 1999).

The growth of wage labour changed the structure and organization of the labour market. Farm owners found they could reduce the number of regularly employed hands and hire casual workers, usually on a seasonal basis, a contrast with the market for maritime labour which came to offer more steady employment to sailors who could now sign with the same shipmaster year after year and sometimes even for a full year. In the processing industry, the owners of production units typically relied on a workforce of casual labourers headed by trained artisans. At the same time the scale of production units remained small. Until the late eighteenth or, in many areas, even the mid-nineteenth century the world of work consisted overwhelmingly of small businesses, typically consisting of a self-employed owner working with a two or three employees plus an apprentice or so. Amsterdam bakers seldom had more than two or three extra hands (Kuijpers 2008: 225-248). Firms employing ten or twenty people were rare. Even the largest and most capital intensive Holland industries such as brewing and sugar refining seldom counted more than ten workers. In some sectors, notably textile production, arms manufacturing, and clock making,

subcontracting could created integrated supply chains with large numbers of workers (Lis and Soly), but these were formally self-employed, if often totally dependent on an entrepreneur.

Indeed, self-employment continued at a high level, even as wage labour grew in importance. Until well into the Early Modern Era most people were selfemployed, whether as farmers, artisans, service providers, skilled or unskilled workers, at least part of their time. The three successive industrial growth phases in the southern Netherlands were all buoyed up by self-employed artisans, be it Flemish cloth manufacturing during the thirteenth and fourteenth centuries, the Brabantine and Flemish industry during the two following centuries, or the luxury weaving of the seventeenth and eighteenth centuries (Lis and Soly 1997: 219-221; Van Damme, Ryckbosch). Services also offered widespread opportunities for self-employed labour, and not just in highly commercialized provinces such as Holland. During the first half of the seventeenth century, for instance, Amsterdam numbered some 8,600 of self-employed merchants, retailers, artisans, and other independent producers of goods and services on a population of 120,000. If we take each of these entrepreneurs as heading a household of four people, self-employment was the main source of income for at least a guarter of all households in Amsterdam (Gelderblom 2009). This will not have been much lower in the numerous small towns and large villages which characterized the Low Countries. As a rule local amenities included not just a baker, carpenter, and smith, but a much wider group of retailers and artisans (De Vries and Van der Woude 1997: 509-510, 522-523. Cf. also Van Deursen, Graft; for the southern Netherlands: Blondé 1999). Indeed, the comparatively high level of locally available skills combined with a surplus of unskilled workers to give the countryside a comparative advantage in competing with cities for high-quality work (Lis and Soly 1997: 219-221; Munro 1990 cited in Lis en Soly 1997: 226). However, over time city and countryside developed different employment structures, cities concentrating on skilled and continuous work, the countryside on low- or unskilled and discontinuous, that is to say seasonal, work, so in the end the relocation of production facilities to the countryside remained limited to sectors which fit its employment pattern (Lis and Soly 1997: 224-225).

However, these employment patterns differed in degree, and not in kind. The boundary between waged work and self-employment was a fuzzy one, many people combining the two categories or switching between them on a more or less permanent basis in an economy of makeshift. Many waged jobs, notably in farming, but also in shipping, the army, public works, churches, and in urban defenses, did not entail permanent and full-time employment, forcing men and women to combine several jobs or generate income with self-employment (e.g. Soly; Soens; Van Wijngaarden 2000; Van Tielhof and Van Dam 2006; Kuijpers 2008, Van Zwet 2009;). This included petty farming, landless labourers with a right to use the commons for grazing some animals or collecting firewood. Even urban dwellers hung on to small plots of land outside the city walls to supplement their income (Stabel 2001: 150, referring to Stabel 1997: 95-106). Conversely, if and when needed self-employed producers of goods and services would supplement their income with wage labour or work swapped for one thing or another: payments in kind or in services, say access to a piece of land, or the use of a cart, a boat. Moreover, many jobs were waged at least partly in kind. Seasonal farm workers, domestic servants, sailors, and soldiers all received a considerable part of their wages in the form of board and lodging (Vermeesch for army example).

One might consider constantly shifting work arrangements as beneficial in providing the economy with a large and flexible pool of labour. This certainly was the case for the seasonal migration of farm hands and of sailors to join the merchant navy or the VOC, and also for authorities needing to mobilize large numbers of workers for emergency public works (Lucassen 1987; Van Zanden 1993). But the flip side was a precariousness which reduced labour mobility. Wage-dependent workers needed social networks for survival and such networks, once ruptured, could not easily be rebuilt somewhere else. Moving a household required finding work for its individual members all at once if income levels were to be sustained, difficult to do for people holding the usual combination of jobs (Kuijpers 2008: 254). The social welfare system did nothing to reduce the precariousness, indeed, it was geared to prolong it. Rather than paying full benefits to those staying at home, charities tended to supplement the wage

incomes of other household members while trying to cut out the very poorest of society, people without a fixed residence, a regular job, and therefore hardly any social network to fall back on (Lucassen 1995). In the southern Netherlands poverty relief was tailored to keeping wages down by forcing women and children to accept manufacturing work (Lis and Soly 1997: 225). Thus, the economy of makeshift with which poor households fought to survive explains why in an otherwise highly integrated economy, where goods flowed freely between regions, fairly large wage differentials continued to exist, notably for unskilled labour (Van Zanden 1999; Aerts 2004: 217). In that sense the Low Countries economy during the Early Modern Age was not really modern or fully capitalist.

Commerce and capitalism

Commodity markets appeared early in different parts of the Low Countries. Norse and Frisian traders pioneered overseas trade during the eighth to tenth centuries and by the turn of the first millennium settlements existed with a regular trade, protected by rulers. This is also best understood from favourable geographic factors. The area's infrastructure favoured both farming specialization and local and regional trade, the ubiquity of navigable waterways keeping transportation costs low. Food, building materials and fuel could thus be easily shipped, lowering the threshold for urbanization.⁶ The countries' central location also helped to bring about an early integration with other parts of Europe. Regular exchange across the North Sea with northern France, eastern England, northern Germany and Denmark existed as early as the year 1000. In addition rivers facilitated trading links with the Rhineland and down the Meuse valley which, from the twelfth century, extended as far as the Champagne fairs, where Flemish fabrics were exchanged for Italian luxury products (Blockmans 2010: 73-123.

⁶ Cf. On the impact of transportation costs on the cost of living in cities: Ballaux and Blondé 2007: 62-63, 76-79.

These factors combined to produce a dense scattering of market towns, first of all in Flanders, where scores of small cities developed into specialized cloth production centres tied to regional and interregional trade flows through a fair cycle which competed for business with the Champagne fairs (Stabel 1997). In neighboring Brabant, Antwerp was the first among at least a dozen towns involved in regional and international trade. In the north cities on the Zuiderzee rim and along the Rhine traded with the German hinterland from the thirteenth century. Holland's trade emerged a century later, instigated by the worsening ecological conditions which forced its inhabitants down the road of marked economic specialization. They switched from growing bread grains to importing them, first from southern Flanders and northern France, by the second half of the fifteenth century increasingly from the Baltic. Instead of grain farms started producing dairy, flax, and hemp, while surplus farm labour found work in fishing and transportation services (Van Bavel and Van Zanden 2004).

The most striking aspect of the way in which Low Countries commodity markets developed is the apparent ease with which aspiring market towns succeeded in obtaining a position in regional or international trade. The key to understanding this lies in the high degree of urban autonomy combined with the intensity of interurban competition. Here and there feudal lords organized annual fairs, as successive heads of the Wassenaar family did, and some big abbeys like the one in Egmond offered facilities to promote trade, but the development of commodity markets was primarily driven by town magistrates, which could shape their town's economic destiny in response to perceived threats and opportunities elsewhere. They were more or less free to do so, having obtained substantial legal and fiscal autonomy from their sovereign overlords in return for successive donations of money (Blockmans 2010; Dijkman 2011).

This enabled town councils to promote trade with every means: by maintaining a legal infrastructure to support private contracting, by offering protection to itinerant and resident merchants, by creating market spaces or dedicated halls, by building port facilities, offering residential accommodation to groups of merchants, granting privileges, setting up institutions such as exchange banks, or even by paying premiums to individuals moving in (Gelderblom 2013).

Magistrates monitored the work of local service providers, defined rules for payment, credit and the registration of credit, and set up courts to resolve disputes. The city charter families offered practical frameworks for devising institutional solutions, as did, for the cities on the Zuiderzee rim, the Hanseatic League, because the cities united in the League bound themselves to common rules and norms about the organization of commercial transactions. At times these frameworks also served to facilitate a degree of regional coordination and collaboration. Cities coordinated the timing of their local, periodic trade fairs into cycles so as to create quasi-permanent markets, and also joined together in promoting the interests of their merchants abroad (Gelderblom 2004). Flemish cities united in supporting merchants travelling to Britain or to the Champagne fairs as early as the 11th century, the IJssel towns formed a support network from the twelfth* century, Holland cities did the same for its Hanseatic traders from the fifteenth century.

However, competition remained the norm and its intensity rooted in the Low Countries' geography. Every city strove to maintain or improve its market position in the face of nearby competitors with access to virtually the same production areas and outlets (De Vries and Van der Woude 1997: 172-174). At times cities succeeded in buttressing a favourable location with commercial privileges obtained from overlords to establish a market monopoly. Dordrecht maintained a general staple privilege on the Meuse and Rhine trade for a considerable time during the fourteenth through sixteenth centuries though, as we shall see, with variable success, and Middelburg had a wine staple for the Zeeland-north Flanders area during the sixteenth century (Wijffels 2003; Dijkman 2011: 159-200). But as a rule producers and traders possessed alternatives. They could sell or purchase elsewhere, in another city, avoid one market's commercial privileges by taking an alternative route to another market, knowing that one city's rights were not easily enforced in others. Some markets, those for horses and cattle, for instance, were highly mobile anyway and thus easily poached by local rulers wanting to stimulate trade (Van der Wee and Aerts 1979; Gijsbers 1999)

The pressure of competition drove cities to mobilize every means available, political, legal, fiscal, and if necessary armed force, to secure their position. Bruges repeatedly sent armed men to stop business seeping away to its outport, Sluys, and in 1356 cajoled the Count of Flanders to subject Antwerp to its rule (Murray 2005: 35-7, 253). Ghent resorted to arms in order to prevent trade being diverted by the digging of a new canal in 1379, Haarlem did so in 1513 to frustrate the building of a lock obstructing traffic (Blockmans 2010: 280-1; Van Dam: 46-7). In Flanders the three dominant cities Bruges, Ypres and Ghent managed over time to subject the countryside to their interests and stifle the growth of smaller towns. Groningen in the far north also wielded considerable political and economic power over its surrounding countryside, the Ommelanden (De Vries and Van der Woude 1997: 509) At different points in time cities as different as Aalst, Antwerp, and Rotterdam suffered serious trade restrictions imposed by neighbouring towns (ref*). When the Holland economy entered its climacteric during the late seventeenth century, hitting the local beer industry, urban magistrates responded with prohibitive tariffs on imports from elsewhere (Yntema 2009). For a time political centralization limited the impact of urban rent-seeking. When the Duke of Burgundy gained control over Brabant in 1406, he halted Bruges' check on the development of Antwerp. From the mid-fifteenth century cities could challenge urban rivals thwarting their economic ambitions before a central court instituted by the Duke. This court ruled in favour of Antwerp when it fought Middelburg's wine staple, and Rotterdam won a similar case against Dordrecht's general staple. Here again the Revolt cut across centralisation. In the southern Netherlands the supreme court's power remained undiminished, but it could not break the iron grip of the leading Flemish cities over their province; the Republic failed to establish a central supreme court, even if litigants in Holland and Friesland could appeal to verdicts of their respective provincial courts in a joint Hoge Raad (Verhas 1997).

However, the key point about urban rent-seeking is that its success differed from region to region, resulting in marked structural differences between factor markets. The three Flemish cities succeeded in controlling the countryside economy, resulting in commodity markets, notably the ones for grain and

textiles, being sharply tilted in their favour, just like the labour markets noted above. By contrast, similar control attempts in Holland failed. Dordrecht's comprehensive staple right in the river delta faced continuous and often successful challenges from small downriver ports vying to poach trade away, until nearby Rotterdam's irresistible rise effectively ended the monopoly (ref*) Small towns villages got away with dodging the market privileges of nearby cities because the count would not risk siding with the cities and incur the wrath of these smaller communities (Dijkman 2011) . When the Amsterdam council, pressed by labour unrest, imposed restrictions on timber processing, the industry simply left town and moved north to the Zaanstreek, drawing shipbuilding in its wake (De Vries and Van der Woude 1997: 301-302). With cities unable to establish control, Holland's labour and commodity markets remained much more flexible and responsive than the corresponding ones in Flanders.

It was also the interurban competition which, from the thirteenth century, propelled the Low Countries into dominating international trade.⁷ The hub function which Bruges, Antwerp and Amsterdam successively assumed for European commodity flows could have been exercised equally well by ports in neighbouring Britain, France, or Germany. However, those ports all occupied commanding positions in relation to their hinterlands, large areas possessing little or nothing in the way of alternative access to supraregional markets. This situation was conducive to a fiscal exploitation of trade and to institutional sclerosis, at the same time reducing the hinterland's economic scope to low-value activities in the production of basic foodstuffs and manufactures. Leading ports in the Low Countries always attempted to obtain similar power over their hinterlands, and they sometimes succeeded in getting it, but they always needed to reckon with the high urban potential of neighbouring regions giving producers and consumers alternative markets. They also had to compete to attract international traders from around Europe, essentially a footloose crowd easily persuaded to move elsewhere if conditions there suited them better. The Bruges market was highly dependent on the German Hansa and on Italian and Spanish

⁷ This parapgraph and the next are based on Gelderblom 2013.

merchants, for instance, Antwerp on Rhine merchants, English cloth merchants and on Portuguese spice traders. If one of those groups moved the others might do so, too, rendering city councils responsive to demands for better facilities.

The contribution of foreign merchants to the growth of international trade in the Low Countries is usually expressed in terms of their particular product specialization and business expertise, but that fails to capture their true importance, which lay in them promoting a continuous adaptation of institutional arrangements to changing economic needs, first as a corporate body, but increasingly, in Antwerp after 1490 and subsequently also in Amsterdam, as individuals. As more and more foreigners used the commercial, legal, and financial infrastructure, city councils strove to optimize conditions, building dedicated market amenities and residential accommodation, promoting good contracting institutions, incorporating foreign customs into law, and adapting legal proceedings to commercial needs. It was this interaction between local markets and foreign merchants which stimulated the spread of commercial institutions such as double-entry bookkeeping and maritime insurance, instruments such as the bill of exchange, public and private bonds, and money market techniques such as bill discounting, securities trading, repos, forwards, futures, and derivatives. Moreover, the interurban competition combined with the ease of communication to ensure that best practices spread quickly from the commercial centres outwards to satellite cities. Foreign merchants could therefore credibly threaten to leave a town, or leave in fact, and they frequently did one or the other. This combination of footloose traders and the determination of urban magistrates to facilitate their commercial transactions also explains the relative ease with which commercial primacy shifted from Bruges to Antwerp in the late fifteenth century, and from Antwerp to Amsterdam following the Dutch Revolt.

The Colonial Challenge

The keen interurban competition also manifested itself in the intercontinental trade, with surprising and innovative results. From the 1560s Flemish merchants made inroads in the sugar trade with the Canary Islands and Madeira, but they remained from trading with the Americas, Africa, and Asia because the crowns of Portugal and Spain kept them out. Once the fall of Antwerp in 1585 had removed this obstacle merchants in the northern Netherlands started sending out expeditions to west Africa, to the Caribbean, and, from 1595, to Asia. For the African and the Caribbean trade the traditional forms of business organization sufficed, that is to say, ships run as private companies which coordinated their movements when necessary. But the Asian trade posed a different set of challenges. The initial expeditions during the 1590s were adapted specialpurpose partnerships between merchants running the venture and investors recruited to provide capital, with local and provincial governments providing subsidies in the form of military hardware. Sent out from rival ports, these expeditions competed with each other, sending product prices up in Asia and down in Europe, at the same undermining the fragile Dutch Republic in its fight for independence from the Spanish empire. Without firm coordination the Dutch stood to lose out against the Portuguese and Spanish traders, already firmly established and backed by the same state power which tried so hard to crush the Republic. These considerations led the Estates General to push for a merger between competing intercontinental trade interests under its auspices.

Chartered in March 1602 with a capital of 6.4 million guilders, the united Dutch east India company or VOC obtained a monopoly on the Asian trade and therefore ended private enterprise in that business. It marked a step from the preceding special-purpose partnership to modern corporations in having a clear separation between ownership and management, transferable shares, and limited liability for shareholders. But in other respects the VOC was a curious hybrid, indeed an anomaly, for four reasons. First, the Estates General were its principal, so military considerations, more specifically the demands of carrying the war against Spain overseas by gaining a firm foothold in Asia, came first, business second, shareholders last (Gelderblom, De Jong and Jonker 2011). Second, to placate competing local interests company operations had to be spread over

separate departments or chambers in six cities, and it took the board some twenty years to weed out the most glaring inefficiencies of that decentralization (Schalk, Gelderblom and Jonker 2012).

Third, the VOC acquired two other defining characteristics of modern corporations, permanence and limited liability for managers, not in response to the exigencies of large-scale business, but as a remedy to structural flaws in its corporate finance (Gelderblom, De Jong and Jonker, forthcoming). The company faced statutory liquidation in 1612. It would be then be replaced with a new one, giving shareholders the option to either take their money back or roll it into the successor. The investment required by the overseas presence starved shareholders of dividends, so directors realized early that the statutory liquidation needed lifting to secure the continuity of the Asian trade. In July 1612 they obtained the necessary waiver from the Estates General, giving the VOC de facto permanence, though not de jure. Moreover, the 6.4 million guilders' capital had been conceived as a revolving fund to be replenished from sales revenues as ships returned. The six chambers were individually responsible for running their part of the combined operations and they remained suspicious of each other's doings, which restricted the scope for a mutual bridging of periodic shortfalls between income and expenses. Large chambers such as Amsterdam could easily raise debt locally, but the smaller ones faced bankruptcy if their ships failed to return in time. In a process of slow, piecemeal engineering the board built sufficient confidence between the chambers to allow first the circulation of surplus commodities to help out needy chambers, then debts in current accounts, and finally a centralized financial policy tied to managers' limited liability for debt (Schalk, Gelderblom and Jonker, 2012; Gelderblom, De Jong and Jonker, forthcoming).

Fourth, permanence and managerial limited liability resulted from a triumph of might over right, and not from the judicious balancing of stakeholders' interests which otherwise characterized Dutch business. The shareholders were not consulted about the blatant breach of the charter and their rights in 1612, but fobbed off with a dividend in kind at rigged prices. Shareholders who refused the goods had to wait years before the company finally

gave them the money. As a result the 1621 charter lapse turned into an epic fight over shareholder rights which the shareholders lost because the VOC directors, hand-in-glove with local and provincial authorities, could mobilize the Estates of Holland in support (De Jongh 2010?). In 1623 the directors, emboldened by years of getting their way, unilaterally discarded their unlimited liability for debt simply by dropping the clause which referred to it from the preprinted bond forms in 1623 (Gelderblom, De Jong and Jonker, forthcoming).

Though the investor protests failed to steer the VOC in the right direction, they did succeed in materially altering the design of its sister intercontinental trading company, the West India Company or WIC, launched in 1621 to take the war against the Luso-Spanish empire to South America and the Caribbean. Its original charter was a copy of the VOC's, so despite vigorous canvassing by the authorities subscriptions remained paltry because by now investors knew that a company combining warfare with trade under political direction made no commercial sense. Bowing to the obvious, the board amended the charter and gave shareholders more power over the company, after which subscriptions closed quickly on a total of 7.1 million guilders (De Jong, Jonker and Röell, 2012).

After its rocky start the VOC became a distinct commercial success, paying regular, high dividends from the mid-1630s. Conversely, the WIC had a good start only to falter following a disastrous attempt to wrest Brazil away from Portugal. By the mid-1640s the heavily indebted company had become an agency licensing its monopoly to private merchants, highlighting the fact that corporations working on a large scale possessed no trade advantage unless they succeeded in duping investors and mobilize the heavy investment needed to build a large territorial presence, as the VOC had done. Both companies remained anomalies in Dutch business, by their hybrid corporate form, their scale, and their monopoly. Their size lent their operations some impact on society in the form of a standardization of product specifications, the organization of sales such as auctions, the labour market, and coin production, but they were otherwise dwarfed by other sectors. As a rule the intra-European trade, entirely in the hands of traditional two or three-man partnerships, amounted to 70-75* per cent of the total (Jonker and Sluyterman 2000). The Dutch economy offered neither

the scope nor the need for large-scale ventures, and investors fully realized this. As a result the attempts in 1720 to inflate a bubble following the examples in Paris and London misfired completely, investors judiciously picking the one or two projects offering some commercial prospects from the speculative rest (Gelderblom and Jonker, forthcoming). It was only during the 1740s that larger businesses in corporate form made their appearance as a result of consolidation in processing industries such as brewing and sugar refining (De Jong, Jonker and Röell, 2012).

The impact of colonial enterprise on the Low Countries' economy remained limited in different respects as well. The VOC was sufficiently wellorganized to seize a leading role in the European competition over the Asian trade and the very modern looking labour market formed an integral part of its strength. That provided a marked difference with the organization of labour in agriculture, manufacturing, and services, which did not have a large and mobile labour supply because the self-employment component remained high, businesses were small, highly skilled workers remained strongly tied to their employers, and precariousness prevented low-skilled workers in both rural and urban setttings from moving. This dichotomy was also mirrored by the impact of the colonial trade on the real economy: as a percentage of total trade volume Asian and American imports remained quite small (De Vries and Van der Woude 2007) and the qualitative transformation of the economy did not stretch beyond the processing industries concerned and, in some cases, like tobacco, madder, and earthenware, the production of local substitutes for exotic goods. Throughout the Low Countries the main engines of growth were, depending on the region, textile manufacturing, commercial agriculture and shipping, and, in the cities, retailing and other urban services.

Financial markets

Having looked at the dynamics of capitalism within the real economy of the Low Countries, we now turn to the world of finance, which reveals a similar dynamism and variation from very early on. Financial techniques spread throughout the Low Countries with the same ease as other types of information. As early as the eleventh century, for instance, the property mortgage appeared in the Meuse valley, then economically the most dynamic region (Vercauteren 1947). From there it travelled first to Flanders and Hainaut, when economic growth began to manifest itself there, and from there to other provinces. (Van Werveke 1929). By the fourteenth century the mortgage had become the instrument of choice for territorial lords wishing to raise money by mortgaging assets ranging from land to tolls, offices and fiscal resources (Van Bavel 2010a: 182-183, 266-267; Vercauteren 1947).

The settlement of Lombard money lenders differed from the spread of mortgages. They started their activities not in the Meuse valley, but in the Flanders-Artois-Hainaut region during the first half of the thirteenth century (Bigwood 1921: 319-320). By 1250 they were active in Oudenaerde, Tournai, Courtrai, Furnes, Poperinghe, Mons, Ypres, and Bruges, by the late 1260s also in Brussels, Louvain, and Utrecht, where in 1267 a mob chased three Italian money lenders into the cathedral and killed them (Tihon 1961: 340, 342, 345; Van Bavel 2010a: 185). Some of these Italian bankers formed syndicates to operate licensed pawnshops, the Count of Flanders granting licenses for no fewer than fourteen cities during 1280-1282 (Tihon 1961: 348). The Duke of Brabant gave blanket permits for his entire territory, where some forty lombard businesses operated in 1309 (Tihon 1961: 350). By that date Lombards were active in nearly all major towns in the southern Netherlands, and in most major towns in the western part of the northern provinces (Maassen 1994: 41-43).

Though occasionally prosecuting money lenders for usury, the church clearly lacked the power to stop them from expanding their businesses across the Low Countries (Wyffels 1991; Van Bavel 2010a: 184-5). The increasing use of

alternatives which sidestepped the ban on usury rendered clerical objections redundant anyway. In 1228-1229 Tournai in Hainaut issued what are likely to have been the first public life annuities, perpetual annuities following close behind (Tracy, Dual origins). Some twenty years later the practice had reached Ghent, by 1300 it was engrained in both Holland and Brabant. Indeed, cities in the former county had already become so familiar with annuities that they clubbed together to underwrite annuities on behalf of their overlord, thereby laying the foundations for the province's later famously capacious credit (Zuijderduijn 2010: 341, 345ff). Such paper possessed a fair degree of security for creditors because the law of reprisal allowed them to arrest any burghers of a defaulting city for arrears. As a result annuities were often held at a surprising distance from the issuing city (Zuijderduijn 2009; Boone et al. 2003).

We have noted above the deep monetization which occurred across the Low Countries during the high and late Middle Ages, familiarizing increasing numbers of people with the concept of money as a standard of value. However, recurrent deficiencies in the coin supply restricted the extent to which money could be used as a means of payment in the medieval as well as the early modern period. Though no doubt impractical in many instances, coin shortages do not appear to have harmed the economy unduly. People possessed a wealth of alternatives to settle transactions, as often as not through barter or clearing (Van der Wee 1978: 101). Intermediaries appeared for squaring multiple transactions. The fragmentary administration of one such intermediary, a cloth merchant active in the eastern Twente region during the first half of the seventeenth century, shows him operating a form of multilateral clearing over considerable distances, compensating, say, goods sold by him with services rendered by one person and debts of a second one to yield a single claim on a third person (Hesselink, Kuiper and Trompetter 2008). Individual items were always priced in money, but the final tally was usually carried over and not paid with coin. Some debts and claims carried interest, others did not, without apparent connection to other aspects of transactions, for instance the duration of credit or the amount of money involved.

We do not know how common intermediaries such as this merchant were, but given the fact that Early Modern society revolved around credit they were probably very common indeed. Presumably their scope decreased with the onset of more ordered coinage conditions, in the Dutch Republic during the later seventeenth century and in the southern Netherlands, by then part of the Austrian empire, from the *1740s. The availability of coin clearly stimulated cash transactions and thus reduced credit; Antwerp estates show a rising proportion of cash to debts plus claims during the eighteenth century (Willems 2009). Even so most people held comparatively little cash long after the arrival of more ordered coinage conditions, so they continued to prefer settling transactions with means other than money.

Members of the aristocracy appear to have been exceptional in keeping surprisingly large amounts of cash in times of coin shortages, that is to say the late fifteenth and early sixteenth centur (Spufford, How often).⁸ Given the nobility's stereotypical reputation for poor payment of suppliers such sums presumably did not represent the kitty for household expenses and may say more about the need for status-enhancing gestures such as conspicuous largesse. Aristocrats may also have avoided alternative modes of settlement such as clearing, either because counterparties would likely be social inferiors, or because they preferred to let debts hang until ripe for bargaining.

By contrast, a merchant's reputation depended on prompt payments, but preferably not in coin. Merchants employed various means of settlement to minimize both their cash holdings and the need use coin (Spufford, how often). They cleared claims and debts via current accounts with each other or with cashiers, money changers, or bankers, they wrote bills of exchange and IOUs to pay debts, and as often as not they circulated each other's paper. In this they were aided by city councils defining terms for accepting business records as legal proof and for endorsing commercial paper. Antwerp provided a key contribution by shaping regulations concerning endorsement to bearer, resulting in a great expansion of commercial credit because paper could now circulate more widely.

⁸ check timing

From at least the mid-153os bills of exchange were also discounted, that is to say, sold before term to a third party (Van der Wee 1978: 102-4). At the end of the 1530s the Emperor Charles V decreed the Antwerp rules about commercial paper binding for the entire Low Countries (De Smedt 1940-1).

Even so the tempo with which commercial payment and credit techniques spread depended less on the adoption of particular legal clauses or new instruments than on the scale and character of business. The Bruges market served as the proving ground for most of them during the thirteenth and fourteenth centuries, and Antwerp's endorsement clauses put in the capstone (Murray 2005).⁹ But traders elsewhere adopted these techniques only if and when business warranted it. The basic legal framework governing bills of exchange, for instance, was sufficiently clear for them to spread, but their actual use depended on the availability of highly specific information about trade flows, commodity prices, interest and exchange rates, and about counterparties, all of these at home and abroad. Consequently bills of exchange only spread beyond commercial centres like Bruges if and when foreign trade reached a scale sufficient to repay the gathering and dissemination of such information. Antwerp already reached this position by the late fifteenth century, but more than a century later Amsterdam traders, though already conducting a large and fast growing international business, showed themselves still wary of being paid with bills (Van der Wee 1963; Jonker and Sluyterman 2000).

The bill market's reach was thus determined by the balance between the cost and benefits of collecting the information required, which turned positive only for the top of the commercial and financial hierarchy. However, that reach appears to have widened over time, the fairly small number of international bankers active in Bruges growing first into a large community of brokers, international traders and bankers at the Antwerp exchange, and then into the specialized and articulated crowd of bill brokers, traders and merchant bankers which turned Amsterdam into Europe's leading settlement centre once the

⁹ Amsterdam's late 17th century innovation of turning bills of exchange into acceptances may have been an exception, but at present we simply know too little about the origins and economic importance of this innovation to make a firm statement. Houwink 1929; Wallaert, *Wisselbrief*.

Iberian trade and finance had left Antwerp for its northern rival following the Peace of Westphalia in 1648 (Baetens 1976; Jonker Wedged).

The arrival of this key business coincided with a period of profound reorientation at Amsterdam's Wisselbank or Exchange Bank (Gillard 2004; Van Nieuwkerk 2009; Dehing 2012). Modelled on a famous Venetian example and set up in 1609, seven years after the launch of the VOC and two years before the opening of the city's first commodity exchange, the bank initially served three purposes: firstly, defending the guilder against the inferior coins flooding in; secondly, providing merchants with a stable means of payment in the form of banco money; and thirdly, holding a stock of quality coins available for merchants having to pay cash overseas. Existing intermediaries such as cashiers already ran a payments circuit and also supplied coins for export and this might have enabled them to evolve into bankers. They successfully did so in Bruges and Antwerp, obviating the need for a public bank there (Van der Wee 1978: 104; Aerts 2011). However, a powerful coalition sought to achieve a higher degree of monetary coordination than Amsterdam's fledgling cashiers could muster. The city council, Holland's Estates and the Estates General wanted to assert control over the currency, and the VOC needed large amounts of silver for export to Asia. These interests combined to launch the Wisselbank as a strong public body, but the intention of replacing the cashiers failed, their services having become indispensable to merchants. Over time a division of labour emerged, the cashiers becoming the hinge between the Wisselbank and the Amsterdam market, an essential and, one assumes, remunerative function, but one which prevented their further evolution to fully fledged bankers in the way some of their Antwerp colleagues did.

By 1650 the Wisselbank had succeeded in stabilizing the guilder sufficiently to render that part of its function redundant to merchants, so deposits stagnated. Casting around for new ways to attract business, the directors came up with a new type of instrument, the *recepis* or tradable depositary receipt for bullion deposited with the Wisselbank. In essence cheap options on gold and silver, the recepissen boosted deposits and transformed operations by handing directors a tool for macro-economic policies by levering the money supply (Quinn

and Roberds 2010). Consequently, though conservative in the sense of not providing credit or issuing notes, the bank was highly modern in pioneering functions which most central banks adopted only during the late nineteenth century. The recepissen also reinforced the Amsterdam market's already highly developed facilities to attract gold and silver, lowering the price for obtaining liquidity to levels unobtainable elsewhere and giving the city a competitive edge in the routing of international payments. The further refinement of bills into acceptances, which cut the risk of non-payment and thus the cost of bills on Amsterdam, helped to keep that edge sharp. Consequently the money market enabled Dutch merchants both to hold on to commodity flows, propping up the Republic's foreign trade in the face of mounting competition, and to reinvent themselves as merchant-bankers, pioneering a burgeoning foreign loan business on the back of their commodity trade and acceptance dealing (Jonker and Sluyterman 2010).

The character of Amsterdam's financial market must therefore be understood from the huge pool of liquidity at its heart. Foreign merchants rushed in to profit from that liquidity and the low interest rates associated with it, swelling the Wisselbank deposits. By the mid eighteenth century bills on Amsterdam financed grain traders in Berlin and cotton manufacturers in Brussels (Groeneveld; Schnabel and Shin 2004; De Peuter 1999). The origins of that liquidity can be traced back to the formation of the Dutch East India Company or VOC in 1602. Trading in the company's shares started almost immediately upon the closing of subscriptions, with forwards and options following in its wake (Gelderblom and Jonker 2004, 2005; Petram 2011). By the 1680s one allied transaction, *prolongatie* or repo lending on collateral of securities, had become a standard technique for short-term credit, which it was to remain until 1914. However, this was not the VOC's only contribution to the Dutch market's facilities. In 1608 its directors devised a system of transferable IOUs with which sailors and soldiers could obtain an advance on future pay so as to either buy food and lodging while awaiting embarkation, or to provide for their family during the tour of duty. As often as not debtors sold these bonds, discounted by the going interest rate plus a mortality risk premium, to specialized

intermediaries who by grouping them managed to offset the individual mortality risks and thereby keep debtors' costs relatively low.

This system did not remain limited to Amsterdam. All six of the VOC's local chambers operated it and the Dutch navy, equally rooted in local admiralties, adopted something similar (Van Bochove and Van Velzen 2010). By *1688 the kind of intermediation on which the VOC IOUs depended had also spawned a private IOU system in Amsterdam, which the city council sanctioned that year by defining a standard format and giving legal preference in case of default to claims on officially stamped paper (Van Bochove and Kole 2011). We have no idea how widely such paper was used, but surviving specimens suggest it filled a key gap between the informal credit common at the lower end of the market and the techniques such as bills and repos used by the upper end. By the end of the eighteenth century private, preprinted IOU forms were also sold by Leeuwarden stationers (Van Bochove and Kole 2011). The two types of IOU were important innovations because they extended the market's reach further down the social ladder and as such they underline that Amsterdam possessed a highly articulated market meeting a wide variety of needs, ranging from the high volumes of debt raised by the government and the colonial trading companies to small-scale private loans. Consequently, though having a large bank at its centre, Amsterdam finance was not bank-oriented, but fully market-oriented (Carlos and Neal 2011). It was the market, not the Wisselbank, which supplied all credit, and key credit techniques such as prolongatie were market-based and survived the bank's demise at the end of the eighteenth century for over a hundred years.

The circulation of formalized IOUs highlights another structural aspect typical of northern markets. A fairly wide public of savers willing to buy paper claims appears to have existed from quite early on, long before Holland's upswing. Data from a community north of Amsterdam show people of modest means holding shares in ships and government annuities during the 1530s (Zuijderduijn, De Moor and Van Zanden 2009). Those shares and annuities were clearly available in small denominations, presumably a consequence of the need to mobilize money amongst a population where wealth was both relatively scarce, compared to Flanders or Brabant, and distributed more evenly (Van Dillen

1941).¹⁰ Mobilizing money therefore required mechanisms for getting small contributions from many people rather than large ones from a few. Shipping shares were commonly split into fractions of 1/64th or even smaller. Until the switch to excises as the main source of fiscal revenue at the end of the sixteenth century taxes were raised by allotting each community its share in the total burden, after which community officials spread that share over households using a periodic detailed assessments of individual wealth. Holland's public loans were similarly apportioned to communities and households until the 1550s, when officials discovered investors would buy willingly (Gelderblom and Jonker 2011a). The dispersed placing of loans continued, however, eighteen local tax receivers doubling as agents for selling debt and paying interest. This had the dual effect of widening the province's access to investors and avoiding the concentration of debt in the hands of a narrow elite.

Consequently Amsterdam differed from Bruges and Antwerp in not being the central market for public debt in the Dutch Republic or even in Holland. The Antwerp exchange functioned as the hub of Charles V's finances, raising the huge sums needed for bribing German princes into electing him Emperor and floating short-term debt, both for his government in the Low Countries and also for the Spanish crown in the form of *asientos* or short-term bonds (Tracy 2002; Blanchard 2009). The *asientos* cemented the Brabant city firmly at the heart of a European settlement network which cleared commercial credit, public debt, and bullion flows with each other (Aerts 2004: 222-3). Antwerp possessed a large group of merchants and bankers who could carry out such transactions and absorb debt, while the Brabant aristocracy also tended to invest heavily in it (Trac 1985). Fiscal centralization under Charles V and Philip II brought about a gradual harmonization of taxation and debt policy across the Low Countries, but following the Dutch Revolt two distinct patterns emerged (Gelderblom and Jonker 2011b). The breakaway provinces in the north adopted a fiscal system relying chiefly on indirect taxes levied by provincial governments, supplemented by debt issued on their own credit, and secured on future tax receipts. Combined

¹⁰ Check wealth distribution 1544

with a soaring economy this enabled the seven provinces to raise very high amounts of debt to achieve and then defend their independence.

However, in the south the trend towards greater fiscal autonomy for the provinces reversed, the representative assemblies which should have assumed responsibility falling apart into their constituent factions asserting their fiscal privileges against each other and against the Spanish and, from *1714 Austrian, government in Brussels. This had three major consequences. First, taxation and debt remained comparatively low in the southern Netherlands, both at the provincial and at the central level. Second, fiscal policy remained firmly in the hands of local and provincial elites, which kept debt issues largely to themselves. Third, key parts of public financial services such as tax collecting and organizing payments were bestowed as favours on well-connected businessmen. The prominent banking houses which emerged in the southern Netherlands during the eighteenth century all grew out of payments services, fiscal services, or both (Baetens 1976; Houtman-De Smedt 1982, 1983; De Peuter 1999; Degryse 2005; Nettine). Those fertile substrata were absent in the north, because the Wisselbanken served the commercially most important part of the payments system and frequent public auctions kept profit margins on tax farms at a minimum. Banking houses did emerge, but they all rooted in trade finance.

That said, financial markets in the north and in the south never reached the vast majority of people, whose low income effectively locked them out of all formal financial services except for the occasional pawning of whatever possessions they could offer as collateral. The IOUs might have given the Amsterdam market a somewhat wider reach than those in Antwerp or Bruges, but that was a difference in degree, not kind. From the same point of departure and using highly similar instruments markets in north and south developed very different institutions and forms of intermediation, but this mattered for the few at the top, not for the many at the bottom.

37

Conclusion

The most striking aspect of capitalism in the Low Countries is its variety, that is to say, the marked differences in the actual organization of transactions between ostensibly similar, free markets driven by supply and demand in which people participated willingly. On the one hand, there clearly did not exist a specific set of precondition or circumstances, or a particular institutional framework necessary for the development of factor markets; on the other, local circumstances continued to shape factor markets throughout the period under consideration.

The variety had its roots in the area's diversity of soil conditions and natural resources which, transformed into specific social property relations, ultimately determined the distribution of income and wealth, structured the power of local and central authorities, and shaped the contracting institutions organizing agriculture, trade, and industry. However, the relative ease of trade and communication combined with the interurban competition to produce a fairly rapid diffusion of information, production techniques, legal concepts, and ways of organizing transactions from one region to the next, the autonomy of local rulers allowing economic actors to choose the institutions that best suited them. The power and wealth of aristocratic magnates, monasteries and other church institutions, cities, individual merchants, and artisan guilds might look impressive, but there were always limits, barriers, and countervailing forces preventing any one of them or even coalition between them from achieving longterm dominance over wide areas and use their vested interests to stifle innovation. Moreover, the keen intercity rivalry prodded elites to embrace innovation when at all possible, since failing to keep up might make business move away to places where perceived restrictions did not apply, to rival cities, or into the countryside.

Now of course capitalism did not develop smoothly everywhere all the time. Opportunities were missed or passed up for one reason or another, innovations were dropped when they failed to live up to expectations, and a few pockets long succeeded in resisting the pressures of change, usually because poor

38

soil conditions cemented the social and political balance. The point is, rather, that as a result of the balance between rulers, economic actors, and local circumstances the structure and shape of factor markets, notably those for labour and for capital, did not become more uniform across the Low Countries, but increasingly different, with a great variety of contracting institutions.

Thus it was not, as often argued, the early decline of feudalism or the Low Countries' degree of urbanization which stimulated successive phases of economic growth, but the interaction between resource endowments, infrastructure, and political fragmentation. It was this continuous interaction which produced both a dynamic evolution of contracting institutions to govern market exchange, and the creation of political and legal constraints on local and central executives. As such it explains why the Low Countries' political fragmentation did not end in economic stagnation, as it did in northern Italy, why violent disruptions such as social upheaval or political strife remained isolated instances, and why cities or rulers rarely succeeded in harming competitors' trade whether by monopolies, punitive tolls or taxes, or armed force.

In the final balance it was the split between north and south which put the Low Countries at a disadvantage within Europe by drastically reducing both the scope for regional interaction and the size of the internal market. As a result neither half reaped the full benefits of economic growth in the other part, be it the north's seventeenth century Golden Age, or the south's renewed dynamism feeding into early industrialization during the eighteenth century. However, both countries retained the long-term legacy of the area's fragmentation: when growth resumed, it did so grafted not just onto the social, human, and financial stock accumulated over time, but also on the accumulated stock of institutions. This really amounted to an oversupply: not only individual areas possessed alternative rules for organizing specific transactions, as for instance the international commodity trade showed, but economic actors in most regions were familiar with a much bigger set of contracting institutions for them to adopt if and when economic opportunities presented themselves. As a result the Low Countries were at the same time resilient enough to absorb exogenous shocks and

39

sufficiently flexible to seize new opportunities. This showed for instance in even the more peripheral areas adopting, with apparent ease, modern institutions such as savings and loan banks for middle class groups, mutual insurance schemes and other forms of risk management, paper money, various forms of investment, and new corporate forms such as the limited liability company.

Bibliography

- Acemoglu, Daron, Simon Johnson, and James Robinson. 2005. "The Rise of Europe: Atlantic Trade, Institutional Change, and Economic Growth." *American Economic Review* 95 (3): 546–79.
- ———. 2012. Why Nations Fail: The Origins of Power, Prosperity, and Poverty. London: Profile Books.
- Aerts, Erik. 2004. "Économie, monnaie, et société dans les Pays-Bas méridionaux de Charles Quint" In Wim Blockmans and Nicolette Mout, eds., *The World of Emperor Charles V.* Amsterdam: University of Chicago Press, 201-226.
- ——. 2011. "The absence of public exchange banks in medieval and early modern Flanders and Brabant (1400-1800): a historical anomaly to be explained", *Financial history review* 18: 91-117;
- Ballaux, Bart and Bruno Blondé. 2007. "Landtransportprijzen en de economische ontwikkeling van Brabant in de lange zestiende eeuw", *Tijdschrift voor Sociale en Economische Geschiedenis* 4-2: 57-85.
- Baetens, Roland. 1976. De nazomer van Antwerpens welvaart: De diaspora en het handelshuis De Groote tijdens de eerste helft der 17e eeuw. 2 vols. Brussels: Gemeentekrediet van België.
- Bavel, Bas (B.J.P.) van. 2003a. "The Land Market in the North Sea Area in a Comparative Perspective, 13th-18th Centuries" In Simonetta Cavaciocchi, ed. *Il Mercato della Terra Secc. XIII-XVIII. Atti della "Trentacinquesima Settimana di Studi", 5-9 Maggio 2003.*Prato: Istituto Internazionale di Storia Economica "F. Datini". 119-145
- ———. 2003b. "Early Proto-Industrialization in the Low Countries? The Importance and Nature of Market-Oriented Non-Agricultural Activities in the Countryside in Flanders and Holland, c. 1250-1570". *Revue Belge de Philologie et d'Histoire* 81-4, 1119-1165.
- ———. 2006. "Rural wage labour in the sixteenth-century Low Countries: an assessment of the importance and nature of wage labour in the countryside of Holland, Guelders, and Flanders." *Continuity and Change* 21-1, 37-72.
- ———. 2009. "The Emergence and Growth of Short-Term Leasing in the Netherlands and Other Parts of Northwestern Europe (11th-16th Centuries): A Tentative Investigation into its Chronology and Causes", in: Idem and P. Schofield (eds.), *The Development of Leasehold in Northwestern Europe, 1200-1600.* Turnhout: Brepols. 179-213.
- ——. 2010a. Manors and Markets. Economy and Society in the Low Countries, 500-1600.
 Oxford: Oxford University Press.

- 2010b. "The Medieval Origins of Capitalism in the Netherlands", *Low Countries Historical* Review 125, 45 – 79.
- Bavel, Bas (B.J.P.) van, and Jan Luiten van Zanden. 2004. "The jump-start of the Holland economy during the late-medieval crisis, c. 1350-c. 1500", *Economic History Review* 57, 503-532.Beekman, A. A. and P.J. Blok. 1915. *Geschiedkundige Atlas van Nederland: De Bourgondische Tijd. De Noordelijke Nederlanden in 1476. Het Bourgondische Rijk in 1476.* The Hague: Nijhoff.
- Benders, Jeroen. 1998. "Over ossen en keurslagers : de stad Groningse, Overijsselse en Gelderse veehandel tussen 1350 en 1550" In D. E. H. de Boer, Remigius Wenceslaus Maria van Schaïk, and Renée Nip, eds. *Het Noorden in het midden: opstellen over de geschiedenis van de Noord-Nederlandse gewesten in Middeleeuwen en Nieuwe Tijd*. Assen: Van Gorcum, 61-86.
- Bigwood, G. 1921. *Le régime juridique et économique du commerce de l'argent dans la Belgique du Moyen Âge*. Brussels: Académie Royale. 319-320.
- Blanchard, Ian. 2009. *The international economy in the age of reason, Antwerp and the English merchants' world*. Stuttgart: Steiner. 19-78.
- Blockmans artikel 2010 over inst arr steden?
- Blockmans, Willem Pieter. 2010. *Metropolen aan de Noordzee: de geschiedenis van Nederland, 1100–1560.* Amsterdam: Bert Bakker.
- Blondé, Bruno 1999. *Het Brabantse stedelijke netwerk (ca. 1750 ca. 1790).* Brussel: Koninklijke Vlaamse Academie van België voor Wetenschappen en Kunsten 1999.
- Bochove, Christiaan (C.J.) van, and Heleen Kole. 2012. "The Private Credit Market of Eighteenth-Century Amsterdam", *unpublished paper*.
- Bochove, Christiaan (C.J.) van, and Ton van Velzen. 2011. "Loans for Salaried Employees: The Case of the Dutch East India Company, 1602-1795", *unpublished paper*.
- Boon, Pieter Arend. 1996. "Bouwers van de zee: zeevarenden van het Westfriese platteland, c. 1680-1720", Stichting Hollandse Historische Reeks.
- Boone, Marc, Karel Davids, and Paul Janssens, eds. 2003. Urban Public Debts: Urban Government and the Market for Annuities in Western Europe (14th–18th centuries). Turnhout: Brepols.
- Braudel, Fernand. 1949. *La Méditerranée et le monde méditerranéen à l'époque de Philippe II.* Paris: Colin.
- ——. 1979. Civilisation Matérielle, économie et capitalisme, XVe-XVIIIe siècles. 3 vols. Paris: Colin.
- Brenner, Robert. 2001. "The Low Countries in the transition to Capitalism". In Peter Hoppenbrouwers and Jan Luiten van Zanden, eds. *Peasants into farmers? The transformation of rural economy and society in the Low Countries (middle ages-19th century) in light of the Brenner debate.* Turnhout: Brepols. 275-338.

Brusse Betuwe

- Carlos, Ann and Larry Neal. 2011. "Amsterdam and London as financial centers in the eighteenth century", *Financial history review* 18: 21-46.
- Dam, Petra J.E.M. van. 1998. *Vissen in veenmeren. De sluisvisserij op aal tussen Haarlem en Amsterdam en de ecologische transformatie in Rijnland 1440-1530.* Hilversum: Verloren.
- Davids, C.A. 1996. "Neringen, hallen en gilden. Kapitalisten, kleine ondernemers en de stedelijke overheid in de tijd van de Republiek." In C.A. Davids, W. Fritschy en L.A. van der Valk (eds.). Kapitaal, ondernemerschap en beleid. Studies over economie en politiek in Nederland, Europa en Azië Amsterdam: NEHA, 95-119

Dehing, ***;

- Degryse, Karel. 2005. De *Antwerpse fortuinen: kapitaalaccumulatie, -investering en -rendement te Antwerpen in de 18de eeuw.* Antwerp: Genootschap voor Antwerpse Geschiedenis.
- Dekker, Cornelis and Roland Baetens. 2010. *Geld in het water. Antwerps en Mechels kapitaal in Zuid-Beveland na de stormvloeden in de 16e eeuw.* Hilversum: Verloren.
- De Moor, Tine. Jaco (C.J.) Zuijderduijn, and Jan Luiten van Zanden. 2009. "Micro-Credit in Late Medieval Waterland. Households and the Efficiency of Capital Markets in Edam and De Zeevang, 1462-1563." In S. Cavachiocci, ed. *La famiglia nell'economia europea secoli XIII-XVIII. The Economic Role of the Family in the European Economy from the 13th to the 18th Centuries.* Firenze: Firenze University Press. 651-668.
- De Peuter, Roger (R.E.M.A.). 1999. *Brussel in de achttiende eeuw. Sociaal-economische structuren en ontwikkelingen in een regionale hoofdstad*. Brussel: VUB Press.
- De Smedt, Oskar. 1940–41. "De keizerlijke verordeningen van 1537 en 1539 op de obligaties en wisselbrieven." *Nederlandsche historiebladen* 3: 15–35.
- Dijkman, Jessica. 2011. *Shaping Medieval Markets: The Organisation of Commodity Markets in Holland, c. 1200–c. 1450.* Leiden: Brill.
- Dillen, Johannes Gerard van. 1941. *Amsterdam in 1585, het kohier der capitale impositie 1585.* Amsterdam.
- DuPlessis, Robert S., and Martha C. Howell. 1982. "Reconsidering the Early Modern Urban Economy: The Cases of Leiden and Lille." *Past and Present* 94: 49–84.
- Epstein, S.R. and Maarten R. Prak. Eds. 2008. *Guilds, Innovation and the European Economy,* 1400-1800. Cambridge: Cambridge University Press.
- Engen, H. van. and R. Rutte. 2008. *Stadswording in de Nederlanden: op zoek naar overzicht*. Hilversum: Verloren.
- Gelderblom, Oscar. 2004. "The Decline of Fairs and Merchant Guilds in the Low Countries, 1250–1650." Jaarboek voor Middeleeuwse Geschiedenis 7: 199–238
- ———. 2013. *Cities of Commerce. The Institutional Foundations of International Trade in the Low Countries, 1250-1650.* Princeton: Princeton University Press.

- Gelderblom, Oscar, Abe de Jong, and Joost Jonker. 2011. "An Admiralty for Asia, Business
 Organization and the Evolution of Corporate Governance in the Dutch Republic, 1590–
 1610." In *The Origins of Shareholder Advocacy*, edited by Jonathan Koppell. New York:
 Palgrave Macmillan. 29–60.
- Gelderblom, Oscar, Abe de Jong, and Joost Jonker. 2012. "The Formative Years of the Modern Corporation. The Dutch East India Company VOC, 1602-1623." *unpublished paper*, <u>http://www.cgeh.nl/formative-years-modern-corporationthe-dutch-east-india-company-voc-1602-1623</u>
- Gelderblom, Oscar, and Joost Jonker. 2004. "Completing a Financial Revolution: The Finance of the Dutch East India Trade and the Rise of the Amsterdam Capital Market, 1595–1612." *Journal of Economic History* 64 (3): 641–72.
- 2005. "Amsterdam as the Cradle of Modern Futures Trading and Options Trading, 1550– 1650." In The Origins of Value: The Financial Innovations that Created Modern Capital Markets, edited by W. G. Goetzmann and K. G. Rouwenhorst. Oxford: Oxford University Press. 189–205.
- ———. 2009. "Mirroring different follies: The character of the 1720 bubble in the Dutch Republic." *unpublished paper*. Utrecht University.
- ———. 2011a "Public finance and economic growth: the case of Holland in the seventeenth century", *Journal of Economic History* 71. 1-39.
- ——. 2011b. "Alba's Irony, Urban autonomy and Public Finance in the Low Countries (1384-1713)." *unpublished paper*. Utrecht University.
- Gijsbers, Wilma M. 1999. *Kapitale ossen. De internationale handel in slachtvee in Noordwest-Europa (1300–1750).* Hilversum: Verloren.
- Gillard, Lucien. 2004. La Banque d'Amsterdam et le Florin européen au Temps de la République néerlandaise. (1610-1820). Paris: Éditions de l'Ehess. Godding, Philippe. 1987. Le droit privé dans les Pays-Bas méridionaux, du 12e au 18e siècle. Brussels: Académie royale de Belgique.

Groeneveld, F.P.

Hart/Brandon

- Hesselink-Van der Riet, Tilly, Wim Kuiper, Cor Trompetter. 2008. *Het schuldboek van Arend Kenkhuis*. Amsterdam: Amsterdam University Press.
- Hollestelle, Johanna. 1961. *De steenbakkerij in de Nederlanden tot omstreeks 1560*. Assen: van Gorcum.
- Hoppenbrouwers, Peter (P.C.M.). 1992. *Een middeleeuwse samenleving. Het land van Heusden* (ca. 1360- ca. 1515), 2 vols. Wageningen: Afdeling Agrarische Geschiedenis.
- Hoppenbrouwers, Peter and Jan Luiten van Zanden, eds. 2001. *Peasants into farmers? The transformation of rural economy and society in the Low Countries (middle ages-19th century) in light of the Brenner debate.* Turnhout: Brepols.

- Houtman-De Smedt, Helma. 1982. "Charles Proli als ondernemer", *Economisch en sociaalhistorisch jaarboek* 44: 84-92.
- ———. 1983. Charles Proli, Antwerps zakenman en bankier, 1723-1786, een biografische en bedrijfshistorische studie. Brussels.
- Houwink, A. 1929. *Acceptcrediet: economische en bankpolitieke beschouwingen over den in het bankaccept belichaamden credietvorm.* Amsterdam.
- Howell, Martha C. 2010. *Commerce before Capitalism in Europe, 1300-1600.* New York: Cambridge University Press.
- Jong, Abe de, Joost Jonker and Aïlsa Roëll. 2011. "Serving Local Demand and Global Opportunities: Dutch Corporate Finance, 1602-1850." *Unpublished paper*.
- Jongh, Mathijs de
- Jonker, Joost P.B. 'Wedged', ***.
- Jonker, Joost P. B., and Keetie E. Sluyterman. 2000. *At Home on the World Markets: Dutch International Trading Companies from the 16th Century until the Present.* The Hague: Sdu Uitgevers.
- Kuijpers, Migrantenstad.
- Limberger, Michael. 2001. "Early forms of proto-industries in the backyard of Antwerp? The Rupel area in the 15th and 16th centuries" In Bruno Blondé, Eric Vanhaute, Michèle Galand, eds. Labour and labour markets between town and countryside (Middle Ages-19th century). Turnhout: Brepols, 158-174.
- Limberger, Michael. 2008. Sixteenth-century Antwerp and its Rural Surroundings. Social andEconomic Changes in the Hinterland of a Commercial Metropolis. Turnhout: Brepols. Lis and Soly 1997.
- Lucassen, Jan. 1987. *Migrant Labour in Europe: The Drift to the North Sea*. London: Croom Helm.
- Lucassen 1995 (miracle mirrored)
- Maassen, H.A.J. 1994. *Tussen commercieel en sociaal krediet, de ontwikkeling van de bank van lening in Nederland van lombard tot gemeentelijke kredietbank 1260-1940*. Hilversum: Verloren.
- Mokyr, Joel. 1976. *Industrialization in the Low Countries, 1795-1850*. New Haven: Yale University Press.
- Murray, James Michael. 2005. *Bruges, Cradle of Capitalism 1280–1390*. Cambridge: Cambridge University Press.
- Nieuwkerk, Marius van (ed.). 2009. *The Bank of Amsterdam. On the origins of central banking*. Arnhem: Sonsbeek.

Parthesius

- Petram, Lodewijk. 2011. "The World's First Stock Exchange. How the Amsterdam Market for Dutch East India Company Shares Became a Modern Securities Market, 1602–1700." *Unpublished doctoral dissertation*, University of Amsterdam.
- Prak, Maarten R. 2005. *The Dutch Republic in the Seventeenth Century: The Golden Age.* Cambridge: Cambridge University Press.
- Quinn, Stephen and W. Roberds, 2010. "How Amsterdam got fiat money." *Unpublished paper* Texas Christian University 2010-17.
- Rijpma, Auke 2012. "Funding public services through religious and charitable foundations in the late-medieval Low Countries", *unpublished doctoral thesis*. Utrecht University.
- Schalk, Ruben, Oscar Gelderblom and Joost Jonker, "Schipperen op de Aziatische vaart. De financiering van de VOC kamer Enkhuizen, 1602-1622". 2012. *Low Countries Historical Review* 127-4.
- Schnabel, Isabel and Shin, Hyun Song. 2004. "Liquidity and Contagion: The Crisis of 1763." Available at SSRN: <u>http://ssrn.com/abstract=600746</u> or <u>http://dx.doi.org/10.2139/ssrn.600746</u>

Soens

Soly

Spufford, 'How often'

- Stabel, Peter. 1997. *Dwarfs among Giants: The Flemish Urban Network in the Late Middle Ages.* Leuven: Garant.
- Thoen, Erik. 1988. Landbouwekonomie en bevolking in Vlaanderen gedurende de late middeleeuwen en het begin van de moderne tijden: Testregio: de kasselrijen van Oudenaarde en Aalst, eind 13de – eerste helft van de 16de eeuw. 2 vols. Gent.
- Thoen, Erik. 2001. "A 'commercial survival economy' in evolution. The Flemish countryside and the transition to capitalism (Middle Ages-19th century)." In Peter Hoppenbrouwers and Jan Luiten van Zanden, eds. *Peasants into farmers? The transformation of rural economy and society in the Low Countries (middle ages-19th century) in light of the Brenner debate.* Turnhout: Brepols. 102-157.
- Tielhof, Milja van. and Petra (P.J.E.M.) van Dam. 2006. *Waterstaat in stedenland. Het hoogheemraadschap van Rijnland voor 1857.* Utrecht: Matrijs.
- Tihon, C. 1961. "Aperçus sur l'établissement des Lombards dans les Pays Bas aux XIIIe et XIVe siècles", Revue Belge de Philologie et Histoire 39: 334-364.

Tracy, James D. 1985. *A financial revolution in the Habsburg Netherlands, renten and renteniers in the county of Holland, 1515-1565.* London 1985.

Tracy, 'Dual origins', ***.

- ———. 2002. Emperor Charles V, Impresario of War: Campaign Strategy, International Finance, and Domestic Politics. Cambridge: Cambridge University Press.
- Van der Linden, H. 1956. *De cope: Bijdrage tot de rechtsgeschiedenis van de openlegging der Hollands-Utrechtse laagvlakte.* Assen: Van Gorcum

Van Lottum, Jelle. 2007. Across the North Sea. The impact of the Dutch Republic on international labour migration, c. 1550-1850. Amsterdam: Uitgeverij Aksant.

- Vercauteren, F. 1947. "Note sur l'origine et l'évolution du contrat de mort-gage en Lotharingie, du IXe au XIIIe siècle", *Historische bijdragen aangeboden aan Leo van der Essen*. Brussels: Éditions universitaires, 218-227.
- Verhas, Christel Madeleine Odile. 1997. *De beginjaren van de Hoge Raad van Holland, Zeeland en West-Friesland: ... tot onderhoudinge van de Politique ordre ende staet der Landen van Hollandt, Zeelandt, Vrieslant.* The Hague: Algemeen Rijksarchief.
- Vries, Jan de. 1974. *The Dutch Rural Economy in the Golden Age, 1500-1700.* New Haven: Yale University Press.

Vries, Jan de. Barges and Capitalism.

Vries, Jan de, and Ad Van der Woude. 1997. The First Modern Economy. Success, Failure, and Perseverance of the Dutch Economy, 1500–1815. Cambridge: Cambridge University Press. Vroom?;

Wallaert, Wisselbrief***.

- Wee, Herman van der. 1963. *The Growth of the Antwerp Market and the European Economy* (14th–16th centuries). 3 vols. The Hague: Nijhoff.
- ——. 1979. "Geld-, krediet- en bankwezen in de Zuidelijke Nederlanden." IND.P. Blok et al., eds., *Algemene geschiedenis der Nederlanden* Vol. 6. Haarlem: Fibula-Van Dishoeck: 98-108
- ———. 1988. "Industrial Dynamics and the Process of Urbanization and De-urbanization in the Low Countries from the Late Middle Ages to the Eighteenth Century. A Synthesis", Idem (ed.), *The Rise of Urban Industries in Italy and the Low Countries (Late Middle-Ages -Early Modern Times)* (Leuven 1988), 307-381.
- Wee, Herman Van der, and Erik Aerts. 1979. "The Lier livestock market and the livestock trade in the Low Countries from the 14th to the 18th century', in: Ekkehard Westermann, ed. *Internationaler Ochsenhandel (1350-1750). Akten des 7th International Economic History Congress. Edinburgh 1978.* Bamberg: 235-254.
- Werveke, H. van. 1929. "Le mort-gage et son rôle économique en Flandre et en Lotharingie." *Revue belge de philologie et histoire* 8: 53-91.

- Wijngaarden, Hilde van. 2000. Zorg voor de kost. Armenzorg, arbeid en onderlinge hulop in Zwolle 1650-1700. Amsterdam: Prometheus/Bert Bakker.
- Willems, Bart. 2009. *Leven op de pof. Krediet bij de. Antwerpse middenstand in de achttiende eeuw*. Amsterdam: Aksant.
- Wyffels, C. 1991. "L'usure en Flandre au XIIIe siècle", *Revue Belge de Philologie et Histoire 6*9: 853-871
- Yntema, Richard. 2009. "The Union of Utrecht, Tariff Barriers and the Interprovincial Beer Trade in the Dutch Republic" In Oscar Gelderblom ed., *The Political Economy of the Dutch Republic*. Aldershot: Ashgate. 255-289.
- Zanden, Jan Luiten van. 1993. *The rise and decline of Holland's economy: merchant capitalism and the labour market*. Manchester: Manchester University Press.
- Zanden, Jan Luiten van, and Arthur van Riel. 2004. *The strictures of inheritance. The Dutch economy in the nineteenth century.* Princeton: Princeton University Press.
- Zuijderduijn, C.J. (Jaco). 2009. *Medieval capital markets, markets for renten, state formation and private investment in Holland (1300-1550)*. Leyden: Brill.
- ———. 2010. "The emergence of provincial public debt in the county of Holland (thirteenthsixteenth centuries)", *European Review of Economic History* 14. 335-359.
- Zwet, Han van. 2009. Lofwaerdighe dijckagies en miserabele polders. Een financiële analyse van landaanwinningsprojecten in Hollands Noorderkwartier, 1597-1643. Hilversum: Verloren.

Zwitser, Het Staatse leger.