

## 1. The whims of the market<sup>1</sup>

The Middle Ages witnessed an increasing commercialization of European societies. Commodities and services that had previously been exchanged in a feudal setting now moved to the marketplace where they were subject to price making. As a result, individuals were increasingly exposed to the whims of the market. Market prices fluctuate because of supply and demand, but also because of monetary factors. Money is not an entirely neutral medium of exchange: it matters greatly whether buyers pay in coin, credit or in kind.<sup>2</sup> In this paper we focus on the costs of using money to explain why annuities in kind continued to exist well into the early modern period and did so alongside monetary annuities. The prevalence of payments in kind is remarkable because this is often regarded as ‘backwards’, and the shift from payments in kind to monetary payments is associated with modernization and the rise of (agrarian) capitalism.

The prevalence of annuities in kind has been explained, for instance, by Peter Spufford, who linked this to coin shortages caused by currency leaking away to other countries, money hoarding and bullion famines. Shortages were frequent and caused the (temporary) demonetization of the economy and an increased use of either credit or payments in kind. Thus, Spufford linked Pope Gregory I’s (r. 590-604) move from money rents to grain rents to a lack of gold. Likewise, and at a much later stage, during the commercial revolution of the thirteenth century, when precious metals became more readily available, «money increased in quantity [so] it could be used more freely for a wide range of activities in which it had previously played a minimal role». As a result, «in the countryside money-rent could oust both labour-rent and rent in kind as the dominant form of peasant rent». But this was not to last, as the late-medieval economy suffered from bullion famines and money shortages: «a consequence of the disappearance and reappearance of money was the growth and decline of barter in trade, in parallel with the growth and decline of rents in kind» (Spufford 1988, 16-17, 240-41, 376).

While it is obvious that a lack of money may have forced participants in exchanges to look for alternative currencies – and Spufford may be correct in this

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<sup>1</sup> All citations of non-English literature were translated by the authors.

<sup>2</sup> Cf. the benefits of using money: Lucassen and Zuijderduijn 2014, 7-9.

respect – various historians have demonstrated that payments in kind continued to exist for a long time, regardless of periods of money shortages. Lies Vervaeke (2012, 1136) remarked that in highly commercialized regions in the Low Countries, part of the rents continued to be paid in kind until as late as the eighteenth century. And H.P.H. Jansen (1955, 76) claimed that monetary development could go hand in hand with payments in kind: in the area he studied, more contracts were expressed in kind when the quantity of coins in circulation increased. More recently, the issue of non-monetary components of wages has been raised in the debate on living standards before and during the British Industrial Revolution (Stephenson 2019). Payments in kind were not uncommon in industrializing Britain. Clearly, a lack of cash is not the only reason why non-monetary payments prevailed.

In a recent contribution Matthieu Arnoux (2021, 152) discussed grain annuities in medieval Normandy. These were contracts that gave an investor the right to an annual delivery of grain. He concluded that their use «cannot be seen as a sign of its economic backwardness», and rather ascribes their continued use to the desire for a secure supply of staple foods without having to depend on the market. We agree, but also believe that the rather unstable pre-modern monetary system should be considered as a factor contributing to the prolonged use of annuities in kind. Monetary annuities could lose their value because of ‘market risk’: «the possibility of a change in the value of a particular financial contract or portfolio» (Coppes 1997, 22-35). Put differently: returns on capital might increase or decrease in value over time, either because of monetary interventions or price developments. In what follows we will first explain why pre-modern contracting parties were exposed to market risk (1), and then proceed with a discussion of how monetary annuities exposed investors to market risk, whereas annuities in kind protected them against this. Investors could shift market risk to their debtors by demanding an annuity in kind (2). To further understand under what circumstances investors were able to shift market risk, we discuss one type of annuity in kind: the *corrody* (3). *Corrodies* were in high demand throughout the later Middle Ages and early modern period. They offered investors lifelong food, or food and lodging. These financial instruments should be regarded as life annuities in kind that paid in commodities and services until the annuitant – or surviving annuitant in the case of a two-person *corrody* – passed away. *Corrodies* were used by vulnerable individuals to make provisions, usually for old age and sometimes also to secure the livelihood of physically or mentally impaired individuals. For them it was particularly important to seek protection against market risk.

## 2. Market risk

Two factors contributed to market risk in pre-modern economies: coin manipulation and price spikes. Medieval and early-modern currencies were less reliable than today because a variety of authorities exercised the right to mint coins, and there were various ways for them to capitalize on this right by means of coin manipulation. In large areas of medieval Europe authorities applied periodic recoinage, frequently declaring existing coins invalid and offering the general public

the possibility to exchange the invalidated old coins for new coins at exchange rates that could be as low as four old coins for three new ones – which amounted to a 25% tax on the use of coins (Spufford 1988, 93-95). Roger Svensson (2016, 1110-14) has demonstrated that periodic recoinage was practised by mint authorities in Central, Eastern and Northern Europe in the High Middle Ages. Even though the situation improved over time in some regions, such as in the Dutch Republic (Elgin, Karaman and Pamuk 2015, 6), elsewhere it proved difficult to arrive at a more stable monetary system. Thus, in the Holy Roman Empire, where a vast number of small states held the authority to mint their own coins, attempts were made in the mid-sixteenth century to harmonize monetary policies, but they ultimately failed due to the realm's complicated political structure and the self-interests of its member states (Volckart 2018). A major effect of periodic recoinage was to reduce one of the main functions of coins – as a store of value – because savers faced a loss if they first had to exchange the coins they had saved before they could purchase anything (Svensson 2016, 1110-14).

Participants in exchange also had to keep in mind that authorities could order their minting houses to decrease the weight and fineness of coins. Debasement was usually an emergency measure but could also be a measure to remedy money shortages or to replace worn and defective coins (Svensson 2016, 1108-09). Periodical and incidental coin manipulation contributed to uncertainty about the future value of coins. Notorious episodes of debasement included that of the Burgundy-Habsburgs rulers in the fifteenth century, the Great Debasement of Henry VIII (1544-1551) and the *Kipper- und Wipperzeit* (1618-1623). During the latter period, the silver content of the Augsburg penny dropped dramatically from 0.082 grams to 0.008125 grams (Pfister 2017). Debasements hurt investors specifically. This was already noticed by the fourteenth-century treasurer-general of Navarre, Guilleme le Soterel, who explained that people who have fixed incomes, «especially those who have their rents in money of account... wish one sort of money, that is, money of strong alloy» (Spufford 1988, 290, 305-06). People who lived off returns on capital, as well as those who lived off savings, suffered from coin manipulation: the Burgundy-Habsburg monetary policy in the late fifteenth century, which was characterized by the severe reduction of the silver content of the *groat*, caused *rentiers* to lose up to 25% of the value of the annual returns (Zuijderduijn 2018, 211).

Apart from the monetary issues that were discussed above, participants in exchange faced the question of what the money they would receive would buy. Pre-modern inflation was generally limited, but nevertheless may have hurt investors. And in the short run price spikes could be severe. Prices were most volatile in areas not suited for growing grain, such as the lowest lying parts of the Low Countries, especially when these areas depended on sea-borne imports of grain (Unger 1999, 338). Conflicts – both international and regional – could lead to disruption of trade and price spikes, and there were plenty of conflicts in the Low Countries and Holy Roman Empire, which were in an almost permanent state of warfare until the Treaty of Westphalia (1648). In addition, agricultural production was threatened by privateering – a usual means to add to the treasure chest or to simply feed starving soldiers – and plunder and scorched earth politics aimed at destroying harvests. And of course, natural disasters could destroy crops. The effects of failed harvests and

disruptions to trade were exacerbated by speculators who tried to buy cheap and sell dear. Contemporaries often mentioned speculation as a cause of price spikes: thus, in one of the most notorious years with grain shortages, 1566, an Antwerp merchant allegedly saw his attic collapse under the weight of the stacked grain. Such speculators were widely criticized and even faced threats to their lives (Noordegraaf 1985, 46-47). There was speculation not only in grain, but also in other commodities: in a 1571 decree Philip II, King of Spain (r. 1556-1598) mentions other fruits of the land, and «animals, butter, salt, wood, flax, and other commodities» in addition to grain (Cau 1658, 1484-91). Wildly fluctuating prices, in addition to monetary policy, contributed to uncertainty about the purchasing power of returns on capital.

### 3. Annuities in kind

One way to seek protection against market risk was to negotiate payment in kind. Especially for individuals who were not interested in making a quick buck, but rather wanted a steady and predictable income, it made perfect sense to bypass the monetary system and demand annuities in kind. We believe this is an additional reason for their prolonged existence. In this section we will illustrate how annuities in kind offered protection against market risk, and in the section to follow we will discuss the corrody as an annuity in kind that was widely used in the medieval and early-modern economy.

Imagine a widow living in Antwerp in 1400, who recently lost her husband and has the opportunity to invest a modest inheritance. Let's call her Anna. The widow of a craftsman, she is used to a 'middle class' living standard and she would like to maintain this even after losing her husband. The economic historian Robert Allen has constructed a commodity basket reflecting the consumption of social middling groups. This 'respectable basket' or 'respectability basket' is used by economic historians to measure whether people could achieve their desired standard of living. Anna wants to make an investment that would allow her to earn the respectability basket. To this end she can decide to invest in real estate or a variety of financial instruments. And she has to decide whether she wants to receive her annual return in money or in kind. In figure 1 we first of all illustrate the impact of price fluctuations if she opts for a monetary return.

In 1400 the commodity basket cost 153.6 *deniers groats Flemish*. If we assume Anna would have managed to get a return of 10% – a common return on a single life annuity – she had to invest ( $10 \times 153.6 =$ ) 1,536 *deniers groats Flemish* to afford the respectability basket. Whether the annuity would suffice depended on the development of the prices of the items in the commodity basket. Figure 1 indicates that Anna had to cope with four years of shortages; the worst was 1408 with a 15.50% loss. On the other hand, there were also years when the annuity was more valuable than the commodity basket: in 1410 she would have had an excess of 8.07%. Altogether our annuitant would have suffered a negligible shortfall of only -0.13% over the period 1401-1411. Provided that Anna managed to smooth things out by saving in years with excesses in anticipation of years of shortfalls, she would have succeeded in living off the annuity.

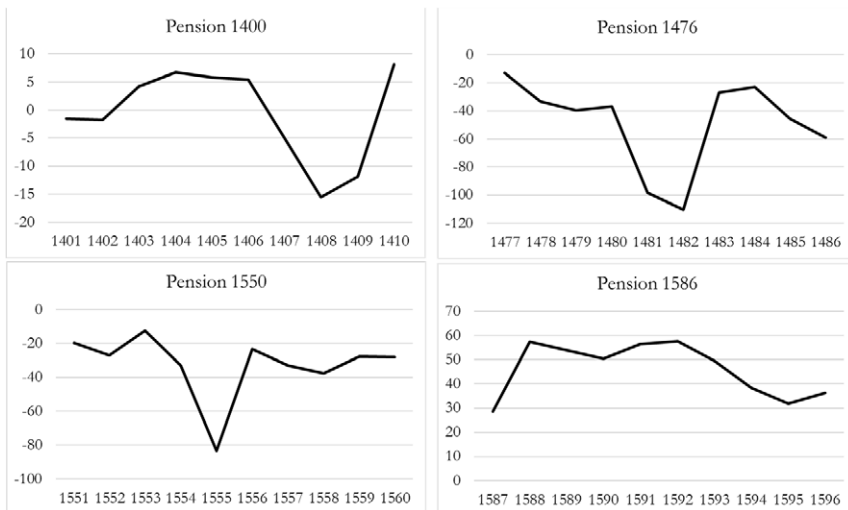
Of course, there were annuitants who fared less well than those investing in 1400. If we indulge in a bit of cherry picking, we can, for instance, present the reader with the particularly grim scenario of Anna buying a life annuity in 1476. At that time she would have been completely unaware of the upcoming political turmoil following Charles the Bold's death on the battlefield (1477) and his daughter Mary the Rich's demise after falling from her horse (1482) and the subsequent decades of financial turmoil. Figure 1 indicates that Anna would have suffered structural losses and a peak loss of -110.12% in 1482, which would have meant her falling well below the poverty line. Equally difficult times awaited investors during the height of the Price Revolution of the sixteenth century: purchasing a corrody in 1550 would have led to structural shortfalls and a peak loss of -83.32% in 1555 – a year of severe grain shortages. But then much more positive scenarios also existed: when we look at the period 1400-1690, best off were investors buying an annuity in 1586, and enjoying excesses throughout, peaking at 57.48% in 1592 (figure 1).

Which brings us to the main problem: Anna would have been unable to foresee whether her annuity would suffice to live off in the years to come. The results varied considerably: figure 2 provides aggregate figures for every starting year between 1400 and 1690. The unbroken line indicates whether the monetary annuity sufficed to pay for the commodity basket in the ten years following the purchase. Thus, the first data point indicates how an annuitant investing in 1400 fared over the period 1401-1410 and gives the shortfall of -0.13% we already discussed before. The graph indicates that gains and losses smoothed out over the ten-year period. Yet, although most hypothetical annuitants would have had an experience resembling the 1400 scenario, most experienced losses over the ten-year period because of the tendency for money to lose its value over time. In fact, 46 starting years yielded losses of more than 20%<sup>3</sup> and it is easy to see this may have posed a threat to investors looking to secure a steady income to live off.

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<sup>3</sup> In the long run more annuitants would have incurred more losses than gains: out of 291 years in which to make an investment, 205 yielded losses (70.5% of all years). Of these, 107 (36.8%) yielded losses in excess of 10% and 46 (15.8%) in excess of 20%.

Graph 1. Scenarios for annuities starting 1400, 1476, 1550 and 1586

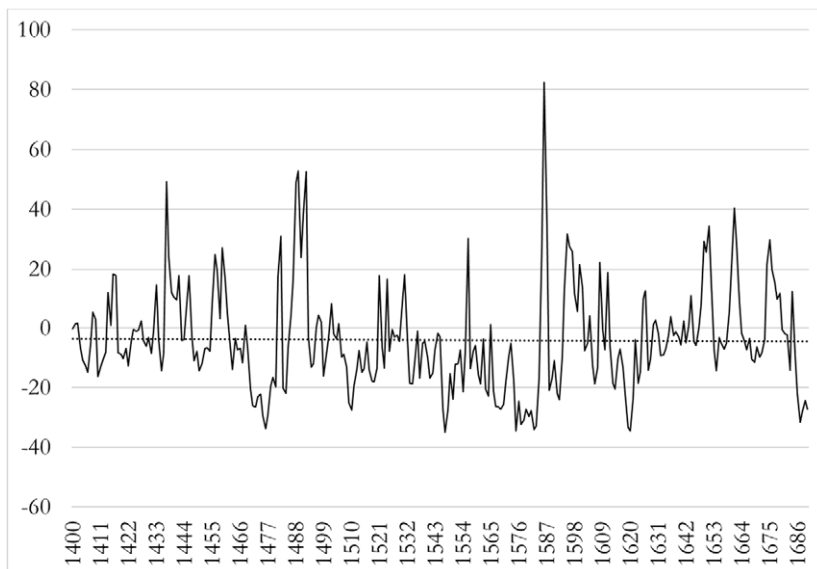


Source: John Munro’s reworked version of Herman van der Wee’s dataset

(<https://memdb.libraries.rutgers.edu/munro-prices-wages>).

Note: we used a basket of goods in d. gr. Flemish.

Graph 2. Scenarios for monetary annuities, 1400-1690

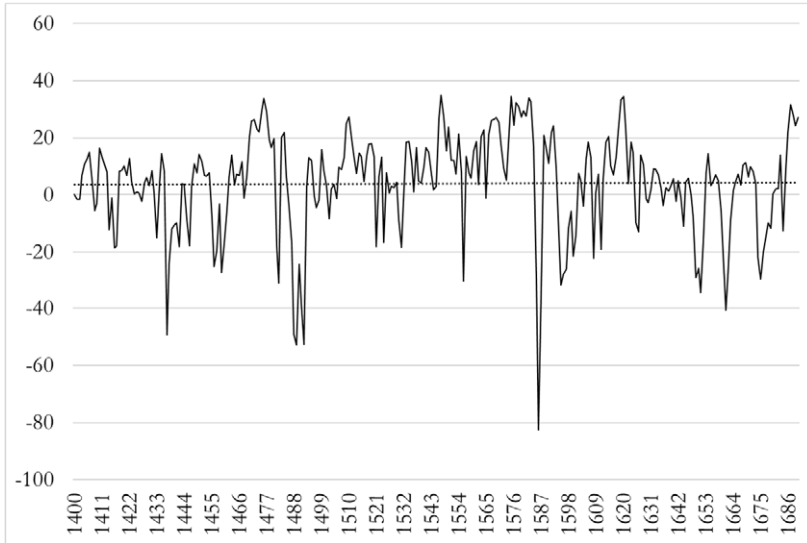


Source: John Munro’s reworked version of Herman van der Wee’s dataset

(<https://memdb.libraries.rutgers.edu/munro-prices-wages>).

Note: we used a basket of goods in d. gr. Flemish.

Graph 3. Scenarios for annuities in kind, 1400-1690



Source: John Munro’s reworked version of Herman van der Wee’s dataset (<https://memdb.libraries.rutgers.edu/munro-prices-wages>).

Note: we used basket of goods in d. gr. Flemish.

This long-run tendency for annuities to lose their value could be solved by expressing annuities in kind. When this was done, their profitability in terms of currency is the exact opposite of the previously-discussed graph. Thus, in the 1400 scenario, expressing the annuity not in money (153.6 d. gr. Fl.) but in the commodity basket has one important consequence. First, starting in 1401 Anna received the commodities and considering that her goal was to be able to get food on the table, she did not have to take further action. Second, if she ever wanted to get her hands on money by selling the commodity basket, she was more likely to gain (or at least break even if we take transaction costs into account) than if she had invested in a monetary annuity. The difference is clearly visible in the trend line for annuities in kind in figure 3, which is consistently positive; in contrast, the trend line for monetary annuities, in figure 2, is consistently negative. So, for investors it made sense to demand annuities in kind to seek protection against market risk.

The previous discussion focuses on price fluctuations over the course of years. But commodity prices also changed during the year, and these are also likely to have had an impact on *rentiers*. If our Anna received a sum of money annually and went to the marketplace every week for groceries, she would have been exposed to seasonal fluctuations. In the late-medieval Low Countries seasonal fluctuations were usually limited to less than 10%: not dramatic, but again potentially difficult for annuitants on a tight budget. Seasonal volatility may have been particularly problematic in the later Middle Ages: it has been suggested for England that price volatility was initially

high and only decreased after the fourteenth century because of improvements in markets (Dijkman 2011, 294-295). Whether the same happened in mainland Europe, which was politically much more fragmented and experienced many more conflicts, is difficult to estimate.

Up to this point we have mainly discussed annuities in kind in terms of reducing market risk. But there were other reasons to avoid being paid in money as well. First, because of its very nature as a medium of exchange, currency is highly liquid, and it has been throughout history a popular item to steal: the monetary equivalent of the commodity basket fits in the palm of a hand. Our Anna would therefore have had to keep her money carefully hidden out of sight. Second, she would also have had to plan ahead to avoid spending too much before her annuity was due and would have to resist the urge to treat herself to things she could not afford. Today human beings have great difficulty acquiring financial discipline and there is no reason to assume this was different in the past. Anna would not be able to indulge in any luxuries and simply go to the market every week or so to purchase commodities. Third, especially for ageing individuals, going to the marketplace, negotiating prices, keeping track of quantity and quality, and making sure they were not defrauded in any way may have been exhausting.<sup>4</sup> In addition, preparing food may have been a challenge. Today meals-on-wheels programmes provide elderly people with a hot meal, and the annuities in kind we will discuss in the next section – *corrodies* – did precisely this.

Before we continue, we should think about Anna's counterparty: why would they agree to offer an annuity in kind and, as a result, take on market risk? If annuities in kind protected annuitants against market risk, it followed that debtors would be exposed to monetary policy and inflation. We see three possible reasons for counterparties to agree. First, it may well be that the question of who ran market risk was part of the negotiations, and that investors demanding to be paid in kind simply compensated their counterparty by paying a relatively high principal sum. Another option would have been to share the risk by using a price cap. A sixteenth-century legal handbook explains that debtors could avoid suffering too much from price spikes by putting in writing that they would only deliver a fixed amount of wine as long as the wine did not exceed a certain price (Hermann 2018, 21).

Second, some counterparties may not have been exposed to market risk. For a grain-producing peasant it would have made sense to sell an annuity in kind because he could simply hand over part of his harvest without having to go through the market. In such cases both debtor and creditor profited from not having to expose themselves to market risk and avoided having to first sell commodities to be able to make monetary payments. Both parties stood to gain from cutting out the middleman (Vervaeke 2012, 1136). Likewise, for institutions – both in the countryside and in towns – that owned land it may also have made sense to sell annuities in kind because of their steady supply of foodstuffs. Urban religious institutions such as hospitals and monasteries usually had good access to foodstuffs because they usually owned large estates.

Third, even if institutions lost out on selling annuities in kind in the short run, for instance because of market risk, eventually they would have been able to profit

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<sup>4</sup> Cf. transaction costs: Davis 2012, 215-22.



from the accumulated capital. Gunnar Pettersen pointed out that institutions could ‘play the long game’: some annuities in kind, such as the corrodies we will discuss shortly, would dissolve within decades, whereas the capital the institutions acquired by selling corrodies would continue to yield profits for centuries (Pettersen 2007, 51).

#### 4. Corrodies

For Anna’s purposes, investing in a corrody was probably the best option: it protected her against market risk and provided her with the necessities of life. The usual approach in later Middle Ages and the early modern period was for the investor – the corrodian – to enter into a contract with an institution and thus obtain the right to lifelong food and lodging (Begon 2002, 177). Corrodies were initially contracted with monasteries but over time hospitals began to specialize in selling these retirement packages (Stunz 2005). They were usually sold to individuals looking to secure their livelihood, but also to couples. Sometimes contracts even included a live-in servant. Naturally, every additional individual on a corrody contract raised the price and there is even evidence that the ages of the investors – and hence the likelihood the institution would have to support them for a shorter or longer period – were taken into account.<sup>5</sup>

Corrodies differed widely. Some retirees only managed to be accepted if, in addition to a sum of money, they also promised to continue to work as much as they could. Others retired with a spouse and servant to a splendid institution where they were served abundant and luxurious meals. Corrodies reflected the consumption patterns of the various social groups in pre-modern societies: the social stratification that existed outside the institutions was replicated inside the walls. In general, three types can be distinguished: poor, middle-class and rich corrodies. Poor corrodies are known as *Armenpfründe* in German; these were either completely free of charge, or very inexpensive (Kruse 2007, 493, 495). Elsewhere we have argued that the ability to pay even small sums was important for both corrodians and the institutions they entered: by demanding payment the institution rewarded people who had demonstrated that they embraced such civic values as *prudentia*, *temperantia* and *fortitudo*. Investors in *Armenpfründe* may not have been able to hand over sufficient capital to cover the cost of a corrody, but by handing over at least something they became more ‘deserving’ of admittance (Pelzl and Zuijderduijn 2022, 343).

One step up the social ladder we find the *Mittelpfründe*, which was attractive for middle-class investors. These corrodies provided simple food and lodging, often on condition the corrodians would also work as much as possible. This condition allowed for this contract to be quite affordable, as it meant the investor could pay partly in kind by providing labour and could gradually transition into old age, taking on lighter or simpler tasks with the passing of the years, at a guaranteed living standard. And then there were the rich corrodies (*Herrenpfründe* in German), which were more expensive than the middle-class and the poor corrodies. To give an example, Ulf Dirlmeier (1978, 489) reports that in late-medieval Germany

<sup>5</sup> According to Reicke (1932, 199-200) ‘the price of a corrody fluctuated based on age, social standing, and demands by the buyer’.

*Armenpfriinde* would cost up to 50 guilders, *Mittelpfriinde* 50-100 guilders, and *Herrenpfriinde* 100-200 guilders. Even though prices varied from one institution to the next and could also increase over time, generally the better-off groups of corrodians carefully safeguarded the retirement package they had a right to by protesting against any transgressions by lower classes of corrodians in terms of food and lodging.

#### 4.1 Lodging

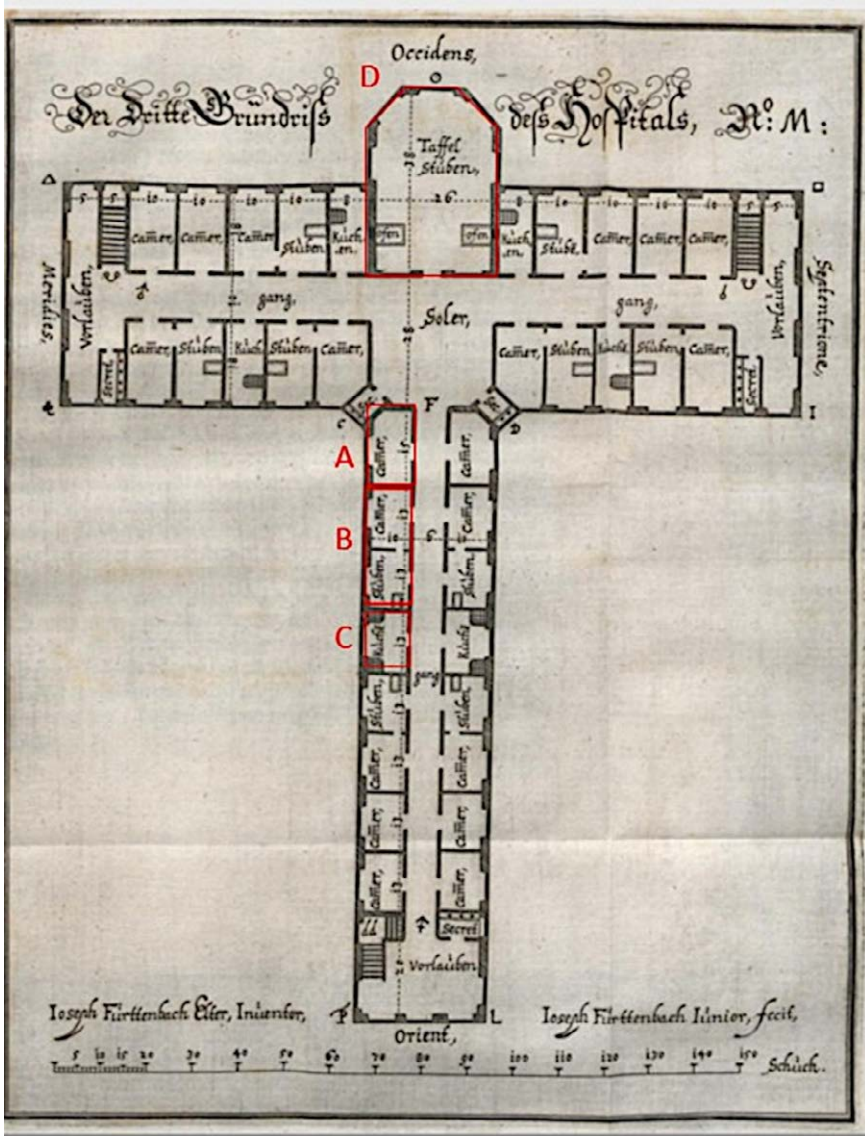
Corrodies came in a variety of types. In their simplest form their recipients did not have a right to lodging but could only come to the institution to receive a meal. This was for instance the practice in Diest, modern-day Belgium, where the hospital at some point had so many mouths to feed of corrodians who lived *ex-situ* that the sale of these annuities in kind was prohibited.<sup>6</sup> In Bergen op Zoom, the Netherlands, two of the ten corrodians lived 80 kilometres to the south, in Brussels, but still received daily meals. Presumably they sent locals to pick up the food, which the latter either consumed or passed on to others. When this came to the attention of the authorities the two were immediately replaced by former employees who did require old-age support (Zuijderdijn 2020, 82). In Leeuwarden, the Netherlands, *maalbaalders* (meal collectors) were allowed to come to the hospital to eat even though they lived independently. Some of them had paid for this privilege, while others had received it out of charity (Eekhoff 1854, 54-55). Some institutions could expect dozens to show up to receive food: the hospital in Regensburg, Germany, handed out food to 60 corrodians living outside the hospital walls (Reddig 2009, 15).

Such corrodies were probably useful for homeowners who wanted to continue to live independently but feared they would not be able to make a living. Most corrodies also included lodging though, usually in an institution. Corrodians lived in monasteries and hospitals that also accommodated the poor, the physically and mentally impaired, and people who suffered from leprosy. With the emergence of paying retirees, hospitals came to include a variety of social groups and as a result it was necessary to create separate living spaces. When the architect and theoretician of architecture Joseph Furttenbach (1632-1655) published a treatise on the ideal hospital, in 1655, he tried to arrive at a synthesis of religious symbolism and an efficient layout (image 1). On the first and second floors of his ideal hospital, poor people were housed in large halls full of long rows of beds, with no privacy. «On the third floor, one can find old and frail citizens who seek tranquillity [and] who in return for a payment have their life-long maintenance [...]». Here Furttenbach designed two types of private apartments: a single-room one (A), and a more luxurious double room (B) including a private stove. In small kitchens (C), shared by four or five apartments, corrodians prepared their own meals, which they could consume in a large *Taffelstube* (D), equipped with two stoves and with light coming through large windows (Furttenbach 1655, 28-29).

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<sup>6</sup> Alberdingk Thijm 1883, 229. Cf. *ex-situ* corrodians in Ghent's Sint-Anna hospital: Marechal 1966, 40.

Graph 4. Third floor of ideal hospital designed by J. Furtttenbach



Furtttenbach's ideal hospital contained elements that were found throughout Europe. Corrodians who paid for their stay usually got the best position, generally the top floor. Thus, in Namur, Belgium, corrodians lived on the first floor of the hospital, and were distinguished from the poor who lived on the ground floor (Pauli 2007, 254). The distinction between more and less luxurious rooms was also quite common. *Herrenpfriindner* who had invested relatively large sums lived in private

apartments or small houses in or close to the institution. *Mittelpfründner* often lived in smaller apartments, in bed boxes, or simply in a bed in a hall. Thus, the wealthier corrodians of St Hieronymus hospital, Leiden, which was housed in a former monastery, were allowed the privacy of a cell that had previously been occupied by monks. The less-well-off shared larger living spaces such as the monastery's former church and refectory, where they would have their beds (Zuijderdijn 2016, 200).

Rich corrodians did not only receive better housing because they paid more, but also because they needed to be able to distinguish themselves from middle-class corrodians. When the hospital in Arnhem, the Netherlands moved to a new location in 1636, it became possible to «distinguish between “decent” (*degelijke*) old citizens who want to pay for their upkeep and the others who are poor and of lower standing (*geringer conditie*)». The rich would live in the citizens' house (*borgher-huijs*), the others in the hall for men (*manscamer*) or for women (*vrouwen camer*) (Leppink 1996, 185). The rich could be quite protective of their living quarters: in the hospital in Leeuwarden they are known to have chased away middle-class corrodians who had wandered into the living quarters of the rich (Eekhoff 1854, 49).

Yet another distinction concerned where to eat meals. Furttentbach had the corrodians eat amongst themselves on the third floor, so they did not have to mingle with the other inhabitants. In hospitals in French-speaking areas a distinction was made between *frères et soeurs du haut pain*, who received their food on the first floor, and those who received their meals on the ground floor (*bas pain*) (Pauli 2007, 254). In Arnhem, the rich were served at the «burghers table» (*burger taeffel*) (Leppink, 1996, 178-179). And in Frankfurt, corrodians negotiated the right to dine at the *Spitalmeistertisch*, side by side with the hospital directors.<sup>7</sup> In contrast, middle-class corrodians often had to sit with the staff: in some cases, their corrodies were even named after the place they were served, such as with *Knechttschpfründner* (named after the servants' table) and *Gemeine Kesselpfründner* (named after the cooking pot) (Reddig 2007, 13). The *Geborsamenpfründe* (servants' corrody) we encounter in Esslingen, Germany, also suggests these corrodians would have been considered part of the same social group as the hospital's employees – and likely ate at their table (Holzwart-Schäfer 2005, 15).

## 4.2 Food

Rich corrodians usually received better food and larger portions of food than middle-class and poor corrodians. The difference is for instance seen in mid-sixteenth-century Nuremberg, Germany, where hospital officials calculated that the yearly maintenance of a rich corrodian cost 140% of the rations of a middle-class corrodian and 200% of the rations of a poor corrodian.<sup>8</sup> In Leiden, the Netherlands, the rich corrodians received 22.6% more butter, 18.7% more cheese, and 67.0% more beer than middle-class retirees (Pelzl and Zuijderdijn 2022, 337-38). For social

<sup>7</sup> Stadtarchiv im Institut für Stadtgeschichte Frankfurt am Main, Findbuch zum Heiliggeistspital, Rep. 712, 343 and following pages.

<sup>8</sup> Stadtarchiv Nürnberg (SN), D2/II Nr. 18, fol. 64-66.

middling groups it was of crucial importance to maintain their ‘middle class’ consumption pattern during old age. Willem Frijhoff, writing about a retirement home in Rotterdam that specialized in selling corrodies, indicates that «quality was essential to the recruitment of the home» and that «bad or insufficient food was prejudicial to its [the institution’s] reputation». Although this institution’s meals were ‘never luxurious’, it was ‘superior in both quality and variety to that of the orphanages, hospitals, and almshouses in Rotterdam’ (Frijhoff 1998, 194-95). Servings of meat were for instance very common, and this has also been noted by Robert Jütte (1987, 123-24), writing about similar retirement institutions in Germany. Fruits, such as apples and pears, were also served frequently in Rotterdam (Frijhoff 1998, 200-21). Other institutions were not as posh as the one in Rotterdam but came close: Amsterdam’s Sint-Jorishof served meat at least three times per week (Commelin 1726, 566). The Hague’s hospital offered a varied menu including meat, fish and vegetables, and served a different meal every day. Menus also changed with the seasons. In addition, there were four feast meals per year, including at Christmas and Easter, which were attended by corrodians, personnel and directors. On such occasions, corrodians received a jug of beer – or tea for those who did not care for beer – and candles (Serneé 1919, 218-219).

The hospitals discussed above specialized in corrodies for retirees coming from relatively wealthy cities. Other hospitals did not serve such lavish meals, especially not for middle-class corrodians. Thus, when a couple purchased a corrody in late-medieval Amsterdam, the contract stipulated they had the right to food ‘as good or bad as the hospital’s kitchen prepares’ (Zuijderduijn 2015, 36). In Haarlem a corrodian was admonished for exclaiming that the butter served was fit for coating the mast of a ship (Kurtz 1979, 71). Should the corrody prove a disappointment, it was usually possible to make adjustments: anyone willing to put in some extra money could improve their diet. Thus, a couple in Leiden’s St. Hieronymus hospital with some money to spare negotiated ‘a good piece of beef’ every Sunday (Zuijderduijn 2016, 200). In this city’s St. Catherine’s and Ceciliae’s hospitals many retirees were willing to pay extra to avoid having to eat the hospitals’ home-baked bread (*huysbacke*), which apparently was not to everybody’s liking.<sup>9</sup> There was also a tendency to pay extra for higher-quality beer. And it was also possible to pay for specific meals: in Leiden a corrodian paid extra to get ‘breakfast in the morning on top of the ordinary provisions of the house’.<sup>10</sup> In Haarlem corrodians were willing to pay an additional sum for milk to pour in their coffee or tea, porridge or biscuits at breakfast, and a maid to clean their rooms and make their beds (Kurtz 1979, 43). And even though the vast majority of the corrodians were elderly men and women, there were sometimes complaints that the food was unsuitable for seniors. In the eighteenth century the corrodians of Würzburg demanded more warm soup and less beer, which they could not stomach because of their old age. Somewhat later they demanded that

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<sup>9</sup> Thus, Jillis van den Heuvel arranged for two loafs of white bread per week ‘and the rest home-baked [bread]’ (Erfgoed Leiden (EL), Archief van de gasthuizen, inv. nr. 58-2 f. 155 (contract from 1743). Cf. EL, Archief van de gasthuizen, inv. nr. 58-1 f. 137 (*gebouuld brood* instead of ordinary bread).

<sup>10</sup> EL, Archief van de gasthuizen, inv. nr. 37-1 f. 42 (contract from 1687).

the hospital officials should take into account that certain types of food were less digestible for old people and should not be served.<sup>11</sup>

Clothing could also be part of a corrody. Some institutions provided repair services, such as in Nuremberg where the hospital paid for repairing corrodians' clothing.<sup>12</sup> Other hospitals mandated their inhabitants to wear clothing that made them recognizable as members of the institution. Another Nuremberg foundation, for example, forbade the resale of an inmate's clothing after their death as it did not want outsiders to wear their attire and possibly be mistaken for corrodians.<sup>13</sup> For rich corrodians it was important to be able to distinguish themselves and therefore they demanded not to be clothed in similar fashion to middle-class corrodians: they could negotiate permission to bring their own clothes to the hospital so they could express their distinct social status.

Corrodies could also provide medical services. When Leiden's St. Hieronymusdal hospital advertised it would be selling corrodies, the expert medical attention investors would receive was highlighted (Zuijderdijn 2016, 195). More directly related to the problems of old age were medical expenses. Retirees sometimes arranged for this, benefitting from the comparatively low labour cost. Thus, one corrody contract explicitly stated: «in the said hospital one will clean and wash him [the rich corrodian] and all that belongs to his body [...] and when sick, one will turn him around, put him to bed, wash him [...] and other related manual services and cures, as often and as much as his ailments require».<sup>14</sup> Not all hospitals covered medicine though: when the local lord paid a visit to their hospital, the hospital officials in Würzburg explicitly denied that they would cover any medical bills, as this was regarded as too expensive.<sup>15</sup>

### 4.3 Protection

Corrodies provided investors with lifelong food and lodging and should be considered as life annuities that were paid out in kind. Because investors entered into a contract with an institution that thereby took on the responsibility for providing food and lodging, market risk was transferred from the investor to the institution. To what extent did corrodies protect corrodians against the whims of the market? First, it is important to realize that hospitals privileged their paying customers over the poor. The latter were the first to have their rations cut. Thus, when the Saint-Laurent hospital of Liège, Belgium, was heavily indebted, in 1414, its abbot did not suggest cutting the rich and middle-class corrodies, but instead proposed reducing

<sup>11</sup> Stadtarchiv Würzburg (SW), Bürgerspital Abteilung II Nr. 8; idem, nr. 463, protocol of 1722.

<sup>12</sup> SN, D15 L1/33 or for example the account books repeatedly name expenses for this, such as SN, B 35 B 766 1765/66.

<sup>13</sup> SN, D 15 L1/121 A.

<sup>14</sup> Hermann 2018, 22, citing a 16th-century corrody contract template: «Man sol im auch in dem bemeldten Spittal allwegen seübern und weschen/ alles das zu seinem leib an under und über gehöret/ und in in seinen krankheiten versehen mit heben/ legen/ zwagen/ wüschien/ weschen/ und andern getreüwen handtreichungen unnd pflagen/ so oft unnd dick sein notturfft das erfordern wirdt».

<sup>15</sup> SW, Bürgerspital Abt. II Nr. 463, see visitation protocoll of 1722.

handouts to the poor (De Spiegelers 1987, 14). Likewise in Bergen op Zoom, the Netherlands, the poor only received food after the corrodians had been fed, probably because they did not have the same rights as paying customers.<sup>16</sup> Some hospitals even had distinct financial administration systems for the corrodians: in Namur, Belgium, the finances of the *sani* and *infirmi* – retirees and sick – were handled by different directors, who even got into a conflict in 1377 about who was to use what resources (Pauli 2007, 256). That corrodians crowded out the poor was not lost on contemporary commentators: in Germany, complaints and criticisms about the righteous poor being supplanted by idle and well-to-do elderly surfaced repeatedly, and commentators pointed at the moral obligation of hospitals to prioritize the wellbeing of the weakest members of society (Reicke 1932, 286-91). Thus landgrave Charles I of Hesse-Kassel (1654-1730) feared that the large number of corrodians in hospitals would result in «particularly wretched and infirm people» not getting the necessary care while waiting to «die helpless in their misery» (Gray 2001, 48). In Ghent, Belgium, the sick issued an official complaint in 1349: ‘their bread weighs less than it should’ and they received less meat on Pentecost than before, ‘even so little that it sufficed for an eight-year old child’. It seems that the hospital’s sick suffered from the admission of corrodians, who were accused of taking the best clothes and living in nicely-furnished quarters, while the sick did not even have a toilet. The city government agreed to install the latter, but for the rest it was unwilling to take any serious measures. In fact, it sided with the corrodians and suggested that the plaintiffs «could leave the house and go their own way, for the love of God» (Alberdingk Thijm 1883, 171-72).

Yet even for the corrodians there was always a risk of cutbacks. In Germany corrodians were aware of this and recorded in their contracts that bread loafs had to have the customary size and could hence not be shortened when resources were scarce. Hospital directors also knew too well they were not always able to live up to corrodians’ expectations: the statutes of the *Wenemaergasthuis* in Ghent, Belgium suggest that retirees could take complaints about any wrongdoings to the hospital directors or the urban court (Alberdingk Thijm 1883, 298-299). Leeuwarden’s corrodians took their case even further when they complained to the high court about not having a fire and breakfast in their rooms.<sup>17</sup> When its revenues became depleted, even the posh retirement home in Rotterdam had to economize: its pampered corrodians had to accept slightly less luxurious food (Frijhoff 1998, 195). We should not feel too sorry for them as they could probably do without. In general, it is unlikely that corrodians who saw their rations cut would have starved to death because many retirement homes fed their corrodians such large quantities that the recipients sold off part of their rations. In some hospitals, this could in fact lead to disputes between the hospital officials and the residents: the sturdy elderly corrodians of the *Canstatt*

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<sup>16</sup> De Mooij 1998, 215. Cf. Eekhof 1854, 15: ‘those who brought any property or money... obviously had more rights and privileges...’.

<sup>17</sup> Historisch Centrum Leeuwarden, 1153 Sint Anthony Gasthuis I te Leeuwarden, 1425-1813, inv. nr. 800.

hospitals in South Germany sent a protest letter to the local lord in the late sixteenth century when officials forbade them to sell the excess parts of their bread rations.<sup>18</sup>

The main threat corrodians faced was bankruptcy of their host institution. In Oudewater, the Netherlands, the hospital's income declined dramatically after an outbreak of rinderpest killed cattle in the surroundings and farmers stopped renting hospital lands. By 1717 the financial situation had deteriorated to the point that the 55 corrodians went to a public notary to record an official complaint that they had not received any food for ten days. When it turned out that the directors and town government were unwilling to step in, the seniors started litigation, eventually ending up at the high court in The Hague. It ruled in their favour: the hospital directors and town government should pay for their upkeep. It seems that one wealthy director eventually had to take personal responsibility for feeding the corrodians; if and how he was compensated for this is unclear (Stoppelenburg 2012). This example underlines that annuities in kind were official contracts that could not be easily terminated. It may have been possible to cut back on rations because of financial difficulties, but stopping altogether with providing food and lodging was clearly a step too far.

## 5. Conclusion

The example of Oudewater's hospital demonstrates the attraction of corrodies. Even though its elderly inhabitants had to put up a fight, eventually the food and lodging they were entitled to were resumed. The judges of the high court did not care about rinderpest and the difficulties the hospital experienced leasing out its landed property: the financial risks were to be borne by the institution and its directors, not the corrodians. The latter were largely shielded from the whims of the market, in particular if they retired to larger institutions that were well-integrated in the regional agrarian economy and, hence, had a steady supply of foodstuffs. Annuities in kind offered greatest protection against market risk if they allowed the investor to become part of the 'natural economy' involving transfers of commodities between farmers and institutions, without any market exchange, and without any involvement of money.

## BIBLIOGRAPHY

- Alberdingk Thijm, Petrus Paul Maria. 1883. *De gestichten van liefdadigheid in België van Karel den Groote tot aan de XVI<sup>e</sup> eeuw*. Brussel and Louvain: Hayez.
- Arnoux, Mathieu. 2021. "Credit and investment between town and countryside: the market in grain annuities in Normandy (thirteenth-fourteenth centuries)." *Continuity & Change* 36, 2: 149-176. doi:10.1017/S0268416021000126.
- Begon, Sabine. 2002. *De Iure Hospitalium. Das Recht des deutschen Spitals im 17. Jahrhundert unter Berücksichtigung der Abhandlungen von Abasver Fritsch und Wolfgang Adam Lauterbach*. Marburg: Tectum Verlag.

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<sup>18</sup> Hauptstaatsarchiv Stuttgart, A 206 Bü 1428.



- Cau, Cornelis. 1658. *Groot placacet-boeck, vervattende de placaten, ordonnantien ende edicten...*  
1. The Hague: De weduwe, ende erfgenamen van wylen Hillebrandt Iacobsz van Wouw.
- Commelin, Casparus. 1727. *Beschryvinge van Amsterdam zynde een naukeurige verhandelinge van desselfs eerste oorspronk wyt den huysse der beeren van Amstel, en Amstellant, haer vergrooting, rykdom, en wyze van regeeringe, tot den jare 1691...* Amsterdam: Andries van Damme.
- Coppes, Robert C. 1997. *Credit and market risk. An analysis of capital requirements for banking institutions.* Groningen: Labyrint Publishers.
- Davis, James. 2011. *Medieval market morality. Life, law and ethics in the English marketplace, 1200-1500.* Cambridge: Cambridge University Press.
- De Mooij, Charles Cornelis Maria. 1998. *Geloof kan Bergen verzetten. Reformatie en katholieke herleving te Bergen op Zoom 1577-1795.* Hilversum: Verloren.
- De Spiegeler, Pierre. 1987. *Les hôpitaux et l'assistance à Liège (X<sup>e</sup>-XV<sup>e</sup> siècles): aspects institutionnels et sociaux.* Paris: Librairie Droz.
- Dirlmeier, Ulf. 1978. *Untersuchungen zu Einkommensverhältnissen und Lebenshaltungskosten in oberdeutschen Städten des Spätmittelalters (Mitte 14. bis Anfang 16. Jahrhundert).* Heidelberg: Winter.
- Dijkman, Jessica. 2011. *Shaping medieval markets. The organisation of commodity markets in Holland, c. 1200-c. 1450.* Leiden and Boston: Brill Academic Publishers.
- Eekhoff, Wopke. 1854. *Geschiedenis van het Sint Anthonij-Gasthuis te Leeuwarden, met de daarbij behorende stukken.* Leeuwarden: Coöperatieve Handelsdrukkerij.
- Elgin, Ceyhun, Kivanç Karaman, and Şevket Pamuk, "Debasements in Europe and their causes, 1500-1800." *Centre for Economic Policy Research working paper*, <cepr.org/sites/default/files/Pamuk%20-%20oslo%20text%20June%202015.pdf> (14-03-2023).
- Frijhoff, Wilhelmus Theodorus Maria. 1998. "Food patterns of the middle classes: the Proveniershuis at Rotterdam, c. 1720-1840." *Bijdragen tot de geschiedenis* 81: 191-206.
- Furttenbach, Joseph. 1655. *Hospittals-Gebäu. Gründliche Beschreibung, in was gestalt und gleichsam in der Form deß Creutztes Christi, ein Hospittal, mit sonderbaren guten Commoditeten [...].* Augsburg: J. Schulte.
- Gray, Louise Marsha. 2001. *The self-perception of chronic physical incapacity among the labouring poor. Pauper narratives and territorial hospitals in early modern rural Germany.* London: University College London.
- Hermann, Hans-Georg. 2018. "Die Spitalpfründe - Geistliche Wurzeln und bürgerliche Ausprägung." In *Leben im Spital. Pfründner und ihr Alltag 1500-1800*, ed. A. Dirmeier, 11-35. Regensburg: Verlag Friedrich Pustet.
- Holzwardt-Schäfer, Iris. 2005. "Pfründner und Bedürftige im Esslinger Katharinenhospital: soziale Schichtung, Versorgung und Alltag im 15. und 16. Jahrhundert." *Esslinger Studien. Zeitschrift*, 44: 7-35.
- Jansen, Hubertus Petrus Henricus. 1955. *Landbouwpacht in Brabant in de 14<sup>e</sup> en 15<sup>e</sup> eeuw.* Assen: Van Gorcum.
- Jütte, Robert. 1987. "Diets in welfare institutions and outdoor poor relief." *Ethnologia Europaea* 16, 1: 117-36.

- Kruse, Britta-Juliane. 2007. *Witwen: Kulturgeschichte eines Standes in Spätmittelalter und Früher Neuzeit*. Berlin: De Gruyter.
- Kurtz, Gerda H. 1979. *Het proveniershuis te Haarlem*. Haarlem: Vereniging "Haerlem".
- Leppink, Gerda 1996. *Het Sint Catharinae Gasthuis in Arnhem in de eerste vier eeuwen van zijn bestaan (1246-1636)*. Hilversum: Verloren.
- Lucassen, Jan, and Jaco Zuijderdijn. 2014. "Coins, currencies, and credit instruments. Media of exchange in economic and social history." *TSEG-The Low Countries Journal of Social and Economic History* 11, 3: 1-13.  
<https://doi.org/10.18352/tseg.143>.
- Marechal, Griet. 1966. "Het Sint-Annahospitaal te Sint-Baafs te Gent." *Annalen van de Belgische Vereniging voor Hospitaalgeschiedenis* IV: 31-50.
- Noordegraaf, Leo. 1985. *Hollands welvaren? Levensstandaard in Holland, 1450-1650*. Alkmaar: Octavo.
- Pauli, Michel. 2007. *Peregrinorum, pauperum ac aliorum transeuntium receptaculum: Hospitälere zwischen Maas und Rhein im Mittelalter*. Stuttgart: Franz Steiner Verlag.
- Pelzl, Ludwig, and Jaco Zuijderdijn. 2022. "Saving the best for last? Old age retirement among the urban middle classes in Leiden and Regensburg (c. 1650- c. 1800)." *The History of the Family* 27, 2: 326-49.  
<https://doi.org/10.1080/1081602X.2022.2055610>.
- Pettersen, Gunnar Ingolf. 2007. "Pensjonsordninger i Norge i middelalderen – ytelser og gjenytelser." *Collegium Mediaevale* 20: 29-98.
- Pfister, Ulrich. 2017. "The timing and pattern of real wage divergence in pre-industrial Europe: evidence from Germany, c. 1500–1850." *The Economic History Review* 70, 3: 701-729. <https://doi-org.ludwig.lub.lu.se/10.1111/ehr.12419>.
- Reddig, Wolfgang F. 2009. "Wohnen als soziale Kategorie im fränkischen Spitalwesen." In *Städtische Spitalbauten in Südwestdeutschland aus der Sicht der Hausforschung: Tagung in Ravensburg am 30. April 2004* ed. S. Uhl, 13-30. Esslingen: Arbeitskreis für Hausforschung Regionalgruppe Baden-Württemberg.
- Reicke, Siegfried. 1932. *Das Deutsche Spital und sein Recht im Mittelalter, volume 2: Das deutsche Spitalrecht*. Stuttgart: Verlag F. Enke.
- Serneé, Johanna M. 1919. "Een en ander over het Sint-Nicolaasgasthuis te 's-Gravenhage." *De Navorscher: een middel tot gedachtenwisseling en letterkundig verkeer tusschen allen die iets weten, iets te vragen hebben of iets kunnen oplossen* 68: 212-24.
- Spufford, Peter. 1988. *Money and its use in medieval Europe*. Cambridge: Cambridge University Press.
- Stephenson, Judy Z.. 2019. "In search of the average craftsman: understanding skilled work and wages in the early modern building trades and wider economy." In: *Seven centuries of unreal wages. The unreliable data, sources and methods that have been used for measuring standards of living in the past*, ed. John Hatcher, and Judy Z. Stephenson, 117-42. London: Springer Nature.
- Stoppelenburg, N. 2012. "Het gasthuis van Oudewater." *Jaarboek Oud-Utrecht*: 51-67.
- Stunz, Holger R. 2005. "Hospitälere im deutschsprachigen Raum im Spätmittelalter als Unternehmen für die caritas - Typen und Phasen der Finanzierung." In *Funktions- und Strukturwandel spätmittelalterlicher Hospitälere im europäischen Vergleich*, ed. M. Matheus, 129-59. Stuttgart: Franz Steiner Verlag.

- Svensson, R. 2016. "Periodic recoinage as a monetary tax: conditions for the rise and fall of the bracteate economy." *The Economic History Review* 69, 4: 1108-1131. <https://www.jstor.org/stable/45183227>.
- Unger, R. 1999. "Feeding Low Countries towns: the grain trade in the fifteenth century." *Revue Belge de philologie et d'histoire* 77, 2: 329-358.
- Vervae, L. 2012. "Het Brugse Sint-Janshospitaal en zijn grote hoevepachters in de 15<sup>e</sup> en 16<sup>e</sup> eeuw: wederkerigheid en continuïteit in functie van voedselzekerheid." *Revue Belge de philologie et d'histoire* 90, 4: 1121-1154.
- Volckart, O. 2018. "Bimetallism and its discontents: cooperation and coordination failure in the empire's monetary politics, 1549–59." *Vierteljahrschrift für Sozial- und Wirtschaftsgeschichte*, 105, 2: 201-220. <https://www.jstor.org/stable/26591333>.
- Zuijderduijn, J. 2015. "Pap en brood tijdens de oude dag. Gepensioneerden in Amsterdam aan het einde van de middeleeuwen." *TSEG - The Low Countries Journal of Social and Economic History*, 12, 3: 23–50. <https://doi.org/10.18352/tseg.62>.
- Zuijderduijn, J. 2016. "Good, fresh air and an expert medical service: old age pensioners in Leiden's St. Hiëronymusdal retirement home, sixteenth century." *The History of the Family* 21, 2: 195-213. <https://doi.org/10.1080/1081602X.2015.1091782>.
- Zuijderduijn, J. 2018. "Incentives and interests: monetary policy, public debt, and default in Holland, c. 1466-1489." In *Money, currency and crisis: in search of trust, 2000 BC to AD 2000*, ed. R.J. van der Spek and B. van Leeuwen, 206-223. London and New York: Routledge.
- Zuijderduijn, J. 2020. "Seeking Pieter Bruegel the elder's father: Pieter Bruegel the eldest (†1566), pensioner in Sint-janshuis retirement home, Bergen op Zoom', *Early Modern Low Countries* 4, 1: 82-101. <https://doi.org/10.18352/emlc.129>.