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Abstract

Although the importance of the institutional approach for understanding pre-industrial economic development is widely accepted, it has proven to be difficult to assess, let alone to quantify the effects of institutions on the functioning of markets in this era. In this paper we demonstrate to what degree our empirical research on the rise of markets in late medieval Holland can illuminate the factors behind the development of the specific institutional framework of markets for land, labour, capital and goods, and the effects of these institutions on the actual functioning of the markets. The findings are corroborated by a comparative approach focusing on Flanders and Eastern England: the parts of Northwest Europe where, next to Holland, economic development was most precocious. Both regions, however, were hit hard by the effects of the Black Death, whereas Holland after the mid-fourteenth century underwent remarkable further growth, even despite ecological difficulties. The favourable organisation of markets, enabled by an exceptional balance in Holland society, played a key role in this success.

Keywords: Holland, markets, factor markets, institutions, medieval economy.

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I Introduction: the theoretical background

The crucial importance of institutional arrangements for economic development and growth has become widely accepted. Following the publication of D.C. North and R. Thomas *The rise of the Western world* in 1973, it has become almost a commonplace to assert that the 'rules of the game' of economy and society limit, encourage and channel incentives, and thus shape economic development and growth, in the past and the present. Recent research in the field of economic history and economics has particularly applied this institutional concept to market exchange. It is now becoming clearer that the specific institutional organisation of the market, the rules developed by all parties involved, including the state, determine to a large extent the impact of market exchange on the long term performance of the economy.

The work by Daron Acemoglu and others on the nineteenth and twentieth centuries has demonstrated the valuable contribution New Institutional Economics can make to our understanding of the preconditions for economic development and growth. It argues that favourable institutions, however diverse in nature, have something in common: they provide a check on the concentration of property and production factors. By ensuring a broad segment of the population access to economic resources they stimulate sustained economic development.[1]

The origins of institutions have been, and still are, the subject of discussion. The notion that institutions develop more or less spontaneously because they provide a good answer to economic needs is popular, but it is also problematic. It suggests that efficient institutions -with 'efficient' defined as contributing most, in a given set of circumstances, to the welfare of society- will automatically prevail over less efficient alternatives. Unfortunately reality is different. Many societies end up with obviously inefficient institutions simply because powerful groups or individuals create and sustain institutional arrangements that support their own interests, if necessary at the expense of aggregate welfare. A more credible way to account for the development of institutions is the notion that institutions are the effect of a confrontation between various social groups. The resulting institutional framework is not automatically the

[1] Acemoglu et al, 'Institutions', 395-396.

most efficient one for society as a whole; it is merely best suited to the interests of the elites in power.[2]

The importance of this institutional approach for understanding pre-industrial economic development and the early growth of markets is widely accepted. In Western Europe, a number of important market regulating institutions, such as law on contracting (concerning selling, buying, hiring, borrowing etc.), notaries, regular verification of weights and measures, public weigh houses, and banks, date back to the late Middle Ages. Because these fundamental market institutions emerged then, this period also offers the best opportunity to study their importance and effects, for instance by contrasting them with the earlier institutions that they replaced. Applying the institutional approach to the late Middle Ages also allows us to combine economic theory and the empirical knowledge acquired through the more traditional medieval studies concerned with religious and social norms, and jurisdictional arrangements.

It has, however, proven to be difficult to assess the effects of institutions on the functioning of the market in this pre-statistical era. Firstly, the functioning of markets is, of course, determined by more factors than institutions alone. And even if we accept that institutions play a large part, difficulties in measuring their effect remain great. A single institution may have many effects, some of them beneficial and others damaging to the functioning of markets: how to weigh the advantages against the disadvantages? Moreover, institutions interact: frequently a combination of institutions contributed to a single effect.[3] For medieval institutions the task is even more daunting than for modern ones, because of the scarcity of reliable and detailed data.

Although we are well aware of all the difficulties, this paper is an attempt to explore possibilities for a more systematic reconstruction and analysis of institutional change and its effects, also in order to invite discussion on these crucial issues in the field of economic history. By focusing on the rise and organisation of markets in late medieval Holland we will try to illuminate two issues: 1) the factors behind the development of the specific institutional framework of markets and 2) the effects of

[2] A notion more often found in work on political economy, and recently made again by Ogilvie, 'Whatever is, is right?'.
[3] Ogilvie, 'Whatever is, is right?', 668-671**.**

institutions on the functioning of the market. [4] To this end, we have not merely focused on commodity markets, but also on factor markets i.e. the markets for land, capital and labour, which are perhaps even more important than the more similarly organised commodity markets in explaining differences in economic development.[5] This broad scope has also allowed us to study the vital ways in which the markets for land, capital, labour and commodities have interacted.

Holland offers a relevant test case for the effects of institutions on the development of markets. In a process which started in the eleventh/twelfth centuries, this region grew from a peripheral, backward corner of Western Europe into an economic, political and cultural world power, in the course of which economy and society underwent a profound transformation. The apogee of this development was in the seventeenth century, the Golden Age of the Dutch Republic, but it seems to have already been well on its way more than a century before. In 1514, an inquiry was held into the economic situation in the county. By that time, about 45% of the population of Holland lived in cities, depending for its nourishment on grain imports. In exchange, the region's agricultural and industrial sector produced many export goods. A substantial part of the population earned an income in trade or transport.[6] With respect to the labour market, about half of the labour performed in the countryside in sixteenth century Holland consisted of wage labour.[7] The start of these developments can be dated back even further. Especially the second half of the fourteenth century witnessed massive urbanisation and a rise of the secondary and tertiary sectors, which can be labelled as the jump-start of the Holland economy.[8]

The idea that a key role in this development could be attributed to the organisation and institutional framework of markets is not new. Actually, in their pioneering book D.C. North and R. Thomas in 1973 used the Dutch case to demonstrate the value

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[4] These were two of the main goals of a collective research project "Power, Markets and Economic Development: The Rise, Organisation and Institutional Framework of Markets in Holland, Eleventh - Sixteenth Centuries". The project was carried out at Utrecht University, 2001-2007 (funded by the Netherlands Organisation for Scientific Research, applicant Bas van Bavel).
[5] Van Bavel et al, 'Factor Markets'.
[6] Van Zanden estimates the tertiary sector at 22% in 1514. Van Zanden, 'Taking the measure', esp. 138; See also Van Bavel, 'Early proto-industrialization', esp. 1143.
[7] Van Bavel, 'Rural wage labour', esp. 62-63.
[8] Van Bavel & Van Zanden, 'The jump-start'.

of their institutional approach.[9] They did so by concentrating on the market institutions in the period 1500-1700, although they cursorily pointed to some of the medieval preconditions. The same applies to the study of J. de Vries and A.M. van der Woude on the economy of the Netherlands in the early modern era.[10] They posited that already in the sixteenth century Holland possessed a highly developed market economy, characterised by a large market freedom, efficient markets and low transaction costs which they tentatively explain by the large degree of freedom and the absence of a feudal legacy in Holland. Although these authors barely touch upon the causes and pre-history of this situation, it is obvious that the origins of the market structures of this relatively modern economy must be sought in the Middle Ages.

A close historical examination of the development of market institutions in medieval Holland does result in a number of observations that allow us to analyse the effects of the institutional framework that was in place by 1500. In order to corroborate these findings we use two approaches. Firstly, our observations can be strengthened by a comparative approach. The simultaneous development of similar institutions and the growth or integration of markets observed in other regions is not yet a proof of a causal relation between the two, but still such a comparison will bring us closer to understanding the effect of institutional arrangements. In our tentative comparisons we mainly focus on the institutional framework and functioning of markets in Flanders and the English counties Norfolk and Suffolk in East Anglia (hereafter: East Anglia), which were, next to Holland, the parts of Northwest Europe where population densities in this period were highest and economic development was most precocious. The three areas are of roughly similar size. Holland (that is, the former county of Holland) measures 6,000 km2 including inland waters, Flanders (the former county of Flanders, without French Flanders) 7,000 km2, and Norfolk and Suffolk together 9,000 km2. All three are examples of pre-industrial florescence, although the exact chronologies of growth and decline differ.[11] Not all relevant indicators for the performance of markets are available for these areas, but where possible we have used them to lend our analysis a comparative aspect.

Secondly, we refrain from trying to measure the impact of individual institutions, since it would be impossible to isolate their effect from that of other

[9] North & Thomas, *The Rise of the Western World*, 132-145.
[10] De Vries & Van der Woude, *The First Modern Economy*, 159-165.
[11] See below, section II, pp. x-x.

institutions. Instead we use two indicators that - at least in part - reflect the functioning of the whole of the markets for goods, land, labour and capital: the volume of the market and the integration of markets. These indicators are chosen because they can, albeit indirectly, be linked to the quality of the institutional framework. Since other elements and the development of the real economy also influence these indicators, interpretation is not always straightforward, but this is at least a first step. Before we embark on making this step, we will briefly introduce the main study area, Holland.

II The case: Holland in a comparative perspective

Holland is the western-most part of the present-day Netherlands, bordering on the North Sea. The South of Holland is traversed by the rivers Meuse and Rhine. This coastal region resorted under the counts of Holland, until it was integrated in 1433 in the Burgundian and in 1506 in the Habsburg empire, together with a host of other principalities in the Low Countries. By that time, it had become one of the most densely populated parts of Europe and by far the most urbanised one. The region possessed one of the most vibrant economies in Europe, making its way towards its Golden Age in the seventeenth century, when the Dutch Republic dominated world trade, with the Holland town of Amsterdam forming the main centre.

In the eleventh century, there was nothing which pointed to this future prominence of the Holland economy. Holland was for a large part a wilderness, consisting of inhospitable peat bogs, hardly inhabited yet. Compared to neighbouring regions, such as Flanders, Brabant and the Rhineland, this was a marginal area. It was only reclaimed in the eleventh to thirteenth centuries, when the count of Holland attracted settlers to do the hard clearing work by offering them freedom and clear property rights to the land. A society of free peasants emerged in which ecclesiastical and secular lords had but little influence. The area had become densely populated when it was confronted in the thirteenth and fourteenth centuries with the subsidence of the reclaimed peat soils, a natural process that ultimately made arable agriculture and the cultivation of bread grains nearly impossible. Despite these ecological difficulties, Holland recovered remarkably quickly from the effects of the Black Death: in the first decades after the epidemics the Holland population declined, but the economy continued to develop and demographic recovery took just a few generations. Meanwhile urbanisation continued apace during the fourteenth century. While only 14% of the population lived in the towns in 1300, their share increased to a quarter around 1350 and a third in 1400. About 44% of the c. 260,000 inhabitants of the region lived in towns by 1500. The increase in urbanisation rate was predominantly caused by the absolute growth of towns, which more than doubled in size between 1348 and the beginning of the sixteenth century, and not by a decline of the rural population.[12] While other European regions experienced a 'late medieval crisis', Holland displayed dynamism, characterised by thriving export industries and a strong development of trade and services.[13] This economic development and growth was sustained up to the seventeenth century, when stagnation set in.

These economic and demographic developments set Holland apart from the many parts of Western Europe which were characterised by stagnation or crisis. The Holland developments even contrast with dynamic, neighbouring regions such as Flanders and East Anglia; these two regions had been progressive in their economic development and displayed dynamism in the eleventh to thirteenth centuries, but struggled after the mid-fourteenth century. Population numbers stagnated or even declined, and urban growth came to a halt. In Flanders, the urbanisation rate declined from c. 33-36 % in the fourteenth century to c. 25 % in the fifteenth century and after.[14] In East Anglia the urbanisation rate was maintained or even increased in some parts in the fourteenth and fifteenth centuries. Around 1300 c. 15 % of the population of Suffolk lived in towns, while two hundred years later this proportion had doubled to c. 30%.[15] However, this growing urbanisation rate was not the result of urban population growth in absolute terms but rather of a severe decline of the rural population. In the fourteenth century total population numbers fell by more than half

[12] See for an overview Van Bavel & Van Zanden, 'The jump-start', 505, and Hoppenbrouwers, 'Van waterland tot stedenland', 136.
[13] Van Bavel & Van Zanden, 'The jump-start'
[14] Blockmans et al., 'Tussen crisis en welvaart', 43-46.
[15] Bailey, *Medieval Suffolk*, 129, 149-151. Dyer gives the slightly lower figures of 14% and 27% respectively (Dyer, 'How urbanized was medieval England?'). For Norfolk no similar calculations are available.

and they did not begin to grow again until the early sixteenth century.[16] At the same time, markets contracted or were deserted.[17]

The difference with Holland can hardly be explained by geographical factors. Holland, Flanders and East Anglia were all located on the southern shores of the North Sea, had similar climatic conditions, and enjoyed similar advantages of location near waterways. There were differences in soil conditions, but these rather disadvantaged Holland, since the region was virtually sinking into the water. The hypothesis to be tested here, is that the organisation of markets formed a crucial difference. All three regions witnessed an early rise of market exchange of goods, in the high Middle Ages, and later also of land, labour and capital. It can therefore be hypothesised, in line with the preceding, that the specific institutional organisation of these markets decided to what extent regions were able to cope with the ecological, economic and demographic challenges of the period from the mid-fourteenth century onwards. To what extent can the favourable development of Holland be explained by better market institutions? Did markets in Holland function better than elsewhere, especially compared to the neighbouring regions Flanders and East Anglia?

Our analysis of the institutional arrangement of markets in late medieval Holland starts with a reconstruction of the main institutions of market exchange and their specific characteristics (section III). Next, we attempt to assess (qualitatively and when possible also quantitatively) what the effects of these institutions were on the growth of the volume of the market and on the integration of markets in Holland (section IV). This will be followed by a tentative explanation of the contribution of socio-political elements to the emergence of specific institutions in Holland. To this end, we will look particularly at the elements standing out most clearly in the medieval history of Holland: the ecological situation, the occupational history and the structure of society (section V). Conclusions follow (section VI).

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[16] Bailey, *Medieval Suffolk*, 67 and 183-184. Population developments in Norfolk display a similar trend, cf. Whittle, *The development,* 175-176.
[17] Bailey, *Medieval Suffolk,* 265-266.

III The development of market institutions in Holland 1100-1500

Property rights and personal freedom

In Holland, nearly absolute and exclusive property rights to land developed in the high Middle Ages, allowing for a dynamic land market. As a comparison with other parts of Western Europe shows, this was an exceptional development.[18] In most regions transfers of land did not involve market transactions: they remained firmly embedded in all kinds of social frameworks, such as the extended family, the village community, the common, or the manor. Even in Norfolk and other areas of Eastern England, where manorialism was relatively weak in comparison to other parts of England and the land market was lively, there was a clear influence of lords and manorial courts on property rights to land and their transfer.[19] In Holland, however, and to an almost equal extent in Flanders, these and the other non-market frameworks had lost their strength already at an early date, or never held that position. In the early phase of settlement, most peasants in Holland acquired free ownership of the land that they reclaimed from the peat lands. In the fourteenth century, all peasants in Holland were free and the vast majority were owners of the lands they cultivated, thus opening the way for exchange of land by way of the market.

This development was sped up by the role of local and central authorities. In Holland, and in adjacent parts of Northwest Europe, local authorities already in the thirteenth/fourteenth centuries started to register property rights to land and land transfers, mainly for fiscal reasons.[20] This increased the security of land transfers. Levies on transfers were quite mild, or even completely absent, in contrast to the situation elsewhere in Europe where lords were able to extract high levies on land transfers. This was also the true for Flanders, where seignorial levies amounted to 8 – 16 % of the sale price; in East Anglia fealty paid with the transfer of free land and especially the entry fines paid with the inheritance or sale of customary land in the fifteenth and sixteenth centuries – although low in an English perspective – were often even higher than this.

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[18] Campbell, 'Factor markets', and Van Bavel, 'The land market'.
[19] Whittle, *The development*, 93 and 99.
[20] Van Bavel, 'The land market', 129-132, also for the following, and for Norfolk: Whittle, *The development*, 31, and 76-82.

It has to be added that in contrast to the solid legislation on land transfers and property rights, the lease market was less regulated in Holland. Rights with respect to leased land remained unclear. Holland peasants claimed all kinds of permanent rights to the land, even when the lease was formally for a fixed term. This situation provoked conflicts and insecurity with respect to investments in leaseholds. Only in the sixteenth century, under the legal and social pressure of the growing group of urban landowners in Holland, lease rights became clarified; much later than in most of Northwest Europe.[21]

The emergence of a capital market was closely connected to the development of property rights to land. Long-term loans required debtors to use mortgages as securities, and therefore clear titles to property were of utmost importance. In Holland, and in the rest of the Low Countries, registration of real estate transactions with the local court played a vital part. The vast majority of transactions on the markets for land and subsequently also for capital was concluded in the presence of two or more aldermen, or other local authorities, who were witnesses and attached their seals to the contract. Only few people opted for contracts ratified by lords, clerics or even notaries, which were not fully recognised by civil law and provided little security.[22] Whereas these property rights regimes allowed for the early emergence of capital markets since the thirteenth and fourteenth centuries, in England divided rights to land and the fragmented registration of these rights among several jurisdictions hindered the emergence of a mortgage system.[23]

In Holland, clear property rights were moreover distributed among all social groups, including women, who were allowed to participate in land markets and capital markets. Access to these markets provided women with a comparatively independent position and the majority of widows in Holland ran their own households.[24] In this respect differences with England appear to have been small, but in Flanders property rights of widows deteriorated in the fourteenth and fifteenth centuries.[25]

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[21] Van Bavel, 'The emergence'.
[22] Zuijderduijn, *Medieval capital markets*, 184-190.
[23] Schofield, 'Access to credit', 119.
[24] De Moor et al, 'Micro credit'.
[25] Howell, *The marriage exchange*, 202-203; Whittle, 'Inheritance, marriage, widowhood and remarriage'.

Likewise, the history of labour in Holland is characterised by early personal freedom. In most other parts of Europe the freedom to hire oneself out was very much restricted by "feudal" and manorial institutions. In the highly commercialised regions of Flanders, Norfolk and Suffolk, however, the burdens of serfdom and villeinage had been reduced at an early date, either because the legal obligations of serfs and tenants were no longer all enforced or because aristocratic manors comprised only a very small segment of the total of landholdings. Near to 80% of all peasants in Suffolk were free by 1300.[26] Yet, the labour service on Suffolk villein holdings, were indeed enforced up to four days of labour service each week on the lord's demesne.[27] The landlords in England remained politically powerful and severe labour laws were issued in order to solve the problem of labour in the wake of the Black Death.[28] The aim of the fourteenth century statutes on labour was to restrict the mobility of the landless population and to keep wages at pre-epidemic levels. They proclaimed service compulsory for every single man or woman without visible means of existence. The breaking of contracts before the end of the term of usually one year was punishable by fines, imprisonment and corporal punishment.[29] In Suffolk both the prosecution of workers who accepted higher wages and the continued high burdens of villeinage resulted in frustration and violent risings of the labouring class against landlords and authorities in the late fourteenth century.[30] By the end of the fourteenth century villeinage and serfdom had disappeared from most Suffolk manors, but the labour laws remained in place.[31]

Developments in England cannot be entirely related to demographic decline. Cohn shows that labour shortages occurred in many parts of Europe in the second half of the fourteenth century; yet, the reactions of legislators differed and sometimes did not follow at all.[32] One of the clues of the situation in England is that the landholding English gentry formed an important political power as they had access to parliament personally or via petitions. The legislation of the mid-fourteenth century predictably

[26] Bailey, ' Villeinage in England', 433-435.
[27] Ibidem, 436.
[28] Cohn, 'After the Black Death'.
[29] Hatcher, 'England'; Clark, 'Medieval Labour Law'; and on sixteenth century legislation: Woodward, 'The background'.
[30] Bailey, *Medieval Suffolk*, 184-193; Whittle describes the enforcement of labour laws in Norfolk: *The development of agrarian capitalism* 287-296.
[31] Bailey, *Medieval Suffolk*, 197, 199.
[32] Cohn, 'After the Black Death'.

represented their interests in an attempt to strengthen the employers' control over labour.[33] This situation did not change during the subsequent centuries.

In Holland the nobility and church only exploited a few domains, mainly in the sandy area behind the dunes. Labour service was limited to these domains and was completely replaced by monetary rents by the late Middle Ages.[34] One could argue that Holland was not hit as severely by the Black Death and employers were not confronted with labour shortages to the same extent as employers in England. On the other hand, the cause may be more structural. The agricultural labour market had been submitted to the forces of the market already before 1350 and a legal tradition by which a class of agricultural employers exercised power over workers had never developed.

In the by-laws of Holland towns there are signs of labour shortages in the early 15th century, but compulsory labour was not the solution chosen by the authorities. Instead, they typically chose to open the market for immigrants,[35] while in Flanders the breaking of contracts by labourers and servants was a criminal offence on which the ordinances prescribed corporal punishments.[36] In Holland, on the other hand, labour legislation for agricultural workers and servants was virtually absent and remained so after 1350. Wage earners could freely move from one place to the other. The count of Holland or the Estates never set wages, nor did they issue penal laws on wage payments above customary levels. Labourers and servants were supposed to serve the usual terms, but in all economic sectors they seem to have had more contractual freedom and therefore a stronger bargaining position as to the terms of contract than in neighbouring regions.[37] Presumably, the effect was that working for wages became more attractive in Holland while the flexibility and volume of the labour market must have increased as a result.

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[33] Given-Wilson, 'Service', 24

[34] Hoppenbrouwers, 'Van waterland tot stedenland', 137.

[35] In 1406 Leyden, for example, a by-law states that anyone, wherever he comes from, will be allowed to work in Leyden for a servant's or journeymen's wage. Hamaker, *De Middeneeuwsche keurboeken van de stad Leiden*, 60, 240.

[36] In Flanders run-aways could count on a whipping, see the ordinances of Hulsterambacht 1440 and 1546, Bosch, 'Rechtshistorische aanteekeningen', 384, Also a Brabant by-law from 1587 states that a servant that breaks his contract will be submitted to criminal law: *Ibidem,* 382.

[37] Ibidem, 355-418.

In Holland, justice, and the responsibility for the protection of property rights that came with adjudication, was shared by the state (the counts of Holland and their government apparatus) and groups of subjects active in local administration. The foundation of the judiciary system was formed by a homogeneous layer of local courts. In towns and villages representatives of local communities stood over disputes involving criminal and civil law. Their sentences over transactions involving land, capital, commodities and labour were done on court days, and these were executed by sheriffs and other government agents. As a result, disputes were hardly ever settled by other authorities, such as manorial and feudal lords, bishops and abbots. Appeals could be lodged at regional courts, which were organised by bailiffs, and supreme courts in The Hague and from the fifteenth century on, also in Malines.

These courts of appeal provided a check on local judiciaries. Combined with occasional investigations into the functioning of the government apparatus, they put a check on nepotism and corruption. Supreme courts showed a great concern for the costs of legal proceedings, and assisted people with modest means by having them represented by government agents working *pro deo.*[38] Some institutions were especially aimed at quickly resolving disputes at little expenses. An example in the capital market is the summary execution, which allowed creditors to seek compensation for default without going through formal proceedings.[39] Since similar capital markets, i.e. markets where long-term annuities were traded, did not exist in England, comparing is difficult. Still, it is our impression that institutions that helped secure the investments of creditors also existed in England, but that these seem to have been so rigorous that they scared debtors from contracting mortgages. This was a major element that prevented the emergence of capital markets in England.[40]

To be sure, princely power had helped to create a relatively favourable situation not only in Holland but in several parts of the Low Countries.[41] The legal framework of Holland may have stood out in one respect though: whereas in other highly urbanised areas like Flanders large parts of the countryside were gradually subjected to urban jurisdictions, in Holland rural courts managed to remain

38 Le Bailly, *Recht voor de Raad*.
39 Developments in Holland are discussed by Zuijderduijn, *Medieval capital markets*.
40 Ashton, *The Crown*, 8-9. Cf. low possibilities for English peasants to borrow also Britnell, ‘England and Northern Italy’, 169-170; Hopcroft & Emigh, ‘Divergent paths’, 15-16.
41 De Schepper & Cauchies, ‘Legal tools’, esp. 254 and 265.

independent in this respect.[42] Together with the insignificance of feudal authorities, like manorial and banal lords, bishops and abbots, this contributed to the transparency of the juridical system and thus helped to keep the costs of civil proceedings low.

The absence of extraction by force

The state could provide some vital economic institutions, but at the same time it could well be a major threat to property rights. The purveyances of victuals that took place in late thirteenth and early fourteenth century England provide a good example. In preparation for a military campaign the Crown issued orders to the sheriffs of one or more counties to acquire a specified quantity of grain or other foodstuffs. If necessary producers could be forced to sell their products, and even if no compulsion was used the price that was offered was often below market rates or covered only part of the goods. Payment was moreover frequently deferred endlessly or even withheld entirely. Lords and ecclesiastical institutions were often able to acquire an exemption; peasants were usually not, and suffered badly.[43]

Even though the counts of Holland frequently waged war, as with the conquest of the areas controlled by the high nobility and the region of Westfriesland, they were not in a position to act in the same way: They did not have the power to impose similar exactions, either in the towns or in the countryside. Army provisions therefore had to be bought at regular market conditions. The accounts of the preparations for the wars with the Frisians around 1400 show that purveyors sent out by the count frequented urban markets in Holland, Utrecht and Guelders in order to purchase cattle and grain. The purveyors, well-to-do high-ranking officials, were often expected to advance part of the expenses from their own means for lengthy periods. Sometimes the sellers themselves also had to wait for their money. However there is no evidence that compulsion was used to force them to sell.[44]

In the same vein, the English King, but also Flemish towns, frequently levied forced loans, whereas the counts of Holland seem to have lacked the necessary power to do the same. Of course, the relative unimportance of forced loans also reflects the strength of market structures: particularly when the main towns underwrote the debts, the counts of Holland had little trouble to borrow in the capital market, and attracted

[42] Hoppenbrouwers, 'Town and country', 72-73.
[43] Maddicott, 'The English peasantry'; Masschaele, *Peasants*, 36-41.
[44] Janse, *Grenzen aan de macht*, 299-308.

credit not only from Holland, but also from Brabant and Flanders. Therefore, on a local and central level there is little evidence of this type of extra-economic pressure.[45]

Likewise, labour services to local lords and central authorities had disappeared at an early stage. In medieval Europe, states or authorities could commandeer labour not only for military purposes but also for public works or other non-public goals.[46] In Holland, however, the occurrence of corvee labour or forms of forced labour were rare and from the late fourteenth century onwards restricted to exceptional occasions of acute threats of war or severe flooding.[47]

With respect to property rights to land, and the possible threat of expropriation, the Holland situation also was favourable. Expropriation by the state was very rare. The reverse, that is, the state protecting peasant property rights and land, and disallowing their transfer to non-peasants, did not occur in Holland either, in contrast to Germany and France, for instance.[48] In these latter areas this policy was mainly dictated by the fiscal needs of the state, since only peasant landownership could be taxed, while the land owned by religious institutions, noblemen and patricians was often exempted from taxes. In Holland, on the other hand, these exemptions were abolished already from the fourteenth century. After that, fiscal extraction no longer prompted authorities to intervene in the land market.

Due to the legal security experienced over time, trust in the state, town council or local authorities would grow. People were confident that dealing with the state (i.e. by paying taxes, lending out money, investing in public projects) would pay off. To the state, on the other hand, the market offered an alternative that was superior to extraction by coercion. Purchasing services and commodities on the market allowed the state to choose from a greater range of products and services without risking the opposition of social groups and organisations. Efficiency benefited: the labour productivity of qualified and well paid workers for instance was probably higher than the productivity of subjects forced to do corvee tasks.[49]

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[45] Zuijderduijn, *Medieval capital markets*, 107-108, 152-153; Cf. the importance of forced loans in Southern Europe Tracy, 'On the dual origins'.
[46] Beresford, *New Towns*, 182; Rigaudière, 'Le financement', 36.
[47] Kuijpers, 'Who digs the town moat?', ***.
[48] Van Bavel & Hoppenbrouwers, 'Landholding and land transfer', 22-24.
[49] Rigaudière, 'Le financement', 37.

Similarly favourable conditions, with a near absence of non-economic coercion, applied to the relationship between town and countryside. Elsewhere, accessibility of markets was often severely restricted by trade monopolies. The effect is clearly visible in attitudes towards rural trade. In Flanders for one both the large cities and the smaller towns claimed regional trade monopolies: they required peasants to bring grain and other victuals, but also the products of specialised agriculture (for instance dairy products) or rural industries (such as linen cloth), to the urban market. Although not all towns were equally successful in enforcing such regional monopolies, they were widespread.[50]

In Holland there is little evidence of regional monopolies of this kind. Some -but not all- of the small towns in Holland's few grain producing regions claimed a monopoly on the grain trade in their district.[51] In addition the counts sometimes granted monopoly rights to towns situated near the border for strategic reasons: this was a way to gain the support of the urban population, establish comitial authority in a contested area, and prevent the transfer of commercial activities and fiscal gains to neighbouring rulers. Geertruidenberg, on the Brabant border, is a good example. The early thirteenth-century charter of liberties of this town, situated on the overland trade route from Holland to the southern Low Countries, declared it to be the compulsory cattle market for the entire rural region of Zuid-Holland.[52] Still, such examples relate to a limited number of towns with specific characteristics. Most towns simply did not possess the political power needed for this kind of coercion. In this respect, the situation in Holland and East Anglia was similar: English towns also had no or only very limited control over their hinterlands and rarely managed to coerce rural trade.[53]

The absence of extraterritorial urban powers in Holland also contributed, at the end of the fourteenth and the beginning of the fifteenth century, to the rise of a new type of rural trade venues, highly specialised in nature. On the North Sea coast informal beach markets for sea fish developed, and in the northern part of the county public scales for dairy emerged in several villages. Both fish markets and dairy scales had direct connections to interregional trade routes; thus they provided fishermen and

[50] Nicholas, *Town and countryside*, 117-118; Stabel, *Dwarfs among giants*, 163-165.
[51] Unger, 'De Hollandsche graanhandel', esp. 356-357.
[52] Korteweg, 'Het stadsrecht', esp. 67-68; Rutte, *Stedenpolitiek*, 115-117
[53] Hopcroft & Emigh, 'Divergent paths', 20; Galloway, ' Town and country', 117.

farmers with easy access to markets abroad.[54] Despite the fact that in England urban domination of the countryside was as rare as in Holland, informal trade venues in the English countryside did not acquire the same strong position, probably because lords maintained at least part of their traditional grip on commercial activities in the countryside.[55]

Moreover urban markets in Holland were usually relatively open to outsiders. In Flanders and also in England burghers or guild members who wanted to operate as traders on the local market were frequently given priority over others. Downright exclusion was rare, but traders from other towns or from the countryside usually had to pay more to get access, or were forced to accept restrictions as to when, where and what they could sell. In Holland limitations of this kind were not common.[56]

Coercive extraction by private persons or feudal powers was even more conspicuously absent in Holland than extraction by central authorities and towns. From the reclamation and occupation in the eleventh to thirteenth centuries onwards, Holland was populated by free peasants and burghers, whereas nobility and religious institutions were few and weak, and did not possess the non-economic instruments to extract surpluses. Also, manorial lords with a right to labour services and other types of extraction had never been prominent in Holland and already disappeared at an early stage, also because of the freedom to be obtained in the large reclamation areas. This also applied to Flanders, where the early rise of towns offered an additional prospect of freedom. In England, and even in less manorialised Norfolk, a large part of the owners of large estates still disposed of at least some servile labour to cultivate their lands until the end of the fourteenth century. Moreover, villains were liable to manorial jurisdictions, could not defend their claims to land tenancy at royal courts and had to pay fees when they desired to marry or to move away. Manorial lords could enforce their right to servile labour at local and higher courts.[57] A long history of serfdom left its traces in social relations and people's image of society in which the majority was destined to toil in the service of a more powerful minority.[58]

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[54] Jessica Dijkman, 'Medieval market institutions', chapter 4.
[55] For informal rural trade in England: Dyer, 'Hidden trade'.
[56] Jessica Dijkman, 'Medieval market institutions', chapter 3.
[57] Whittle, *The development*, esp. 37-63; Mark Bailey recently downplayed the role of villeinage in Suffolk, however: Bailey, 'Villeinage in England'.
[58] See for the discussion on the decline of serfdom Razi, 'Serfdom'; Hatcher, 'English Serfdom', and on the mental implications: Dyer, 'Work ethics'; Hatcher, 'Labour'.

IV Effects of institutional development

Markets can be considered efficient when transaction costs are low, which reflects well-respected property rights and a high degree of trust between parties, elements which reduce search and information costs, as well as the costs for protecting property rights and contracting. It is almost impossible to measure these transaction costs directly, except to some extent perhaps for interest rates as a direct indicator for the efficiency of the capital market.[59] However international comparisons of interest rates for the medieval era are difficult because the financial instruments used to contract long-term loans differed markedly. Therefore we have opted for more indirect ways to test the maturity or efficiency of markets. One approach is to focus on the relative *size* of these markets; this is based on the assumption that greater market dependency can only exist where markets function adequately and are easily accessible for large groups. Another is to investigate the *integration* of markets, since this reflects the absence or presence of possible barriers. As mentioned earlier, interpretation is complex, because each of these indicators may also be influenced by factors other than the quality of the institutional framework alone. Also, data is non-homogeneous and dispersed, and this disallows any advanced quantitative tests. Still, we think the importance of the issue at stake justifies to take this first, tentative step, that is, to assemble the quantitative material and place this in a comparative perspective.

Volume

In Holland, capital, labour and commodity markets all increased to large volumes already in the Late Middle Ages. There was, for instance, a marked increase in long-term debt contracted by towns and villages. Initially this type of funding was limited and the privilege of the counts of Holland and some of the largest towns. However, from the end of the fourteenth century on, other public bodies also began to participate in capital markets, and at the beginning of the sixteenth century all towns of Holland and 60% of the villages had created long-term debt, usually at interest rates just above 6%.[60] Towns elsewhere in continental Northwest Europe turned to

[59] North, *Institutions*, 69.
[60] Zuijderduijn, *Medieval capital markets*, 112-129; Zuijderduijn, 'Het lichaam'.

capital markets as well.[61] In England, however, public debt emerged relatively late: London was the first English town to create public debt, at the end of the fifteenth century.[62]

The towns of Holland also managed to service a geographically highly dispersed public debt: they found creditors all over the Low Countries. Obviously, for foreign creditors to invest in public debt, and for Holland towns to contract and service public debt, efficient markets were a prerequisite.[63]

There is ample evidence suggesting that capital markets in Holland were accessible to large parts of the population. For instance, the tax registers of Edam show that a considerable proportion of the households in this small town was either creditor or debtor of long term debt: more than 30% in 1462, little over 20% in 1514, and more than 50% in 1563. In the surrounding countryside figures were lower, but still significant, at 18% (1462), 5% (1514) and 23% (1563). Due to some shortcomings of the source, these are minimum figures. Remarkably, we encounter many women among the creditors and debtors.[64] This broad access is also visible elsewhere in the Low Countries,[65] but not so much in England, where access to capital markets was particularly poor in the countryside,[66] not least because of the low proportion of peasant landownership there and the resulting impossibility to use land as a collateral.

The impressive volume of the commodity market in Holland can be inferred from the considerable growth of the share of labour input devoted to market oriented activities between 1350 and 1500. Estimates can be made for Holland, Flanders and East Anglia based on the share of the population living in towns (minus a correction for urban labour devoted to food production for the household), the share of rural labour devoted to non-agrarian activities (the provision of basic local services by village millers, smiths, brewers, bakers and the like, but also proto-industrial activities serving a wider market) and the share of agrarian labour going into production of foodstuffs and raw materials intended for the market.

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[61] Isenmann, *Die deutsche Stadt*, 174-176; Gilomen, ‘Renten’; Tracy, ‘On the dual origins’.
[62] Webber & Wildavsky, *A history of taxation*, 253-254, 257.
[63] Zuijderduijn, *Medieval capital markets*, 129-134.
[64] Zuijderduijn, *Medieval capital markets*, 231-242
[65] For instance in Den Bosch at the beginning of the sixteenth century: Hanus, *Tussen stad en eigen gewin*.
[66] Briggs, ‘Empowered, 15; Britnell, ‘England and Northern Italy’, 169-170; Hopcroft & Emigh, ‘Divergent paths’, 15-16.

Table 1: share of labour input in market-oriented activities in Holland, Flanders and England

	Estimated share of labour input devoted to market oriented activities[67]	
	Early / mid 14th century	Late 15th/ early 16th century
Holland	60-66%	87-94%
Flanders	64-71%	69-76%
East Anglia	At most 60%	At most 77%

The figures are of course no more than approximations, but they do indicate marked differences between the three regions. In Flanders market orientation was already high in the middle of the fourteenth century, but with the exception of coastal Flanders, where commercialised tenant farming developed rapidly, it did not increase much afterwards. In East Anglia and Holland we see an increase, but in Holland it was more pronounced: by the early sixteenth century at least five-sixth of labour input was devoted to market oriented activities. To be sure, this exceptionally high figure may well have been influenced by more than just institutional causes. After about 1400, Holland had to import almost all of its bread grains: wheat and rye could no longer be cultivated on the subsiding peat soils. Still, the rapid commercialisation that speaks from the figures would not have been possible without an efficient organisation of markets to support it.

A similar estimate can be produced for the size of the wage labour market. This has been attempted for rural labour in the sixteenth century.[68] In the central part

[67] Dijkman, 'Market orientation' (also for sources and a more detailed explanation on the method of calculation). Dijkman distinguishes between a rapidly commercialising coastal Flanders and a stagnant inland Flanders; here the figures for Flanders are based on the assumption that at least 75% of the Flemish population lived in inland Flanders. The (maximum) figures given for East Anglia are those calculated by Dijkman for Suffolk; however it is unlikely that market orientation in other parts of East Anglia was higher.

of Holland around the middle of the century, almost half of all rural labour was performed as wage labour, mostly in proto-industrial activities. This is a little less than in the Guelders river area, to the east of Holland, where 55-60 % of rural labour was for wages, but far more than in inland Flanders (c. 25 %). It is also far more than the share of wage workers in the total rural population in various English regions, which amounted to between a quarter and a third in the sixteenth century. In Norfolk around 1525, for example, 20-35 per cent of the rural population consisted of wage labourers, a proportion which remained more or less constant during the rest of the sixteenth century.[69]

Integration

Judging on the interest rates, it seems that Holland capital markets were already fairly well integrated. At the beginning of the sixteenth century, large towns, small towns and villages on average paid about the same interest on long-term debts, 6.3, 6.4 and 6.5% respectively. [70] Also, some regions within Holland show signs of integration, although interest rates in the North of Holland show a greater variation.[71] In the small town of Edam we can observe some other signs of market integration: when we look at interest rates, the spread around the mean was remarkably small. In 1514 61% of long-term loans carried an average interest rate of 5,6% and in 1563 this was even 81%.[72] Variations between town and countryside were also modest: in 1514 the average interest rate encountered in the town of Edam was 5.7% and in the surroundings 5.3%; in 1564 this was 5.6% and 5.8% respectively.[73]

Commodity markets were also well integrated. To be sure, on a regional level it is not surprising to find that grain prices in the late Middle Ages moved in concert. They certainly did so in the southern Low Countries in the fifteenth century.[74] In fact in England, with its abundance of early price data, an efficient and coherent grain market has been demonstrated for the Thames valley as early as the late thirteenth

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68 Van Bavel, ‘Rural wage labour’.
69 Whittle, *The development*, 227-231, with some notes on the reliability of the sources, and Cooper, 'In search of agrarian capitalism', esp. 167-168.
70 For the main cities 33 interest rates are known, for the smaller cities 43, and for villages 206.
71 Zuijderduijn, ‘Village-indebtedness’.
72 De Moor et al, ‘Micro-credit’, 658-659.
73 Ibidem, 659.
74 Tits-Dieuaide, *La formation*, 36-44.

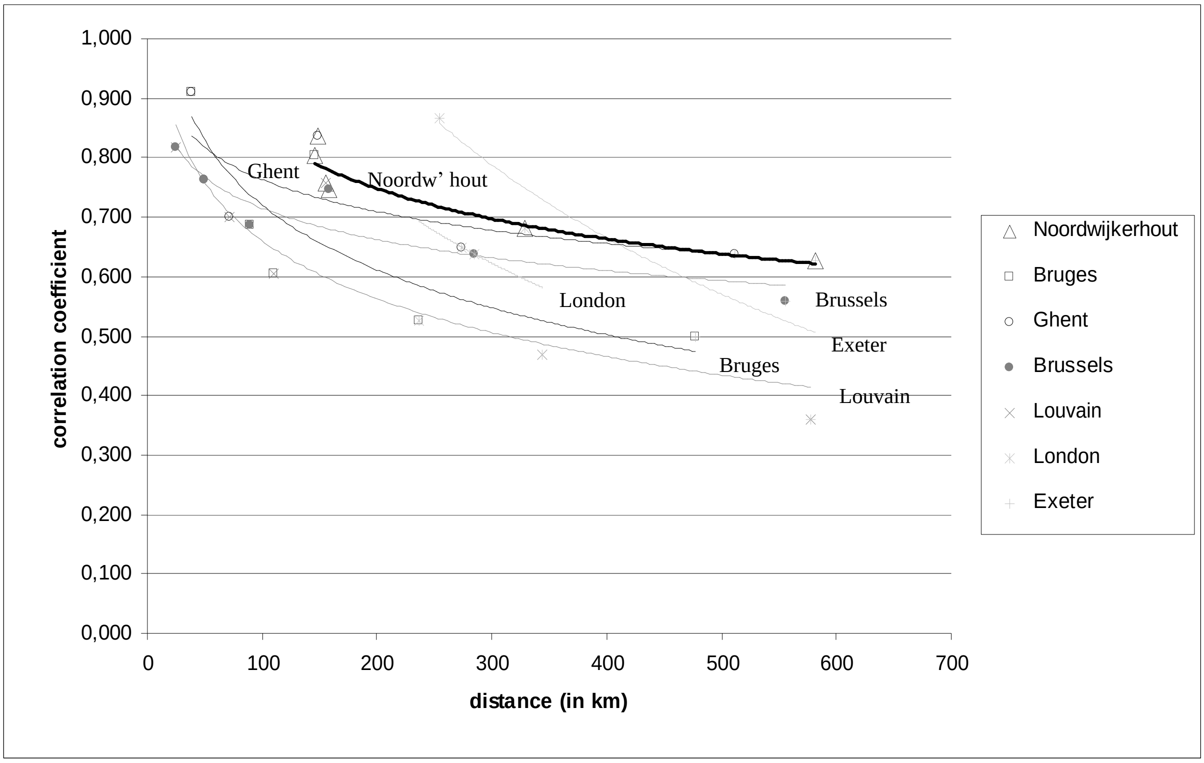
century, with London as a price-setting center.[75] Since price movements in the London region were moreover closely linked to those in Exeter, there is good reason to believe that around this time a coastal grain market on a national scale was in existence as well.[76] Grain transports connecting Norfolk to London, or even to a region as far away as Devon, were probably not very frequent, but in times of dearth they did take place.[77]

When it comes to the integration with commodity markets abroad however, Holland does stand out. This can be demonstrated by an analysis of grain price movements in the early fifteenth century. In the figure below correlation coefficients between wheat prices in 21 pairs of locations have been plotted: all imaginable combinations between Noordwijkerhout (Leeuwenhorst abbey) in Holland; Bruges, Ghent, Louvain and Brussels in the southern Low Countries; and London and Exeter in England. The regression line for Noordwijkerhout in Holland is at the top, suggesting that wheat markets in the central part of Holland were relatively well connected to markets in the neighbouring countries. The flatness of the line indicates that Holland markets were not only well integrated with foreign markets nearby, but also with those further off. In this Holland is not unique though: the markets in the southern Low Countries display similar flat slopes. The slopes for London and Exeter are quite steep, suggesting that the English grain market was relatively self-contained.[78]

The driving force behind Holland's international grain trade was no doubt the demand for grains. However if market structures had been less favourable, it is doubtful if it would have been possible to build up the same robust and wide-flung international trade network.

[75] Campbell et al, *A medieval capital*, 46-77.
[76] Galloway, 'One market or many?', 36-39. Gregory Clark even believes a national grain market operated in England from the early thirteenth century onwards (Clark, 'Markets and economic growth', 8-13).
[77] Galloway, 'One market or many?', 38; Campbell et al, *A medieval capital*, 69-71, 181.
[78] Dijkman, 'Grain market integration' (also for a more detailed explanation of the method and references to the sources).

Figure 1: correlation coefficient of logs of annual average wheat prices (in gr silver per hectolitre) between seven locations in Holland, the southern Low Countries and England, related to the distance between locations, 1410/11-1439/40.



On the Holland labour market wage differentials between town and countryside were small. In inland Flanders, nominal wages in the countryside were still close to the urban ones in the early fourteenth century, but in the late fourteenth and fifteenth centuries an urban/rural wage differential emerged of some 50-70 per cent, perhaps because it was in this period that urban and guild restrictions on immigration and entry into urban occupations became tighter.[79] In Holland, on the other hand, the urban/rural difference at the time was and remained very small, or was even absent altogether.[80] For the fourteenth century, this can still be attributed to the small size of the towns, but after the dramatic growth of Holland towns in the fifteenth and sixteenth centuries, this was no longer the case; this suggests that the absence of institutional barriers was the cause.

[79] Stabel, *De kleine stad*, 185-192, Thoen, *Landbouwekonomie en bevolking*, 955-960.
[80] Van Bavel & Van Zanden, 'The jump-start', 511-513.

Guilds developed very late in Holland and did not acquire the political role in urban government as their counterparts in Flanders had. Important towns like Delft, Leyden, Haarlem, Alkmaar and Hoorn only got guilds in the first half of the sixteenth century, in reaction to the competition of crafts and proto-industries from the countryside [81] However, this resulted in ordinances that only mildly limited the right to set up rural crafts and sell on the urban market, but did not attempt to regulate the availability nor the price of labour. Guild ordinances that contain rules for the employment of in-living apprentices and journeymen, let alone setting wages, are very rare until the late seventeenth century. Immigration was encouraged when labour ran short.

Another important reason for the small wage differences between town and country in Holland is that agricultural wages had to compete with the many other wage earning opportunities for the mobile rural population, both in the countryside and in the towns. In regions with an important large landholding class represented in government, such as in England but also elsewhere, rules usually represented the landlords' interest of restricting mobility and keeping wages low. [82] The count of Holland and the Estates, on the other hand, never set wages for agricultural labour, nor did they restrict labour mobility by any measure. By 1500 Holland seems to have had a highly integrated labour market involving the mobility of especially the rural work force during a substantial part of the year.[83]

Theory predicts that favourable institutions reduce transaction costs. The results for the impact of the institutional framework on market performance in Holland c. 1500 show different results for the various types of markets. The performance of the lease market was probably less than in the other areas. Internal integration in the market for goods – or more particularly: the grain market - was no higher than in Flanders or England. On the other hand, at the end of the Middle Ages market orientation in Holland was very high. Also, the labour market was much more mobile and flexible than in the other regions. And the capital market of Holland performed better than that

[81] De Munck et al, 'The establishment'.
[82] Cohn, 'After the Black Death'.
[83] In 1510 and in 1515, for instance, hundreds of hired labourers who were working at the dikes near Haarlem (at its peak over 900 labourers at any one time) were recruited in all parts of Holland and beyond: Van Dam, 'Digging for a dike', see the tables on p. 247-249.

of England, although differences between Holland and Flanders were probably much smaller. Of course, market performance was not exclusively determined by institutions, but these differences do point to differences in the institutional framework. We can surmise on the basis of the preceding that in Holland the framework of the markets for goods, and even more those for capital and labour, possessed a more favourable institutional framework than the other parts of Western Europe. How to explain this?

V A tentative explanation of favourable and unfavourable institutions

We believe the explanation can be found in the combination of two developments, both resulting from the geographical characteristics of Holland, and its associated occupation history: the process of reclamation and settlement of the Holland peat areas in the eleventh to thirteenth centuries, and the subsidence of these soils and the resulting ecological crisis in the second half of the fourteenth century. Both factors have been mentioned by other authors as particular to Holland, and even as essential in the economic development of this region, but so far their implications for the institutional framework have remained at best an intuition. Our research now shows how already before the thirteenth century the foundations were laid for institutions favouring market efficiency, thus providing a basis for accelerated specialisation and commercialisation when at the end of the fourteenth century a drastic economic transformation as a result of the ecological crisis became necessary.

Social developments

Holland, in contrast to other parts of Western Europe, was characterised by the absence of a genuinely feudal past. In the words of Jan de Vries and Ad van der Woude: there was no ‘society of orders, where each member held a legally fixed position assigned by birth’; barriers against social mobility were absent, and this encouraged innovation and initiative.[84] The origins of Holland’s weak feudal structures are to be found in the process of land reclamation in the high Middle Ages. When colonists started to reclaim the extensive peat lands covering most of Holland,

[84] De Vries & Van der Woude, *The first modern economy*, 160.

from the tenth century onwards, the counts allowed them to create a completely different society, not based on feudal structures, but on direct relations between sovereign and subjects. The settler communities were incorporated in the fabric of the state. The colonists recognised the count's supreme authority, paid taxes and served in the count's army at his command, but were otherwise largely free to run their own affairs. They organised themselves in public bodies that took responsibility for taxation, public debt and public works. At the local level the count's authority was represented by an appointed functionary, the sheriff. Thus a layer of local public bodies was created, characterised by broad participation but also by a balance of powers: representatives of the local elite had to collaborate with governments agents.[85]

Towns only gradually started to develop, especially in the thirteenth and fourteenth century: later than in neighbouring areas such as Flanders and the Rhineland. These towns emerged when village communities and princely rule were already firmly established. The number of towns was quite large, but individually they were all small or medium-sized: no large, dominant metropolis emerged. In many heavily urbanised pre-industrial societies large towns subjugated their surroundings. This was the case in Italy and to a lesser extent, also in Flanders and Brabant. Urban jurisdictions were in part established due to a lack of organisation in the countryside: towns had to ensure the supply of commodities from the countryside, and rural incompetence – imagined or real – was often seen as an invitation to take over the reins.[86] As a consequence, the thirteenth- and fourteenth-century counts were strong enough to prevent the towns from extending their jurisdiction over the countryside. In the fifteenth and sixteenth centuries resistance by local lords and competition between towns helped to keep urban greed in check.[87] Moreover rural organisations protected villages against urban ambitions, for instance by taking sides with local lords and

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[85] The argument goes back to Van der Linden, 'Het platteland in het Noordwesten', esp. 73-78. Cf. a recent survey of the reclamation of the peat lands by Hoppenbrouwers, 'Van waterland tot stedenland'; on the position of the nobility De Vries, 'The transition', 75-76; on the early emergence of public bodies Van der Kieft, 'Stedelijke autonomie', 99, and Mitteis, *Rechtsfolgen,* 20-21.
[86] Nicholas, *Town and countryside*, 348-351.
[87] Hoppenbrouwers, 'Town and country', 76-78.

filing legal procedures. As a result, unlike elsewhere, villages managed to at least retain the level of public services and their self-organisation.[88]

Ecology

The aforementioned process of land reclamation had another crucial effect in the long run. As the reclaimed peat land in Holland slowly started to sink and became ever wetter, some of the peasants gave up agriculture and migrated to the towns, causing urbanisation to increase and urban industries to expand. The remaining peasants adapted to the new conditions: they gave up the cultivation of bread grains, which grew during winter when water tables were highest, and switched to summer grains and livestock farming. They sold the fruits of their labour on the market; growing urban markets no doubt contributed to the success of this agricultural transition.[89] This favourable turn of events is certainly not self-evident: an ecological disaster on this scale could easily have led to a general depopulation. That this did not happen - in fact by the year 1400 the population of Holland was almost back to pre-Plague levels - demonstrates the influence of pre-existing institutional arrangements: clear property rights and open and transparent factor and commodity markets discouraged squeezing, stimulated a positive interaction between town and countryside and allowed the Holland economy to swiftly adapt to the changing circumstances.

A combination of ecological crisis, ample transport possibilities offered by the many waterways, and favourable market organisation, all favoured the commercialisation and specialisation of the economy and the emergence of proto-industrial activities in Holland's countryside.[90] Thus, in the second half of the fourteenth century Holland witnessed a transition to a heavily commercialised economy, with little to no subsistence farming left. Its population had to market butter, cheese, peat, bricks and other proto-industrial products to earn the money they required to buy grain that was imported from Northern France and later from the Baltic. The switch to labour-extensive livestock farming also provided an impulse for labour markets: a large part of the rural population had to look for additional employment, for instance in towns, but also as day labourers in rural proto-industries.

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[88] Raadschelders, *Plaatselijke bestuurlijke ontwikkelingen*; Lesger, *Hoorn*, 215.
[89] De Boer, *Graaf en grafiek*, 211-245.
[90] Van Bavel & Van Zanden, 'The jump start''; Van Zanden, 'Taking the measure', 149-150; Van Zanden, 'A third road'; Van Bavel, 'Early proto-industrialization?'.

Finally, capital markets are likely to have received a boost when entrepreneurs started to look for funding to set up proto-industries.[91]

It is important to note that both in the Holland towns and in the countryside the tertiary sector developed rapidly. In 1514, only 25 per cent of labour in Holland was active in agriculture, supplying less than 20 per cent of GDP. If fishing and peat digging are included, the primary sector still involved no more than 39 per cent of labour, generating only 31 per cent of GDP. Industry accounted for 38 per cent of the labour force and 39 per cent of GDP, and services for 22 per cent and 30 per cent, respectively.[92] A very large share of the Holland population was active in shipping and other transport services, retail, wholesale trade, measuring, administrating, both in town and countryside. This exceptional importance of the services sector in Holland was in part forced by the ecological disaster, but it was also enabled by the flexible organisation of the labour and capital markets, and in its turn further stimulated the labour and capital market. This positive feedback cycle perhaps explains why exactly these markets developed so favourably in Holland. It perhaps also explains why Holland's lease market lagged behind, since this market related to the relatively unimportant agricultural sector, and not to the services sector, and was not part of this positive interaction between economy, market development and institutions.

The unfavourable organisation of the lease market is also directly linked with the medieval occupation history of Holland and the social structure that emerged here. The society of free peasants was hostile to limited rights to the land and remained so up to the sixteenth century. Only then, as peasant landownership was bought up by wealthy urban investors, this started to change. The absence of feudal power, the strength of horizontal associations and communities, the broad participation and the fragmentation of power all went back to the high Middle Ages and made their impact felt during the following centuries. As a result, except for the lease market, no social group in late medieval Holland was able to bend institutions to their own interest.

This situation did not last. From the end of the sixteenth century, that is, largely outside the chronological scope of this paper, this social balance was eroded. In Holland towns, income and wealth inequality increased markedly between the middle

[91] Van Bavel, "Early proto-industrialization in the Low Countries?", 1162; Hoppenbrouwers, "Mapping an unexplored field", 54-57.

[92] Van Zanden, 'Taking the measure'.

of the sixteenth and the middle of the seventeenth century, as observed for Alkmaar, for instance. [93] This process was even more pronounced in the metropolis of Amsterdam .[94] Simultaneously town governments and patriciates became more closed, and barriers to acquire citizenship were raised.[95] Social polarisation was also found in landownership. In the sixteenth and seventeenth century the small-scale peasant landownership, so characteristic of the Holland countryside, became accumulated by wealthy burgher-investors.[96] Especially the newly-reclaimed polders became the exclusive domain of the patriciate of the large Holland towns. Material and political inequality thus increased in the sixteenth and seventeenth centuries.

It can be speculated that the elite of merchant-entrepreneurs in the Holland towns, and especially in Amsterdam, used this economic and political power to freeze or adapt market institutions to their own interest. This can be observed in commodity market regimes. In the sixteenth century urban resistance to rural trade, for instance, increased. In 1515 the towns began pressuring the Habsburg government into banning rural trades and industries. Sixteen years later Charles V issued an ordinance to this effect. To be sure, existing activities were usually left in peace, so the towns' victory was far from complete. Still, there can be no doubt that urban policy towards rural commerce became increasingly restrictive.[97] Further research is necessary in order to assess whether this is representative of a more general development, and if the institutional framework in Holland indeed became less favourable in the late sixteenth and seventeenth centuries.

VI Final observations

Explaining the development of institutions and assessing their effects is never an easy task. We do not pretend that our focus on a limited number of indicators for market efficiency solves all methodological problems, but we do think that this approach

[93] Van den Berg & Van Zanden, 'Vier eeuwen welstandsongelijkheid'.
[94] Soltow & Van Zanden, *Income and wealth inequality*, esp. 77-110.
[95] Lourens & Lucassen, 'Zunftlandschaften' 15-20; Kuijpers & Prak, 'Burger', 121-122.
[96] Van Bavel, 'Rural development'.
[97] Brünner, *De order op de buitennering*; Hoppenbrouwers, 'Town and country', 64-66.

allows us to link up institutional theory and empirical data and thus contributes to a better understanding of pre-modern economic development.

Our research shows that already in the late Middle Ages Holland possessed a favourable institutional organisation of markets, even compared to advanced regions such as Flanders and East Anglia. Although it is possible, even easy, to find many institutions held in common between these three regions, there are also clear differences. Especially the capital and labour markets in Holland compare favourably to elsewhere. This was not necessarily the only cause of Holland’s rapid commercialisation; non-institutional factors, such as the ecological problems that made the cultivation of bread grain almost impossible, and the favourable geographical location of Holland, played a part as well. However, favourable institutions did facilitate an adequate response to opportunities, ecological threats and external changes, thus allowing for a strong rise of markets and high market performance.

This development of markets was an intermittent process, evolving over many centuries, taking its shape under the interaction of various social groups and organisations that often clashed in pursuit of their own interests. One of the results of this analysis is the insight gained in the role of authorities in the development of this institutional framework. In Holland, this role turns out to have been mostly positive. This applies particularly to the role of authorities on the local level of the village and the town, but also on a regional or central level. The explanation for this exceptional situation appears to lie in the balance between different parties involved in political decision-making, both political bodies and organisations, and social groups, precluding dominance by way of power and necessitating these parties to co-operate or at least to arrive at a rational compromise. In its turn, this situation appears to be rooted in the period of occupation of Holland, i.e. the high Middle Ages, as Holland was colonised by free peasants under a territorial lord, creating a situation of exceptional freedom and a near-absence of non-economic force, with the nobility gaining only a weak position, in contrast to most other parts of Western Europe, and allowing various other groups to organise themselves and acquire a role in political decision-making. Especially the co-operation at a grassroots level emerging in the period of occupation made Holland stand out.

We also observe a strong interaction between the various markets. In particular the emergence of a well-functioning capital market enabled and reinforced the rise of land and labour markets. The resulting feedback cycle in Holland had a positive character, speeding up the growth of markets. In its turn this situation interacted with the real economy, and especially with the rise of the tertiary sector, which benefited from the favourable capital and labour markets, and probably stimulated their further development. The arrangement of the commodity market was less vital in this process, since its institutions are highly adaptive and therefore differ less between regions. The lease market did not compare favourably to that in surrounding regions and was only marginal to the specific development of the Holland economy. It were the capital and labour markets which gave Holland its competitive edge.

The research also shows that the organisation of trade and exchange of land, labour and capital is not the automatic expression of a natural human drive to trade or to make a profit. On the contrary, it is the result of very specific social conditions. Differences in these conditions result in a sharply differing organisation, even between regions closely situated to each other, with sharply diverging effects on economic development. This situation to a large extent evolved at a regional and local level: not necessarily at a national level, let alone that of the modern nation states, often central in the analysis of institutional organisation and economic development.

Furthermore this study shows that the institutional organisation of markets as we know it now, already developed here from the high Middle Ages onwards. The foundation laid in the tenth-twelfth centuries strongly influenced future developments. The form this organisation took in Holland at that time, within the specific social context, appears to have been conducive to economic growth. This research thus reveals, at least in part, the roots of the Golden Age of Holland and helps to explain why the Golden Age took place exactly here, in a path-dependent process of many centuries. This finding is also relevant to the debate about institutions shaping the development of markets or markets shaping institutions – a debate largely unresolved as yet.[98] Although, of course, there was interaction between the two, the regional path-dependency of the process suggests that the institutions and their social context were the crucial element in this.

Knowledge on the mechanisms of long term economic development may enhance our understanding of economic failure. In many economies the institutional

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[98] D.C. North, *Institutions*.

organisation of exchange played, and still plays, a negative role, limiting or blocking economic growth. This research shows how difficult it is to break or change this institutional organisation, since these institutions are hardly the result of rational economic or social decision-making, but rather of existing social relations, the balance of power, custom and vested interests. The Holland case also suggests that even in cases where market institutions had been conducive to economic growth these tend to petrify and become detrimental if too much economic and political power is concentrated in the hands of a single group in society. This insight is important today, both for development economics and in the western world.

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