

Crediting women? A comparative perspective on credit markets and gender inequality in late medieval Brabant.

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Despite the widely recognized importance of credit and control over finance for women's economic opportunities and wider processes of economic development, very little is known about women's participation in medieval capital markets. Through a comparative study of two cities, this paper explores gendered participation in private capital markets in growing and shrinking economies around 1490. It aims to determine how female participation on credit markets differed from men's participation - in terms of their market share, the type of credit transactions, invested capital and trade partners, and how this was influenced by their marital status and by different economic situations. Moreover, it places these results in a comparative European framework.

The study is structured as follows. After a historiographical overview on medieval women and credit, the article introduces the two cities on which this study is based and the used sources. Second, a general overview of the functioning of credit markets in both cities is given. After this, the study compares how women and men participated in credit markets in two contrasting economic situations. The study concludes that women's share in capital markets in the fifteenth-century Low Countries was relatively limited, despite the egalitarian provisions in the region's customary law. Still, compared to their Southern European counterparts, women in the Low Countries probably had a slightly better access to the capital markets.

If capital market participation empowered women, this was a possibility open only to a limited group of women. However, this group was much more diverse than previous studies have accounted for: widows or elite women were far from the only participants. The period of economic growth in Antwerp moreover seems not to have allowed women to enter capital markets on a larger scale, but the gender differences on the capital market were less pronounced than in economically challenged Leuven. Women's access to capital moreover was considerably lower than in the fourteenth century, which supports the notion of a decline in economic opportunities for women during the fifteenth century.

Women and credit in the late medieval economy

By studying female participation in the credit market of the Low Countries, this study employs an original perspective to approach the longstanding historiographical debate on the changing economic opportunities of women during the Late Middle Ages. Assessments of these changes are not straightforward: historians far from agree on the economic possibilities of late medieval women, and especially on how these changed. According to many historians,

opportunities for women in the economy diminished during the fourteenth and fifteenth century. To explain this, scholars point to changing production conditions,¹ growing control by male-dominated guilds,² and an increased emphasis in families on patrilineal preservation of property.³ However, other studies have assessed the changing opportunities for women during the Late Middle Ages in a more positive light.⁴ In the most recent view, the demographic decline caused by the Black Death gave rise to the European marriage pattern (EMP), characterized by an older age at marriage for both partners, a high number of singles, and the predominance of nuclear households, which led to less patriarchal structures in society. Due to various factors, the EMP empowered women in late medieval society significantly, especially women from the lower and middle groups. This pattern occurred in its strongest form in the North Sea region, where it stimulated economic growth.⁵

Both in the Low Countries and in other regions of Europe, this debate on women's economic opportunities in the Late Middle Ages has chiefly been considered from the perspective of female labour. Yet gender differences on property and capital markets are considered equally paramount to understanding women's position in society. Access to and control over resources, finance and credit is widely accepted as a crucial aspect of women's agency.⁶ The ability to access credit can empower women in several ways. These mechanisms require however more research, and have mostly been studied for the early modern period. As debtors, access to credit would have allowed women to set up production and market activities, finance profitable investments or their consumption, and to overcome temporary cash-flow problems. Being able to obtain credit as such increased women's possibilities to participate in the economy.⁷ As creditors, capital markets offered women opportunities for investment and for securing a regular income, thereby enhancing their financial position. It has tentatively been argued that this might have increased women's social esteem and their latitude with regard to marriage, including the possibility to sustain a celibate lifestyle.⁸

Unsurprisingly then, women's involvement in capital markets has equally been considered an important aspect of their relatively strong economic participation in the North-

¹ Wensky, M., *Die Stellung der Frau in der stadtkölnischen Wirtschaft im Spätmittelalter* (Köln and Vienna 1980); Howell, M. C., *Women, production, and patriarchy in late medieval cities* (Chicago 1986); McIntosh, M. K., *Working women in English society, 1300-1620* (Cambridge and New York 2005); Stabel, P., 'Working women'.

² Bennett, J. M. and Kowaleski, M., 'Crafts, guilds, and women in the middle ages: fifty years after Marian K. Dale', *Signs* 14 (1989), 474-501; Stabel, P., 'Women at the market: gender and retail in the towns of medieval Flanders', W. Blockmans ed., *Secretum scriptorum: liber alumnorum Water Prevenier* (Leuven 1999), 259-276.

³ Howell, M. C., *The marriage exchange: property, social place, and gender in cities of the Low Countries, 1300-1550* (Chicago 1998); Hanawalt, B., *The wealth of wives: women, law, and economy in late medieval London* (Oxford 2007); Hutton, S., *Women and economic activities in late medieval Ghent* (New York 2011).

⁴ Barron, C., 'The 'golden age' of women in medieval London', *Reading medieval studies* 15 (1989), 35-58; Goldberg, P. J. P., *Women, work, and life cycle in a medieval economy*, Oxford 1992.

⁵ De Moor, T. and Van Zanden, J. L., 'Girl power: the European marriage pattern and labour markets in the north Sea region in the late medieval and early modern period', *The economic history review* 63 (2010), 1-33.

⁶ See for example: World Bank, *World Development Report 2012: gender equality and development* (2012).

⁷ Briggs, C., 'Empowered or marginalized? Rural women and credit in later thirteenth- and fourteenth-century England', *Continuity and change* 19 (2004), 13-43; Baum, H., 'Annuities in Late Medieval Hanse towns', *Business History Review* 59 (1985), 24-48; Ogilvie, S., Küpker, M. and Maegraith, J., 'Household Debt in Early Modern Germany: Evidence from Personal Inventories', *The journal of economic history* 72 (2012) 134-167.

⁸ Dermineur, E., 'Les Femmes et le Cr dit dans les Communaut s Rurales au 18e si cle', *Traverse Revue d'Histoire* 2 (2014) 53-64; Spicksley, J., 'Fly with a Duck in Thy Mouth': Single Women as Sources of Credit in Seventeenth-Century England, *Social History* 32 (2007) 187-207.

Sea region in recent studies of the EMP.⁹ Nevertheless, empirical studies on female participation in private capital markets across medieval Europe remain strikingly scarce.¹⁰ The most important exceptions focus exclusively on the Mediterranean world before the Black Death,¹¹ on Jewish women, or on rural societies.¹² In general, most studies of women and preindustrial credit tend to focus on the better documented seventeenth and eighteenth century.¹³ Looking at studies of women's participation in credit markets in Northwestern Europe during the Late Middle Ages, empirical studies are indeed rare.¹⁴ The causes for this are twofold: on the one hand, economic studies of premodern credit have been reluctant to explore gender inequality, and historians of medieval women have only scarcely included credit markets in their research.¹⁵ On the other hand, source problems have also prevented this: series of contracts are often lacking for the medieval period. In England for example, the few historians which have attempted to study women's participation in credit relationships, have been forced to use litigation sources, which only indirectly allow for a reconstruction of the credit market. Moreover, due to the legal status of married women in this region, their participation is often hidden.¹⁶ For the medieval Low Countries, the source situation is more fortunate. Yet only two studies have explored medieval women's involvement in credit markets in depth.¹⁷ Interestingly, both of these studies have argued that women's credit activities strongly resembled those of men, a pattern which differs from findings in Southern Europe.¹⁸ Both studies however leave the door open for a more thorough investigation.

Lastly, women's credit activities are also part of the topical debate on the historical connections between economic growth and women's economic participation. Next to

⁹ De Moor, T., Van Zanden, J.L., and Zuijderduijn, C.J., 'Microcredit in late medieval Waterland. Households and the efficiency of capital markets in Edam en De Zeevang (1462–1563)', Cavaciocchi, S. (ed.), *La famiglia nell'economia europea. Secc. XIII-XVIII*, Florence, 2009, 667.

¹⁰ Women on markets for public capital, i.e. life annuities sold by towns, have received more attention, especially in the Early Modern Period. See for example Hanus, J., 'Een efficiënte pre-industriële kapitaalmarkt? Het vroeg zestiende-eeuwse 's-Hertogenbosch als voorbeeld', *Tijdschrift voor sociale en economische geschiedenis* 6 (2009), 82-113, and the literature cited there.

¹¹ Riemer, E. S., 'Women, dowries, and capital investment in thirteenth-century Siena', M. A. Kaplan ed., *The marriage bargain: women and dowries in European history* (New York 1985); Reyerson, K. L., 'Women in business in medieval Montpellier', B. Hanawalt ed., *Women and work in preindustrial Europe* (Bloomington 1986), 117-144; Angelos, M., 'Urban women, investment, and the commercial revolution of the middle ages', L. Mitchell ed., *Women in medieval European culture* (New York 1999), 257-272.

¹² See the overview in: Jordan, W.C., *Women and credit in pre-industrial and developing societies* (Philadelphia 1993), 17-78.

¹³ Recent studies of early modern women and credit can be found in Spicksley, J., 'Usury legislation, cash, and credit: the development of the female investor in the late Tudor and Stuart periods', *The Economic History Review* 61 (2008), 277-301; Dermineur, E., 'Single Women and the Rural Credit Market in Eighteenth-Century France', *Journal of social history* 48 (2014), 175-199.

¹⁴ Most in depth articles are concerned with IOU's. For Germany, see Gilomen, H., 'Frauen als Schuldnerinnen und Gläubigerinnen in der Stadt Basel in den 1420er Jahren', Signori, G. (ed.) *Prekäre Ökonomien: Schulden in Spätmittelalter und Früher Neuzeit* (Konstanz 2014), 103-137; For England, a short overview limited to anecdotal evidence is provided in McIntosh, M., *Working women in English society, 1300-1620* (Cambridge and New York), 2005, 85-116. For the Low Countries, see: Hutton, S., *Women*, 81-101; Murray, J. M., 'Family, Marriage and Moneychanging in Medieval Bruges', *Journal of medieval history* 14 (1988), 115-125; Van Zanden, J.L., Zuijderduijn, J. and De Moor, T., 'Small is beautiful: the efficiency of credit markets in the late medieval Holland', *European Review of Economic History*, 16 (2012), 3-22.

¹⁵ A situation equally observed in Van Nederveen Meerkerk, E., 'Gender and economic history. The story of a complicated marriage', *Tijdschrift voor sociale en economische geschiedenis* 11 (2014), 175-197.

¹⁶ Briggs, 'Empowered or marginalized?'

¹⁷ Hutton, *Women*, 81-100; Van Zanden, Zuijderduijn and De Moor, 'Small is beautiful'; De Moor, Van Zanden, and Zuijderduijn

¹⁸ Jordan, *Women and credit*, 17-78.

potentially enhancing the position of women in society, it has been argued that the participation of women in credit markets can foster economic growth. As such, it is a part of the explanatory framework of the EMP.¹⁹ Especially for early modern England, historians have stated that the possibility of single women to participate in credit markets held causal significance in the precocious economic development of the region, as ‘it increased the proportion of the population able to engage in financial markets by fifty per cent’.²⁰

Rather than demonstrating how women’s credit activities might lead to economic development, this study wants to gain insights into women’s position on late medieval capital markets, its determinants, and how these might be impacted by economic changes. It does so by investigating women’s position in two cities in the Low Countries with very different economic trajectories: Antwerp and Leuven.

Sources and methodology

Two cities located in the late medieval duchy of Brabant are ideally suited for the aims of this study: Antwerp and Leuven. In the first place, the towns had similar juridical and political conditions, which keeps the circumstantial variables stable enough to allow comparison. Second, the economies of the two cities had opposite trajectories during the fifteenth century, which allows to assess credit opportunities in growing and shrinking markets. At the start of the fifteenth century, the economic situation of Leuven and Antwerp was roughly the same, but crucially, their paths diverged sharply as the Middle Ages drew to a close. At the end of the middle ages, Antwerp entered its first phase of economic and demographic growth as it was on its way to become the commercial metropolis of north-western Europe in the sixteenth century.²¹ In contrast, Leuven, once the leading capital city of the duchy, lost its lustre during the fifteenth century. This was mainly due to a sustained crisis in its principal industry, the cloth trade, and economic hardships due to war. In the final decades of the period, the city’s economic decline accelerated swiftly.²²

The study is based on the annual registers of the aldermen of Antwerp and Leuven.²³ These sources have been well preserved from the fifteenth century onwards. The registers contain documents stemming from the so-called voluntary jurisdiction. On payment of a small fee, the inhabitants of the city and surrounding areas could go to the bench of the aldermen to register private contracts of all sorts, thereby ratifying and giving legal force to these agreements. For every conveyance of rights on real estate within the city walls (including annuities and mortgages), registration was compulsory. Therefore these sources allow a complete reconstruction of the urban real estate and annuity market. It was not obligatory the register other private transactions and contracts in the aldermen’s registers (such as credit transactions not based on real estate, gifts, trade deals, and conveyances of non-urban

¹⁹ An overview of recent literature which makes this argument, see Van Nederveen Meerkerk, ‘Gender and economic history’, 193-195. For a critique, see Dennison, T. and Ogilvie, S., ‘Does the European Marriage Pattern Explain Economic Growth?’, *The Journal of Economic History* 74 (2014) 672-676.

²⁰ Erickson, A.L., ‘Coverture and Capitalism’, *History Workshop Journal* 59 (2005), 3.

²¹ Van der Wee, H., *The growth of the Antwerp market and the European economy (fourteenth – sixteenth centuries)* (Den Haag 1963), 97-98. The first phase of Antwerp’s growth is roughly dated between 1490 and 1520. The economic apex of the city arrived in its second phase, dated between 1535 and 1565.

²² Van Uytven, R., *Stadsfinanciën en stadseconomie te Leuven van de XIIde tot het einde der XVIde eeuw* (Brussel 1961).

²³ City archive of Antwerp, Registers of the Aldermen, nr. 97-102; City archive of Leuven, Registers of the Aldermen, nr. 7384.

property), but since the registration provided parties with legal security, the parties often decided to register their agreement.

In spite of their broad scope, the registers of the aldermen do not contain all economic acts in the cities. The most important kind of credit transactions that is excluded from the view of this study, are the credit transactions that were not formally registered.²⁴ Although it is nearly impossible to get a view on these for the middle ages, it is likely to many contracts were concluded orally before witnesses or simply registered in a private contract. Especially IOU's and sales of goods of limited value were not systematically formally registered. Nevertheless, registration offered a clear advantage, as it provided the creditor with more legal security. This is an important limitation, as previous research on early modern England and France has shown that precisely at the informal level, women played an important role in credit networks by securing small loans and extending credit to family members.²⁵ Unfortunately, records of this informal exchange have scarcely survived for the middle ages. Therefore this research, like other studies of medieval credit, will necessarily focus on the formal levels of the market. Moreover, historians generally assume that the poorest social strata are underrepresented in medieval registers of the aldermen: these groups were generally more active in the informal market and were unable to pay the registration fee. However, recent research has given a more positive view of poorer groups' presence in these sources, stating that the perceived underrepresentation of poorer people might be due to a tendency not to record occupational information of the poor in the registers.²⁶ These limitations aside, the registers of the aldermen provide still abundant and varied information on the social relations governing credit relations in these Brabantine cities and their surrounding areas.

The research presented here is based on a relational database with all economic transactions in the registers of the aldermen. For Antwerp, the aldermen's registers during the years 1490-1492 have been analysed, which has yielded a total amount of 4911 contracts containing economic transactions. In Leuven, the empirical base is not as extensive: it is based on the largest register of the year 1490, containing 750 contracts (which represent 56% of the contracts of that year). It is however important to underline that the data of Leuven are based on a random sample, and therefore unbiased.²⁷ Furthermore, the aldermen not only registered contracts for citizens and goods within the city walls, but also for people and properties on the surrounding countryside, villages and even sometimes of the smaller towns in the region (which will be referred to as rural in this paper, although smaller towns were

²⁴ For the middle ages, other authorities (clerical courts or noblemen) or notaries did not play a major role in drawing up transactions, as they did not provide parties with the same legal security as the aldermen. It was only in the sixteenth century that many people in the Low Countries also turned to notaries to register contracts. Before that, they mainly registered documents stemming from canonical jurisdictions (testaments, marriage contracts, etc.) (Zuijderduijn, J., *Medieval Capital Markets: Markets for Renten, State Formation and Private Investment in Holland (1300-1550)* (Leiden and Boston 2009), 188; Gelderblom, O., *Cities of commerce: the institutional foundations of international trade in the Low Countries, 1250-1600*, Princeton, 2013, 87-94)

²⁵ Lemire, B., *The business of everyday life: gender, practice and social politics in England, c. 1600 – 1900* (Manchester 2005).

²⁶ De Moor, T. and Van Zanden, J. L., 'Preferences of the poor: market participation and asset management of poor households in sixteenth-century Holland', *European review of economic history* 17 (2013), 233-249.

²⁷ In short, the bench of the aldermen of Leuven worked with three registration rooms, which each produced a separate register of contracts for each year. The third room was probably only open on busy days. There seems to have been no chronological or thematical differences with regard to the contracts that were registered by each room.

also involved).²⁸ Due to the limited scope of this paper, the analysis presents an overview of both the urban contracts and contracts stemming from properties in the hinterland of the cities. The rural and urban credit markets were of course strongly interrelated, as city dwellers often invested in the rural market and vice versa, or citizens entered into transactions with villagers. However, the analysis will distinguish between the rural and urban market for Leuven and Antwerp when necessary.

Lastly, the juridical position of women in Antwerp and Leuven was quite similar. In both cities, just like in most other cities in the Low Countries, daughters and sons had equal inheritance rights. As far as properties outside the cities are concerned, the ability of daughters to inherit is less univocal: in the smaller towns, egalitarian inheritance was the rule. On the rural side, it depended of the nature of the good involved: allodial property and property kept in tenure was divided equally among daughters and sons,²⁹ but feudal property followed the law of primogeniture. In the provisions for widows and widowers, equality was also the rule, as both had the same rights to the marital estate.³⁰ During marriage, a limited community property regime prevailed. Each of the spouses remained the full owner of their personal property, consisting of immovable goods obtained through gifts, testaments or inheritance. All other property – movable goods and real estate acquired during the marriage – was held in community. However, during her marriage, a woman was considered legally incapable and could only perform legal acts under guardianship of her husband. He, on the other hand, could manage the marital estate freely, except for his wife's personal property, which he could not govern or alienate without her permission. Earlier studies of women in the medieval Low Countries have shown that these laws were not always followed, and that married women were in some circumstances able to manage their own goods.³¹ The only important difference concerns the guardianship of unmarried women, which existed formally in Antwerp but not in Leuven. However, previous research has shown that there was not much difference in actual practice during the early modern period.³² My current research on Antwerp confirms that this was also true for the fifteenth century: unmarried women and widows are often either listed without a guardian in legal documents or the mentioning of a guardian seems to be merely pro forma, with a simple *cum tutor* (with guardian) after the first

²⁸ This is due to a process described in detail by Philippe Godding, in which the increased power of the major cities in a region resulted in a growing prestige and influence of their courts on surrounding smaller jurisdictions (Godding, P., 'Les conflits a propos des lettres échevinales des villes Brabanconnes', *Tijdschrift voor rechtsgeschiedenis* 22 (1941), 308-353).

²⁹ With the exception of goods in the countryside of Brussels. These are however only rarely included in the aldermen's registers of Leuven, as Brussels had a very influential aldermen's bench of its own.

³⁰ The provisions for the longest living spouse however differed in both cities: in Antwerp, the matrimonial community was divided equally in two between the surviving spouse and the heirs. In Leuven, due to the *droit de devolution*, the surviving spouse was granted usufruct to the totality of the marital estate, whereas the heirs received the 'nude ownership'. This would have given widow(er)s in Leuven a slightly stronger position than their counterparts in Antwerp, at the expense of the heirs (see Cappelle, K., '“in de macht, plicht en momboorije van heuren man”. De rechtspositie van de getrouwde vrouw in Antwerpen en Leuven (16de eeuw)', *Pro Memorie* (submitted)). However, the most important thing is that in both towns, widows and widowers were granted the same rights.

³¹ Kittell, E., 'Guardianship over Women in Medieval Flanders: A Reappraisal', *Journal of Social History*, 31, 1998; Hutton, *Women*.

³² Van Aert, L., 'Tussen norm en praktijk. Een terreinverkenning over het juridische statuut van vrouwen in het zestiende-eeuwse Antwerpen', *Tijdschrift voor sociale en economische geschiedenis* 2 (2005), 22-42.

mention of their name, after which there was no further mentioning of the guardian in the contract.³³

The capital markets in Leuven and Antwerp

Before the gendered aspects of credit markets in Leuven and Antwerp around 1490 can be discussed, an overview of the functioning of the capital markets in these two cities is required. Situated in one of the core principalities of the Low Countries, a region of intense commercialisation in late medieval Europe, Antwerp and Leuven were part of a capital intensive society with well-functioning markets.³⁴ Although there was also a public capital market, this study focusses on the private markets for capital.³⁵ In general, three types of financial instruments could be used to obtain credit on private capital markets. The first one, the simple IOU (“I owe you” or an obligation), was a loan of cash unsecured by property. In these contracts, a person simply promised another person to pay back a certain sum of money by a certain date. Although there was often an interest charged on the loan, it was not noted down but hidden in the value of the contracted sum. As these loans were not secured by real estate, they could involve a higher risk than annuities, which could of course be lowered by lending to people one personally trusted.³⁶ These kinds of payments were both used as simple loans for short-term debts, or as a way to delay payments. The other types of credit, annuities or rents, were financial instruments for long-term debt. Such an annuity consisted of a yearly and redeemable payment (the annuity). In exchange for the annuity, the creditor (annuity holder or annuity buyer) gave the debtor (the annuity seller) a certain sum of money. These annuities were redeemable but only on request of the debtor, and could be resold by the creditor.

The first type, the life annuity (*lijfrente* or *rente viagère*, abbreviated to LR in the tables), was paid to the creditor for his or her lifetime (they could also be sold to groups). Generally, no specific good served as a mortgage: the entire estate of the debtor provided the security of the annuity. Hereditary annuities (*erfrente* or *rente constituée*, abbreviated to HR in the tables) were paid perpetually, and as such could be inherited, or until the annuity was redeemed.). They needed to be mortgaged on real property (any immovable good could be used as a mortgage: parcels, houses, but also other types of regular income such as annuities or excises). The interest rate of both types of annuities was usually written down in the contract. For life annuities, this was usually between 10% and 11,1% (1 penning for 10 penning or 9 penning), and for hereditary annuities between 5,55% and 6,25% (1 penning for 18 penning or 16 penning). Life annuities and hereditary annuities offered both debtors and creditors clear advantages compared to IOU’s. For the debtor, this financial instrument

³³ Gilissen, J., ‘Le statut de la femme dans l’ancien droit belge’, J. Gilissen ed., *La femme* (Brussels 1962), 255-321; Godding, P., *Le droit privé dans les Pays-Bas méridionaux du 12e au 18e siècle* (Brussels 1987).

³⁴ Zijderduijn, J., *Medieval Capital Markets*.

³⁵ This public capital market had a more unstable character, as it was used by governments such as the city to obtain funds by selling annuities. For a discussion of its interaction with the private capital market, see for example Dambruyne, J., *Mensen en centen. Het 16de-eeuwse Gent in demografisch en economisch perspectief* (Gent 2001), 21-22. The position of women on public capital markets has received considerable attention for the early modern period, especially in the Low Countries. For an overview, see Hanus, J., *Tussen stad en eigen gewin. Stadsfinanciën, renteniers en kredietmarkten in 's-Hertogenbosch (begin zestiende eeuw)* (Amsterdam 2007), 70.

³⁶ Willems, B., *Leven op de pof. Krediet bij de Antwerpse middenstand in de achttiende eeuw* (Amsterdam 2009), 117.

allowed to obtain capital against a relatively low interest rate without disposing of his property, and he could redeem the annuity whenever necessary. For the creditor, a life annuity or hereditary annuity formed an interesting investment opportunity which guaranteed a regular and yearly income. If the annuity holder would be in need of funds himself, he could resell the annuity to a third party.³⁷

Historians have found that the capital market, and especially the market for hereditary and life annuities, mirrors the economic conjuncture of a city. In periods of a booming economy, a higher intensity of economic activities increases the demand for capital. On the supply side, people have more capital to their disposal and real estate prices rise, and annuities offer an interesting investment opportunity. As such, a period of economic bloom results in an increase in annuity transactions. In periods of economic recession on the other hand, real estate transactions decrease and the creation of new annuities slows down, whereas the reselling of existing annuities becomes more popular.³⁸

Although both cities were part of the same region, the capital markets in Leuven and Antwerp were organized in a strikingly different way, as table 1 (next page) shows. The table below gives a general overview and a per capita overview of all transactions involving these three types of credit – IOU's, hereditary annuities (HA) and life annuity annuities (LA), including the transfer and redemption of annuities. The sums invested are given in lb. *Brabantse groten*. It is important to underline that rather than looking at the absolute numbers, one should focus on the relative importance of each type of credit (as the sample of Antwerp is larger than the sample of Leuven).

First, it is remarkable that in Leuven, more contracts per capita were contracted, but the per capita contracted value was lower. The higher number of contracts can be explained by two factors. On the one hand, the per capita number in Leuven is probably overestimated, as the bench of the aldermen of Leuven seems to have had a wider regional scope than its counterpart in Antwerp. On the other hand, it is likely that in Antwerp a higher amount of IOU's was contracted in an informal way than in Leuven, signalling a higher degree of trust on the Antwerp market. In Leuven, a city facing a prolonged economic crisis, the absence of trust might have encouraged more people to register their short-term loans.³⁹

³⁷ Dambruyne, *Mensen en centen*, 113-145.

³⁸ For the Low Countries, see in particular: H. Soly, 'De schepenregisters als bron voor de conjunctuurgeschiedenis van Zuid – en Noord-Nederlandse steden in het Ancien Régime. Een concreet voorbeeld: de Antwerpse immobiliënmarkt in de 16^{de} eeuw.', *Tijdschrift voor Geschiedenis*, 87 (1974), 521-544; Zuijderdijn, J., 'Conjunctuur in laatmiddeleeuws Haarlem. Schepenregisters als bron voor de economische ontwikkeling van een Hollandse stad', *Holland* 40 (2008), 3-17.

³⁹ The aldermen's registers of Leuven indeed make clear that many people were unable to pay their debts, as they contain many confiscations of property.

TABLE 1. Leuven (1490) and Antwerp (1490-1492): general overview of recorded credit transactions, with annual number per capita per 100 inhabitants, and annual value per capita.⁴⁰ Values in lb. Brabantse groten.⁴¹

Transaction type	RECORDED TRANSACTIONS						ANNUAL NUMBER OF TRANSACTIONS AND VALUE PER CAPITA			
	Leuven (56% of 1490)			Antwerp (1490-92)			Leuven		Antwerp	
	N	% of N	Average £	N	% of N	Average £	N per 100	Value	N per 100	Value
IOU	342	58,4%	5,9	516	15,2%	38,4	4,07	0,21	0,52	0,15
HR	139	23,7%	9,9	2099	61,7%	23,0	1,65	0,13	2,12	0,33
LR	58	10,1%	13,4	195	5,7%	8,8	0,70	0,12	0,20	0,01
HR, transfer	32	5,5%	19,0	145	4,3%	30,0	0,38	0,03	0,15	0,03
HR, redem.	12	2,0%	11,2	438	12,9%	25,0	0,14	0,01	0,44	0,08
LR, redem.	2	0,3%	6,2	9	0,3%	15,7	0,02	0,00	0,01	0,00
Total	585	100%	8,1	3402	100%	25,3	6,98	0,51	3,4	0,60

Second, the Antwerp market has a much stronger focus on hereditary annuities than the market in Leuven, and the average contracted values are considerably higher. The readiest explanation of this is the expanding economy of the city: the booming market of Antwerp led to much larger sums of capital to invest, and a growing elite which strongly participated in the capital markets.⁴² Real estate prices in Antwerp were also higher than in Leuven, which allowed more property owners to capitalize their property by selling annuities on it. In Leuven, it is likely that fewer people than in Antwerp possessed real property which allowed them to make use of mortgaged credit. People in Leuven seem also much less able to redeem the annuities on their property.

The differences between these capital markets are remarkable, but explaining these in full requires a study of its own and lies beyond the scope of this paper. It should however be noted that the economic boom in Antwerp was probably an important cause of these differences: in a period of economic growth, the selling of hereditary annuities increases, and in periods of economic crisis, the selling of hereditary annuities slows down. As such, the importance of hereditary annuities in Antwerp is associated with the expanding economy in the city.

Gender inequality on credit markets in Brabant

Not only did Leuven and Antwerp had very different economic climates around the year 1490, the organization of their credit markets also differed strongly. This raises the question

⁴⁰ Number of inhabitants per city based on the Brabantine household censuses: ca. 15 000 in Leuven in 1492 (Van Uytven, *Stadsfinanciën*, 478), ca. 32 930 in Antwerp in 1496 (Cuvelier, J. (ed.), *Les dénombrements de foyers en Brabant XIVe-XVIe siècle*, Brussel, 1912-1913, 463).

⁴¹ To put these amount into perspective: 1 lb. Brabantse groten corresponds with a what a master mason in Leuven would earn in 20 workdays (or 12 d. per day) in 1490 (Van Uytven, *Stadsfinanciën*, 578). An unskilled laborer in Leuven and Antwerp earned ca. 6-8 d. per day in 1490 (Van Uytven, *Stadsfinanciën*, 578; Scholliers, E., 'Prijzen en lonen te Antwerpen en in het Antwerpse (16e-19e eeuw)', Verlinden, C. (ed.), *Dokumenten voor de geschiedenis van prijzen en lonen in Vlaanderen en Brabant, deel II (XVIe-XIX eeuw)* (Brugge 1965), 379).

⁴² As observed in Soly, H., *Urbanisme en kapitalisme te Antwerpen in de 16de eeuw: de stedenbouwkundige en industriële ondernemingen van Gilbert van Schoonbeke* (Brussel 1977).

how these differences affected women's and men's participation in capital markets in both cities, and how women's credit activities compared to their counterpart in other European regions. The only existing overview of medieval women and credit in Europe, by William Jordan, pointed towards certain patterns for female activity on credit markets: women borrowed and loaned smaller sums than men, and they were predominantly active in the domestic part of the market, focusing on small scale investments and consumer loans. Women generally tended towards more conservative and low-risk investments, such as real estate or life annuities sold by cities. Female creditors also tended to engage in transactions with other women in 'networks of female sociability'.⁴³

Remarkably, the two existing studies on women and credit in the Low Countries, have contradicted some of Jordan's conclusions. Shennan Hutton's exploration of IOU transactions in mid-fourteenth-century Ghent concluded that 25% of all contracts included a woman, and their credit activity resembled the activity of men to a large extent. Although women were excluded from the highest segment of the market, women from all marital statuses were very active in the middling echelons. During the fifteenth century, women seem to have lost access to these economic opportunities: the proportion of female participants declined, and was increasingly limited to widows.⁴⁴ In contrast with the evolution outlined by Hutton, Tine De Moor, Jan Luiten van Zanden and Jaco Zuiderduijn concluded that women's position on capital markets in Edam and Zeevang (in Holland) during the period 1460-1565 was strongly comparable to the position of men, both in terms of the amounts they invested and in terms of their strategies. The source material is however difficult to compare: inevitably,⁴⁵ the study is mainly based on a taxation source which lists the assets and debts of households. As such, it only includes household heads and does not allow to reconstruct how men and women obtained these assets and debts (through market activity, or rather through informal or passive acquisition⁴⁶). The earliest preserved aldermen's register for the region, dating from 1564, however makes clear that at this time women were very active on the capital market (they were represented in a third of the transactions).⁴⁷

The register of the aldermen of Leuven and Antwerp allow for an in-depth analysis of private capital markets. In the following, the credit market participation of men, women and other parties is compared in Leuven and Antwerp. The objective of the analysis is to determine to what extent and how the credit participation of men and women differed, and how this was influenced by the marital and social status of women, and the economic climates in Leuven and Antwerp. The first section draws up a profile of female and male participants in capital markets in terms of their marital and social status, and their transactions partners. The second section discusses gender differences in market participation, by looking at markets share, type of credit, and the invested amounts.

⁴³ Jordan, *Women and credit*, 17-78.

⁴⁴ Hutton, *Women*, 81-101

⁴⁵ Registers of the aldermen in Holland have only been preserved starting from the late sixteenth century.

⁴⁶ A recent study of English women showed that family ties and informal relations were one of the primary ways for women to enter into credit relations: McIntosh, M., 'Women, Credit, and Family Relationships in England, 1300-1620', *Journal of family history* 30 (2005), 143-163.

⁴⁷ Van Zanden, Zuiderduijn and De Moor, 'Small is beautiful', 16-17.

The profile of female borrowers and creditors

Studies of pre-industrial credit have sketched a general profile of female participants on capital markets.⁴⁸ Despite regional differences, the wealthy widow looms large over these studies, especially in assessments of female creditors. It was often only at this point in their lives that women had autonomous access to capital and could act without guardianship, it is argued.⁴⁹ Recent studies of medieval women and the economy however have called this long-standing focus on widows into questions.⁵⁰ The legal context of Leuven and Antwerp, where the inheritance rights of daughters were legally secured, and where unmarried women could act without a guardian,⁵¹ provided women with opportunities to enter the capital market at various stages of their lives. The empirical data shows that women of various marital status made use of this opportunity: widows were far from the only important female participants on capital markets. Table 2 presents an overview of the marital status of female parties, with a breakdown per type of credit.

TABLE 2. Leuven (1490) and Antwerp (1490-1492): percentage of female debtors and creditors per credit type according to marital status (U: unknown; M: married; W: widowed).

	LEUVEN (N=100)									ANTWERP (N=587)								
	Debtors			Creditors			Total			Debtors			Creditors			Total		
	U	M	W	U	M	W	U	M	W	U	M	W	U	M	W	U	M	W
IOU's	26%	34%	40%	47%	28%	26%	37%	31%	32%	30%	9%	61%	62%	14%	24%	48%	12%	40%
Rents	75%	0%	25%	33%	0%	67%	38%	0%	63%	14%	62%	24%	61%	12%	27%	38%	37%	26%
Total	31%	31%	38%	43%	20%	38%	38%	24%	38%	15%	58%	27%	61%	12%	27%	39%	35%	27%

It should be noted that in the contracts of both Leuven and Antwerp, large groups of women are merely described by their name. This could of course signify that these women were never married, but it might also be due to negligence of the clerks. Therefore, it might be plausible that the women mentioned without a (former) husband were indeed unmarried, but certainty is impossible. However, it was not common for women to be mentioned without a marital status in one contract but as widowed or married in another contract.⁵² Especially when real property was involved in the transactions, it seems that clerks were quite diligent in noting down family associations.

The results show that only on the rent market in Leuven, widows formed the majority of the female parties (63%). It is clear that women of unknown status were equally active as

⁴⁸ Jordan, *Women and credit*, 20-25 and 57-77.

⁴⁹ For the Low Countries, see for especially Danneel, M., *Weduwen en wezen in het laat-middeleeuwse Gent* (Apeldoorn and Leiden 1995); Boone, M., Dumon M. and Reusens B., *Immobilienmarkt, fiscaliteit en sociale ongelijkheid te Gent 1483-1503* (Kortrijk 1981).

⁵⁰ Bennett, J. M. and Froide, A. eds., *Singlewomen in the European past, 1250-1800* (Philadelphia 1999); Hutton, S., *Women*; Beattie, C. and Stevens, M. (eds.), *Married women and the law in premodern Northwest Europe*, (Woodbridge 2013); Dermineur, E., 'Single Women'.

⁵¹ As mentioned before: in Leuven formally, in Antwerp in practice.

⁵² Among the 465 who were involved in an economic transaction in Leuven (whether in group or not), I discovered merely one instance where a woman appeared with different marital statuses in several contracts without an apparent reason (i.e. remarriage): Agnes Pieraerts appeared together with her husband Sebastiaan Gheersbergen in three contracts, but in another contract she borrowed money with her sister Barbara Pieraerts without reference to her married status (SAL, nr. 7384, fol. 557 v^o). In Antwerp I rigorously checked the first 500 female parties (from an alphabetically ordered list), and found two instances where a woman of unknown status was probably married (Katlijne de Cuyper: SAA, nr. 100, fol. 116v^o) or widowed (Zoete de Bruyne: SAA, nr. 99, fol 125v^o).

well, and that they represented an important share of the female parties on credit markets, especially among creditors in Antwerp (over 60%).⁵³ This resonates with the findings of studies European marriage pattern, that point to a high number of single women in urban societies in the Low Countries.⁵⁴ Clearly, these women found their way to the capital markets, especially in Antwerp. Married women, although acting under guardianship in most of the acts, also participated in the market. In Antwerp, they are mainly involved as debtors on the rent market, whereas in Leuven they are completely absent from the rent market. On the IOU's market in Leuven they are however regular participants, and even closed transactions without their guardians at some instances. These differences are difficult to explain, but they underline that women on credit markets do not adhere to the stereotype of the widow as sketched by many studies of the urban economy. Women of unknown status, of which there is a good chance they were single, played an important role as well, especially as creditors. The results also confirm the hypothesis of research on rural England, which suggested that the involvement of married women in credit relationships has been seriously underestimated due to the particular legal status of married English women (a consequence of the English laws of coverture).⁵⁵

Another typical characteristic associated with women on capital markets is their elite status, especially for female creditors.⁵⁶ Unfortunately, the registers of the aldermen give few indications of the social status of the parties involved, especially those of Leuven, and tax lists are non-existent for the period under review. Nevertheless, by combining the mentions of titles and professions, the occurrence of patrician surnames, and information on the social status of a close relatives, it is possible to give an indication of the social group from which female and male participants on capital markets originated. As table 3 shows, female participants on capital markets did not predominately stem from elite groups, nor did their male counterparts. Nevertheless, women on capital markets more often than belonged to elite or noble families, a tendency which was especially pronounced in Antwerp.

TABLE 3. The social status of female and male participants on credit markets in Leuven and Antwerp.

	Leuven				Antwerp			
	Debtors		Creditors		Debtors		Creditors	
	Men <i>n</i> =296	Women <i>n</i> =39	Men <i>n</i> =364	Women <i>n</i> =61	Men <i>n</i> =1829	Women <i>n</i> =295	Men <i>n</i> =1823	Women <i>n</i> =292
Unknown	76%	78%	72%	84%	49%	47%	39%	60%
Craftsmen & laborers	18%	4%	15%	2%	39%	30%	41%	19%
Traders	0%	9%	1%	0%	4%	1%	9%	0%
Public officials	2%	0%	6%	0%	2%	2%	3%	0%
Clergy	1%	2%	3%	2%	1%	1%	2%	6%
Nobility & elite	2%	7%	3%	11%	4%	19%	6%	14%

⁵³ Women of unknown status also represent 75% of all female borrowers on the rent market in Leuven, but this number is only based on 4 transactions.

⁵⁴ De Moor and Van Zanden, 'Girl power', 12.

⁵⁵ Muldrew, C., 'A mutual assent of her mind?'; Briggs, C., 'Empowered or marginalized?.'

⁵⁶ Jordan, *Women and credit*, 77-78.

In terms of transactions partners, gender differences were relatively limited as well. This again contradicts with the general European pattern, as outlined by William C. Jordan, that female creditors were predominantly active in ‘networks of female solidarity’, mostly loaning out money to other women.⁵⁷ Looking at the trade partners of female and male creditors in Antwerp and Leuven (table 4), there are no traces of these ‘female networks’ to be found in Antwerp: men even counted slightly more women among their debtors than women did (17% compared to 14%). In Leuven, there was however a tendency among female creditors to loan money to other women: 25% of women loaned money to other women, a figure that only amounted to 6% for men. Nevertheless, 50% of women loaned to men, and so did 60% of the male creditors.

TABLE 4. Comparison of the transaction partners of female and male creditors in Leuven and Antwerp.

	Leuven		Antwerp	
	Women	Men	Women	Men
Men	48%	60%	66%	66%
Women	23%	6%	14%	17%
Couples	5%	9%	9%	6%
Groups	23%	22%	7%	8%
Institutions	2%	1%	5%	2%

⁵⁷ Jordan, W.C., *Women and credit*, 77-78.

Gender differences in market participation

The women active on the credit markets in Antwerp and Leuven at the end of the fifteenth century were a diverse bunch, both in terms of their marital and social status. However, they still represented a relatively small part of the market, both in economically challenged Leuven and in booming Antwerp. Table 5 gives a breakdown of the market share of each type of party (men, independent women (whether under guardianship or not), married couples, groups, and institutions) according to the type of credit.

TABLE 5. Leuven 1490 and Antwerp 1490-92: market share of men (M), women (W), married couples (MC), groups (G) and institutions (I).

	DEBTORS					CREDITORS				
	M	W	MC	G	I	M	W	MC	G	I
Leuven <i>n=553</i>										
HR	39,9%	2,2%	22,5%	32,6%	2,9%	72,5%	8,7%	5,1%	8,7%	5,1%
LR	29,3%	1,7%	12,1%	56,9%	0,0%	12,1%	8,6%	24,1%	55,2%	0,0%
IOU	65,5%	10,2%	3,8%	19,3%	1,2%	75,7%	12,6%	0,9%	6,5%	4,4%
Total	55,0%	7,2%	9,5%	26,8%	1,5%	68,0%	11,2%	4,5%	12,3%	4,1%
Antwerp <i>n=3257</i>										
HR	63,7%	13,0%	8,8%	11,4%	3,1%	69,3%	13,2%	5,8%	7,9%	3,8%
LR	67,2%	5,1%	14,4%	8,2%	5,1%	14,4%	13,9%	18,0%	53,6%	0,0%
IOU	74,9%	4,5%	2,8%	15,9%	2,0%	70,6%	6,0%	3,0%	13,5%	6,9%
Total	66,0%	10,9%	8,1%	12,0%	3,0%	65,6%	11,9%	6,1%	12,2%	4,1%

The market share of women differed only slightly between Antwerp and Leuven: among debtors, women represented 7,2% in Leuven, and 10,9% in Antwerp. There are however important differences according to the type of credit: in Leuven, very few women were able to obtain loans on mortgage - which might indicate that women had difficult access to or control over real estate, the fundamental precondition to creditworthiness on the annuity market.⁵⁸ To a lesser extent, men acting on their own in Leuven also are not selling annuities with the same frequency as their counterparts in Antwerp. We will return upon this question when looking at investment patterns. Moreover, the large share of groups as debtors in Leuven (26,8%) does not mask a high female participation: only one out of five groups included a women among the debtors. The importance of groups in Leuven, especially among those selling life rents, might again indicate the low level of trust on the market in Leuven. These groups consisted often of one or more actual debtors, and other people who were included as sureties in the contract, whose assets stood surety for the payment of the annuity.⁵⁹ In Antwerp on the other hand, men acting on their own represent the majority of the debtors for all kinds of transactions. Female debtors in Antwerp represent a slightly larger share of the market than in

⁵⁸ Zuijderdijn, J., *Medieval capital markets*, 227-248.

⁵⁹ Most of the time, the contracts do not allow to distinguish between the actual debtors and their sureties (Verbeek, C., *De Leuvense schepenregisters: bronnen voor de sociale structuren en voor de privé-financiële geschiedenis. Het voorbeeld van leden der familie Pynnock (1400-1450)* (Unpublished master thesis, KU Leuven 1971), 85-105).

Leuven, with 10,9% percent as opposed to 7,2%. In contrast to Leuven, Antwerp women are especially present as debtors on the market for hereditary annuities, where the possession of real estate was required (13% as opposed to ca. 5% for life annuities and IOU's). This was however an economic opportunity that women of unknown marital status apparently found harder to access: they only represent 14% of the female debtors on the annuity market, and in turn, were more present on the market for IOU's. In short, female debtors in Leuven were clearly in a less advantaged position than their counterparts in Antwerp when trying to obtain credit. In Antwerp, especially married and widowed women are able to gain access to the less expensive hereditary annuities.

Among the creditors, women took up a similar market share in both cities: 11,2% in Leuven and 11,9% in Antwerp. Figures differ according to the credit type, with women being more prominent in Leuven among IOU creditors, and among buyers of annuities in Antwerp. Whereas marital women and widows were prominent among debtors in Antwerp, the data shows that it were especially unmarried women which were investing their capital as creditors, joined by widows in Leuven. Female investment in capital markets was however much smaller than that of men, who represented by far the largest part of the market, with over 70% in both cities for hereditary annuities and IOU's. The exception here are life annuities, which are frequently bought by married couples and groups (often family members or parents with their children). This is a common pattern on capital markets: life annuities were often used as an investment by couples or families to secure a stable income for the longest living spouse or children.⁶⁰

The general picture of women's share on capital markets in Antwerp and Leuven around 1490 seems roughly comparable, and there seems to be no remarkable smaller share of women in Leuven, a city in economic crisis, than in Antwerp. However, if the markets involving rural and urban property are taken apart (i.e. only including transactions which are mortgaged) important differences do appear. In Antwerp, the share of women on rural and urban markets remains comparable, around 10,5% for debtors and 12% for creditors. In Leuven however, it seems to have been especially on the market involving rural property that women were affected by the economic crisis. On the urban market in Leuven, women's share remains comparable to their share in Antwerp: they represent 9% of debtors, and 12% of the creditors. On the rural market however, women formed only less than 1% of the debtors, and as creditors they took up only 7,5% of the market. Clearly, women in the region of Leuven were unable to use rural property as collateral, and also had few opportunity to invest in credit which used rural property.

Taken together, women represented 7-11% of the parties on the capital market in Leuven, and 11-12% in Antwerp. Moreover, it is striking how the different economic climate and organization of the credit markets in Antwerp and Leuven did not result in significantly different market shares for women. Assessing these percentages is of course not straightforward, but for a society where customary law awarded women and men equal access to movable and immovable property, this seems a rather limited share. Comparisons with other studies of European cities would allow to place these figures into perspective, but these are difficult because very few studies have assessed the capital market as a whole. Based on Hutton's study of fourteenth-century Gent, where women took up a market share of 25%, the results indicate that women's access to capital markets in the fifteenth-century had decreased

⁶⁰ Zuijderduijn, J., 'The ages of women and men. Life cycle, family and investment in the fifteenth-century Low Countries' (draft paper).

significantly compared to the century before. The more positive assessments of women's access to capital by De Moor, Van Zanden and Zuijderduijn during the period 1462-1563, therefore might be explained in two ways. Either, these two small towns in the north of Holland offered women more possibilities than the Brabantine cities - the legal situation of women was however identical. Or the prominent activity of women on capital markets, as they observed in aldermen's register of 1563, was rather a phenomenon of the later sixteenth century, whereas in the fifteenth century passive or informal acquisition might have played a bigger role in women's capital assets. Clearly, more comparative research across cities and time periods is needed to assess and explain these differences.

In general, the results indicate a decline in women's economic opportunities on markets in the Low Countries during the Late Middle Ages. Further examination of the earlier decennia of the fifteenth century are needed to explore this evolution more profoundly. The data from Leuven and Antwerp however presents one important difference to this master narrative: the group of women that continued to be active in the economy, was not limited to widows. Moreover, women's share on capital markets in the Low Countries was probably slightly higher than their counterparts in contemporary Southern Europe. The material for comparison is however very limited, and mostly concerns studies of notarial archives in Southern France before 1348.⁶¹ In Montpellier between 1293-1348, Christian women represented 7,8% of borrowers and 11,3% as creditors.⁶² In Manosque between 1290-1325, women represented 13% of all creditors, but the majority were Jewish women. Christian women only took up a share of 2,5%.⁶³ We can expect these numbers to have been lower in the fifteenth century, as women's access to capital declined in this region due to legal changes. Therefore, it seems likely that although women's share on capital markets in the Low Countries was limited, they still had a slightly better access to capital market than their counterparts in Southern France. A further exploration of the capital markets in Leuven and Antwerp will allow a more profound understanding of gender differences.

To what extent did women and men have different loaning and investments patterns? As said, research of pre-industrial Europe often characterizes women's capital market participation as more conservative compared to men.⁶⁴ Women would have tended towards different financial instruments than men, focusing on the most risk-averse types of credit such as hereditary annuities or life annuities sold by public bodies.⁶⁵ The studies of Hutton (on IOU's) and De Moor, Van Zanden and Zuijderduijn have already called this assumption into question. The data of Leuven and Antwerp allows to confirm their results for the entire private capital market. Table 6 (next page) shows the division of the market activity of each type of party across the types of credit.

⁶¹ These notarial archives have also been preserved for some fifteenth-century cities in Southern. The only study which used these to investigate women and credit, is limited to female activities and does not provide an assessment of the importance of female credit activities on the credit market (Béghin-LeGourriérec, C., *Le rôle économique des femmes dans les villes de la sénéchaussée de Beaucaire à la fin du Moyen Age (XIVe -XVe siècles)* (Unpublished doctoral thesis, École des Hautes Études en Sciences Sociales, 2000).

⁶² Reyerson, K, *Business, banking and finance in medieval Montpellier* (Toronto 1985), 67-76.

⁶³ Courtemanche, A., *La richesse des femmes: patrimoines et gestion à Manosque au XIVe siècle* (Montréal 1993), 134-135.

⁶⁴ Jordan, *Women and credit*, 69; McIntosh, *Working women*, 85-116.

⁶⁵ The public credit markets will be involved in later part of my research.

TABLE 6. Leuven 1490 and Antwerp 1490-92: borrowing and investment strategies of men (M), women (M), married couples (MC), groups (G) and institutions (I).

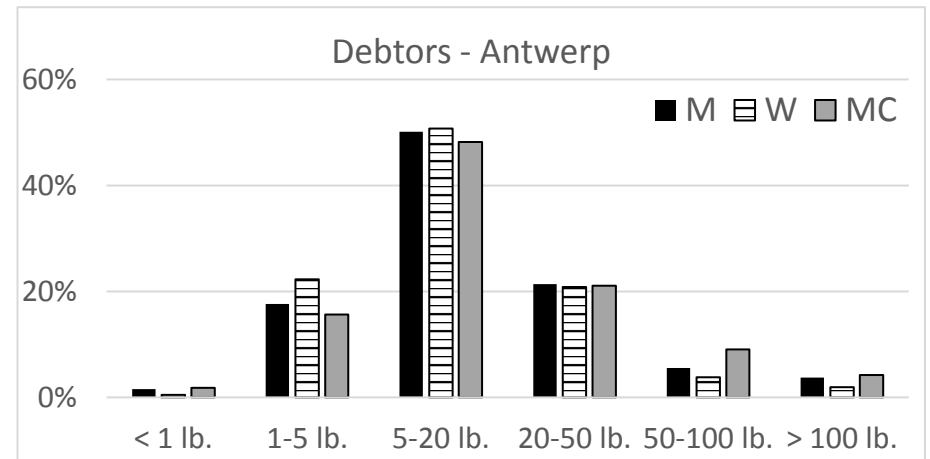
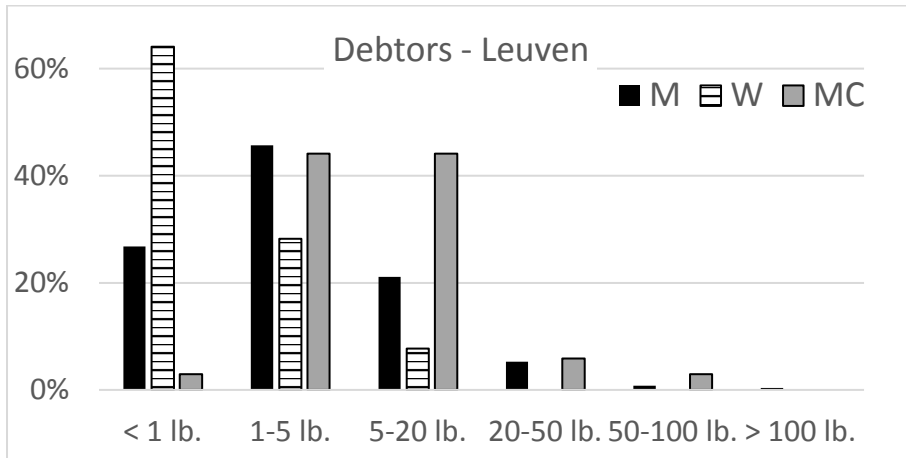
	DEBTORS					CREDITORS				
	M	W	MC	G	I	M	W	MC	G	I
Leuven										
HR	19%	8%	61%	31%	50%	27%	20%	29%	18%	32%
LR	6%	3%	14%	23%	0%	2%	8%	58%	48%	0%
IOU	76%	90%	25%	46%	50%	71%	72%	13%	33%	68%
<i>Total</i>	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Antwerp										
HR	72%	89%	81%	70%	76%	78%	82%	70%	48%	69%
LR	7%	3%	13%	5%	12%	2%	8%	21%	31%	0%
IOU	21%	8%	6%	25%	12%	20%	9%	9%	20%	31%
<i>Total</i>	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Among debtors, women in Leuven were slightly less able than men to make use of mortgaged credit types by encumbering debts on their properties (and a lot less able than married couples). More than any other type of party in Leuven, women depended on unmortgaged loans through IOU'S. Again, this pattern suggest that women in Leuven had less real estate to their disposal than men did. Nevertheless, female and male debtor profiles did not differ strongly: the majority of their loans consisted of IOU's, with 76 % for men and 90 % for women. In Antwerp, the pattern reverses: here men are the ones who made more use of unmortgaged IOU's, and women largely tended to stick to mortgaged hereditary annuities. In general, as in Leuven, gender differences in borrowing existed in Antwerp, but they were not very pronounced: 72% of male debtors were involved in hereditary annuities, a number that rises to 89 % for women. Taken together, men used a more diverse array of transaction types than women, but their transactions nevertheless had the same focus as those of women.

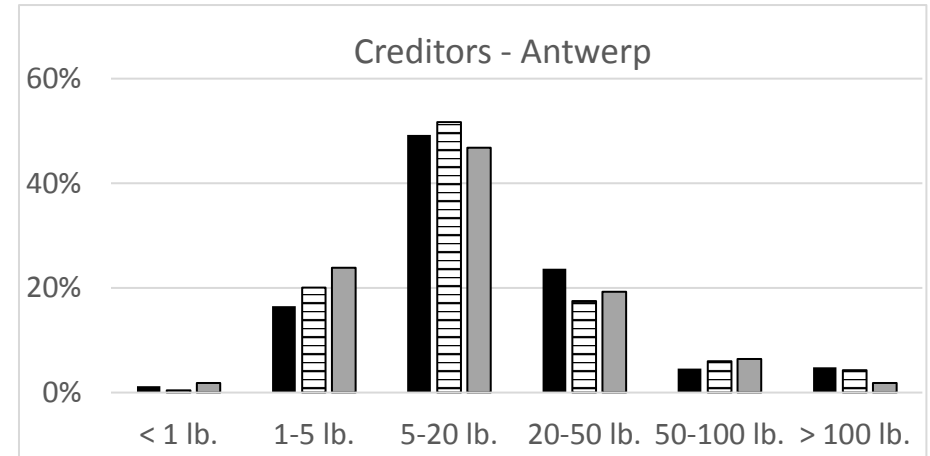
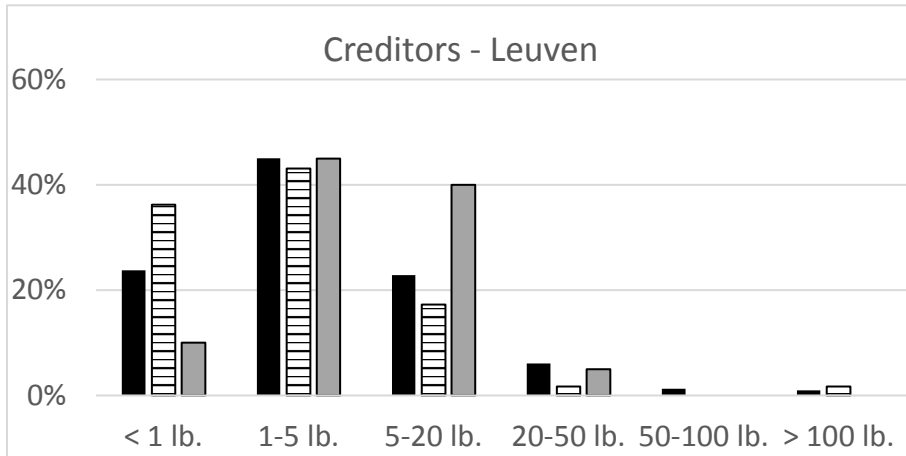
As creditors, both in Antwerp and Leuven women showed a slightly stronger tendency than men to invest in life annuities (8 % as opposed to 2 % for men). In both cities, the parties most heavily involved in life annuities are married couples and groups. Despite the stronger tendency of women to buy life annuities in both cities, the investment patterns of women and men follow the same patterns in both cities: in Leuven, the investment portfolio of women and men was composed for ca. 70% out of IOU's. In Antwerp, both women and men invested heavily in hereditary annuities (respectively 82% and 78%). In sum: in both cities, women bought life annuities more often than men, but the difference remains relatively small. In general, men and women had similar investment patterns, even if these patterns differed strongly between Antwerp and Leuven. As such, these findings offer no support for a more risk-averse strategy of female investors, compared to their male counterparts.

The strongest gender differences on capital markets become apparent when looking at the values of the transactions. Graph 1 and 2 compare the relative distribution of the amounts borrowed and loaned by men, women and married couples. The analysis is further supported by tables 7 (Leuven) and 8 (Antwerp), which provide a complete breakdown of the credit profile for men, women of unknown marital status, married women, widows and married couples (attached at the end of the paper).

GRAPH 1. Leuven (1490) and Antwerp (1490-1492): relative distribution of amounts borrowed by men (M), women (W), and married couples (MC)



GRAPH 2. Leuven (1490) and Antwerp (1490-1492): relative distribution of amounts loaned by men (M), women (W), and married couples (MC)



On the side of the borrows, it is clear that female borrowers in Leuven predominantly operated in the lowest segment of the market, with over 60% of their loans amounting to less than 1 lb. Men were clearly borrowing money in higher segments of the market. The highest sums were however borrowed by married couples. In Antwerp, this pattern did not occur: the relative distribution of the amounts borrowed by men, women and married couples is strikingly comparable. When the marital status of female borrowers is taken into account, the picture becomes even more telling. In Leuven, regardless of the marital status, women borrowed considerably lower sums than men. Women of unknown marital status on average borrowed sums which were 59% lower than those borrowed by men, and for married women and widows this was even less: respectively 71% and 74% lower than the sums contracted by men.⁶⁶ This corresponds with the proportions of loans taken by women in several studies of Southern European regions.⁶⁷ In Antwerp, the differences between men and women are clearly less pronounced: the capital borrowed by widows was only 16% less than that borrowed by men, and married women borrowed 22% less on average than men. Especially women of unknown marital status were unable to borrow large amounts compared to men: their loans were on average 37% lower than those of men.

Looking at the creditor side, the differences between women and men in Leuven are less pronounced. Women were again more investing in the lowest segment of the market, but they also invested in the middling levels like men and married couples did. However, marital status was an important factor in this, and it were mainly widows who were able to invest money on the middle levels. Compared to men, unmarried and married women invested sums that were respectively 79% and 73% lower. Widows invested 23% less capital as creditors. So in Leuven, only widows were remotely able to invest comparable amounts to men on the capital markets, whereas unknown women and married women clearly operated in a much lower segment of the capital market. The figures of female creditors in Leuven again correspond with the general patterns found across other (mainly Southern) European regions.⁶⁸ In Antwerp, the average amounts invested by women surpass the amounts of their European counterparts with quite a large margin. In Antwerp, as it was on the side of the debtors, the distribution of the invested capital by women, men and married couples across the different market levels was very comparable. Here too however, women of unknown marital status were predominantly concentrating on a lower segment of the market: their invested sums were on average 45% lower than those of men. Widows on the other hand, were almost able to keep up with men and invested only 10% smaller sums than men. Remarkable seems to be the role of married women: although very few married women acted as creditors on the capital market in Antwerp, they invested on average even larger amounts than men. Clearly, a small group of elite married women found their way to the higher echelons of the capital market.

Conclusion

This study compared gendered participation on credit markets in two cities with contrasting economic situations around 1490: Leuven, a city facing a sustained economic and demographic crisis at the end of the fifteenth century, and Antwerp, which found itself at the

⁶⁶ In these calculations, an exceptionally large life annuity of 59.400 d. *Brabantse groten* sold by a noble man in Leuven to his mother has been excluded (to compare: the largest life annuity in Antwerp was 7680 d.).

⁶⁷ See notes 60 and 61.

⁶⁸ Jordan, *Women*, 20.

start of its 'golden age'. Next to differing economic climates, these two cities had very differently organized capital markets. Surprisingly however, the market share of women on capital markets was very similar in both cities. Women represented 7-11% of the parties on the capital markets in Leuven, and 11-12% in Antwerp. Placing these figures in a European framework is challenging due to a lack of comparable studies, but it is likely that women on capital markets in Brabant played a slightly more prominent role than their counterparts in Southern France. Furthermore, the common characterization of the female investor as 'conservative' in many studies, is barely to be found on the capital markets in Leuven and Antwerp. Men used a slightly more diverse array of credit types than women, but women did not prefer more low-risk credit types compared to men.

Although the more prosperous situation of Antwerp did not lead to a larger share for women on the capital market, the results indicate that gender differences in credit transactions in Antwerp were nevertheless considerably smaller than in Leuven. In Leuven, women's credit activities adhered more to the traditional picture sketched by the historiography on women and medieval credit: women of all marital statuses borrowed and loaned much smaller amounts than men. On the market with credit mortgaged on rural property in the region of Leuven, women were almost completely absent, in contrast to their counterparts in Antwerp. Possibly, the economic hardship in the region hindered women's access to rural property. Women in Leuven also engaged more often in transactions with other women. In Antwerp on the other hand, there was no trace of 'networks of female solidarity' and the amounts contracted by women did not differ strongly from those contracted by men. Only women of unknown marital status borrowed and invested lower sums.

Nevertheless, if the participation in capital markets indeed enhanced women's opportunities in the economy, it was only a limited number of women that was able to profit from this at the end of the fifteenth century. This group of women was however much more diverse than various studies of the fifteenth-century Low Countries and other regions in Europe have accounted for. Although more women than men stemmed from elite groups, a large majority of women and men came from a wide range of social groups. The results moreover offer no support for the strong emphasis on widows as put forward by Jordan, Hutton and others. Both married and unmarried women were frequent participants in the capital markets. The results especially highlight the prominent share of women of unknown status, who were likely to be single, as creditors.

Compared to studies of the fourteenth-century Low Countries, women's access to credit seems to have declined. This may support the notion of a decrease in economic opportunities for women during the fifteenth century, as has been argued Martha Howell and others, among others due to more patrilineal tendencies with regard to property transmission. Explaining how this process took place on capital markets, requires more research which compares both cities during the earlier fifteenth century. The results therefore indicate that at least in the first phase of Antwerp's economic growth, the role of capital invested by women was probably modest.

Tables

TABLE 7. Leuven 1490: credit profile of unknown women, married women, widows, men and married couples as debtors (D) and creditors (C)

With N: number of parties, N=? : number of parties with unknown sums, £: total invested capital in *Brabantse groten*, \bar{x} : average invested capital, %N: percent of parties, % \bar{x} : percent of average sums

		IOU		LR		HR		Total	
		D	C	D	C	D	C	D	C
Un-known women	N	9	20	1	3	2	3	12	26
	N = ?	0	2	0	0	0	0	0	2
	£	956,3	3911,3	1800	3840	3240	1836,0	5996,3	9587,3
	\bar{x}	106,3	217,3	1800	1280	1620	612	499,7	399,5
	% N	24%	53%	3%	8%	5%	8%	32%	68%
	% \bar{x}	6%	25%	12%	25%	21%	12%	38%	62%
Married women	N	12	12	0	0	0	0	12	12
	N = ?	0	0	0	0	0	0	0	0
	£	4287,5	6102,0	0,0	0,0	0,0	0,0	4287,5	6102,0
	\bar{x}	357,3	508,5	0	0	0	0	357,3	508,5
	% N	50%	50%	0%	0%	0%	0%	50%	50%
	% \bar{x}	41%	59%	0%	0%	0%	0%	41%	59%
Widows	N	14	11	0	3	1	9	15	23
	N = ?	0	1	0	0	0	0	0	1
	£	4698,0	5193,0	0,0	72000	52,2	12816	4750,2	90009,0
	\bar{x}	335,6	519,3	0,0	24000	52,2	1424,0	316,7	4091,3
	% N	34%	27%	0%	7%	2%	22%	39%	61%
	% \bar{x}	5%	5%	0%	72%	0%	13%	5%	95%
Men	N	224	257	17	6	55	101	296	364
	N = ?	21	33	3	0	7	21	31	54
	£	211143,9	346148,4	77683,9	24790,0	91497,0	219078,0	380324,8	590016,4
	\bar{x}	1040,1	1545,3	5548,9	4131,7	1906,2	2738,5	1435,2	1903,3
	% N	34%	39%	3%	1%	8%	15%	45%	55%
	% \bar{x}	22%	36%	8%	3%	9%	23%	39%	61%
Married couples	N	13	5	7	14	32	7	52	26
	N = ?	3	0	0	4	15	0	18	4
	£	34662	3996,0	12156	19391	26382	8904	73200,0	32290,5
	\bar{x}	3466,2	799,2	1736,6	1939,1	1551,9	1272,0	2152,9	1467,8
	% N	16%	6%	9%	17%	39%	9%	67%	33%
	% \bar{x}	31%	4%	11%	18%	24%	8%	69%	31%

TABLE 8. Antwerp 1490-92: credit profile of unknown women, married women, widows, men and married couples as debtors (D) and creditors (C).

With N: number of parties, N=? : number of parties with unknown sums, £: total invested capital in *Brabantse groten*, \bar{x} : average invested capital, %N: percent of parties, % \bar{x} : percent of average sums

		IOU		LR		HR		Total	
		D	C	D	C	D	C	D	C
Un-known women	N	7	18	2	20	34	134	43	172
	N = ?	1	3	0	9	6	42	7	54
	£	52260	72480	43200	21419	75490	302366	132070	394585
	\bar{x}	8710,0	4832,0	2160,0	1947,2	2696,1	3286,6	3668,6	3343,9
	% N	3%	7%	1%	8%	16%	62%	20%	80%
	% \bar{x}	8%	11%	1%	3%	14%	57%	25%	75%
Married women	N	2	4	5	1	164	31	171	36
	N = ?	0	0	1	0	58	9	59	9
	£	2280,0	35760	8760,0	2160,0	497373	368172	508413	406092
	\bar{x}	1140,0	8940,0	2190,0	2160,0	4692,2	16735	4539,4	15040,4
	% N	1%	2%	2%	0%	79%	15%	83%	17%
	% \bar{x}	0%	3%	1%	0%	54%	40%	56%	44%
Widows	N	14	7	3	4	64	73	81	84
	N = ?	5	2	2	0	12	17	19	19
	£	56760	17220	720	14715	246780	3218836	304260,0	353818
	\bar{x}	6306,7	3444,0	0,0	3678,8	4745,8	5747,9	4907,4	5443,3
	% N	7%	3%	1%	2%	39%	44%	49%	51%
	% \bar{x}	7%	2%	0%	2%	38%	49%	46%	54%
Men	N	381	356	131	28	1317	1439	1829	1823
	N = ?	88	85	56	13	423	472	567	570
	£	2633138	2272425	137896	42606	4613896	5279721	7384930	7594752
	\bar{x}	8986,8	8385,3	10,1	11,7	5161,0	5459,9	5851,8	6061,3
	% N	9%	9%	3%	1%	36%	39%	50%	50%
	% \bar{x}	15%	13%	1%	0%	31%	35%	49%	51%
Married couples	N	14	15	28	33	183	119	225	169
	N = ?	1	4	8	15	50	39	59	58
	£	138192	46173	36198	24726	930644	418594	1105034	489495
	\bar{x}	10630	4197,5	1809,9	1373,7	6997,3	5232,4	6656,8	4409,9
	% N	3%	3%	6%	7%	46%	30%	57%	43%
	% \bar{x}	8%	3%	2%	1%	58%	26%	69%	31%