

## Segmentation in the Pre-Industrial Labour Market: Women's Work in the Dutch Textile Industry, 1581–1810\*

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**SUMMARY:** This article analyses women's work in the Dutch textile industry in the seventeenth and eighteenth centuries within the framework of dual (or segmented) labour market theory. This theoretical framework is usually applied to the modern labour market, but it is also valuable for historical research. It clarifies, for example, how segmentation in the labour market influenced men's and women's work in the textile industry. Applying this analysis, we find that, even in periods without explicit gender conflict, patriarchal and capitalist forces utilized the gender segmentation of the labour market to redefine job status and labour relations in periods of economic change. Although this could harm the economic position of all women and migrants, it appears that single women were affected most by these mechanisms.

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Capitalistic organisation tended [...] to deprive women of opportunities for sharing in the more profitable forms of production, confining them as wage-earners to the unprotected trades.<sup>1</sup>

In her pioneering study from 1919, Alice Clark pointed out that in pre-industrial times women had played a large part in production. But the rise of capitalism and industrialization in the eighteenth and nineteenth centuries changed things radically, for production was then taken out of the home and consequently out of the hands of women.<sup>2</sup>

In the 1970s feminist historians like Louise Tilly and Joan Scott reverted to Clark's idea that female workers had once experienced a "golden age", which they believed should be linked to the specific functioning of the pre-industrial *family economy*, in which reproduction, production, and consumption were closely connected. Because pre-industrial production often took place in the domestic sphere, women had a large share in it.<sup>3</sup>

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1 Alice Clark, *Working Life of Women in the Seventeenth Century* (London, 1919), p. 299.

2 *Ibid.*, p. 12.

3 Louise Tilly and Joan Scott, *Women, Work and the Family* (2nd edn, New York [etc.], 1989), pp. 12, 60.

With the emergence of the capitalist economy, new and patriarchal relations of production were born, and the rise of wage labour and the separation of home and work affected women's economic activity most particularly. They were shut out of public life as well as the labour market.<sup>4</sup>

Numerous historians adopted this idea of "the good old times" of women's work. Some of them, including Bridget Hill and Merry Wiesner, situated it in the early modern period,<sup>5</sup> while others, such as Martha Howell, placed it in medieval times.<sup>6</sup> Their arguments were, however, similar in all cases. Corporatism and capitalism supposedly pushed women out of occupations in which they had been employed formerly and through which they could reach a certain degree of status and independence.<sup>7</sup>

Conversely, historians like Judith Bennett and Peter Earle stressed the *continuity* in the history of women's work. They questioned the idea that there had ever been a "golden age".<sup>8</sup> Bennett emphasized a striking continuity in the unequal division of power between men and women, and in the subordination of the latter. She acknowledged that there were different experiences for different groups of women, but in general, she argued, patriarchy has confined women to low-status jobs and badly paid occupations throughout history.<sup>9</sup>

There might be some truth in Bennett's view, for empirical research so far does not point in the direction of a "golden age" for female workers. In the pre-industrial period economic possibilities for women were almost always less than those for men, and women have almost always been clustered in lower-skilled, low-status and lower-paid occupations.<sup>10</sup> However, the theoretical assumption of unchanging patriarchy poses

4. *Ibid.*, pp. 104, 144–145; Amanda Vickery, "Golden Age to Separate Spheres? A Review of the Categories and Chronology of English Women's History", in Pamela Sharpe (ed.), *Women's Work: The English Experience* (London, 1998), pp. 294–332, 294–299.

5. Bridget Hill, *Women, Work, and Sexual Politics in Eighteenth Century England* (Oxford, 1989); Merry E. Wiesner, "Spinsters and Seamstresses: Women in Cloth and Clothing Production", in M.W. Ferguson, M. Quilligan, and N.J. Vickers (eds), *Rewriting the Renaissance: The Discourses of Sexual Difference on Early Modern Europe* (Chicago, IL, 1986), pp. 191–205.

6. Martha C. Howell, *Women, Production, and Patriarchy in Late Medieval Cities* (Chicago, IL, 1986).

7. Els Kloek, *Wie hij zij, man of wijf. Vrouwengeschiedenis en de vroegmoderne tijd: Drie Leidse studies* (Hilversum, 1990), pp. 27–28.

8. Judith Bennett, "History that Stands Still: Women's Work in the European Past", *Feminist Studies*, 14 (1988), pp. 269–283; Peter Earle, "The Female Labour Market in London in the Late Seventeenth and Early Eighteenth Centuries", *Economic History Review*, 42 (1989), pp. 328–353.

9. Judith Bennett, "Women's History: A Study in Continuity and Change", in Sharpe, *Women's Work*, pp. 58–64.

10. Ad Knotter, "Problems of the *Family Economy*: Peasant Economy, Domestic Production and Labour Markets in Pre-Industrial Europe", *Economic and Social History in the Netherlands*, 6 (1994), pp. 19–59, 26–27, 43; Pamela Sharpe, "Introduction", in *idem*, *Women's Work*, pp. 1–17, 7–8.

serious problems for the historian, because it does not *explain* gender inequalities nor changes in the relationships between the sexes.<sup>11</sup>

Since both views of the discourse on “continuity or change” have proved to be problematic, the debate has lost much of its appeal over the last decade. Some historians have shifted their focus to the importance of women’s work in the pre-industrial economy. They emphasize that we still lack sufficient empirical research to understand clearly the functioning of the early modern labour market and women’s contribution to it. That leads to some basic empirical questions, such as: “What kind of labour did women actually do?”; “How was the work divided between men and women, and why was this so?”<sup>12</sup> These historians deliberately place their work in the “mainstream” economic-historical tradition, instead of in that of feminist theory, but that does not mean that they overlook established sexual inequalities between men and women in the past. Rather, they wish to emphasize the importance of such power imbalances for investigating broader themes in social and, especially, economic history.<sup>13</sup>

The quest for more empirical information to help give an “accurate historical perspective”<sup>14</sup> is valuable, but problematic. Empirical research will offer us knowledge, as well as nuance and a more differentiated picture.<sup>15</sup> At the same time, it could raise the danger of overemphasizing the developments discovered in female participation in the labour force as “path-dependent”. As a result, it remains difficult to discern patterns or make generalizations about women’s work. Furthermore, while new research might indeed have refuted old explanations for the sexual division of labour, such as biological or “natural” arguments, or questions of skill or status,<sup>16</sup> it has not yet offered alternative explanations. We must therefore derive a new theoretical framework to explain the working of gender in the pre-industrial labour market.

#### PRE-INDUSTRIAL WOMEN’S WORK AND LABOUR-MARKET THEORIES

Historians of early modern women’s work have largely neglected the extensive efforts of economists and sociologists who have studied the

11. Joan W. Scott, *Gender and the Politics of History* (New York, 1988), pp. 33–34. She describes the patriarchal argument as “a-historical”.

12. Sharpe, “Introduction”, in *idem*, *Women’s Work*, p. 12; *idem*, “Women’s History and Economic History in Britain”, in *ibid.*, pp. 23–42, 27; Sheilagh C. Ogilvie, *A Bitter Living: Women, Markets, and Social Capital in Early Modern Germany* (Oxford, 2003), pp. 23–42, 2, 5.

13. See, for example, Pamela Sharpe, *Adapting to Capitalism: Working Women in the English Economy, 1700–1850* (Basingstoke, 2000), p. 6; Ogilvie, *A Bitter Living*, pp. 3–4.

14. Sharpe, “Introduction”, in *idem*, *Women’s Work*, p. 12.

15. A good example here is Sharpe, *Adapting to Capitalism*, pp. 149–153.

16. For instance Deborah Simonton, *A History of European Women’s Work: 1700 to the Present* (London, 1998), pp. 76–83.

modern labour market. Even so, their theories might offer us just the explanations we need for labour market dynamics. In the early 1970s Edna Bonacich introduced an important theory of split labour markets,<sup>17</sup> which offered, in short, the prediction that labour markets tend always to be split along ethnic lines, or by gender. A split labour market contains at least two groups of workers, whose labour price differs for the same work, or would so differ if they did the same work.<sup>18</sup> This can be explained by the fact that their work is often temporary, and so migrants and women are in a position to agree to work for lower wages and under worse conditions than, say, white males would tolerate. Employers will naturally try to use this ethnic or sexual antagonism to depress the price of labour.<sup>19</sup> These mechanisms enforce capitalist power over the workforce as a whole.

Although the split labour market approach can be very useful for investigating class antagonism, it has its shortcomings with regard to the analysis of labour among women, or among migrants. The theory ascribes the secondary position in the labour market of migrants and women chiefly to their characteristics as temporary workers, “unreliable” and therefore powerless. It focuses on class conflict and power relations between employers and their employees and tries to offer purely economic explanations for these imbalances, such as competition or the price of labour. However, it overlooks existing unequal power balances among ethnic groups and between the sexes outside the labour market.

A more institutional approach is offered by the dual, or “segmented”, labour market theory to explain sexual differences in the labour market. This approach is focused not on competition, but on segmentation in the labour market, and so pays more attention to institutional causes of power imbalance between the sexes. Proponents of this theory perceive the labour market to be divided into a “core” and a “periphery”, each having fundamentally different characteristics. Different economic branches belong either to the core or to the periphery, sometimes called “primary and secondary sectors”.<sup>20</sup> The core comprises highly productive, very profitable and capital-intensive industries in which we find correspondingly differentiated task and wage schedules; well-defined career patterns, with an important role for formal education; high wages; and a great deal of labour organization. The periphery consists of industries comprising small enterprises, which normally display low productivity and profit-

17. Edna Bonacich, “A Theory of Ethnic Antagonism: The Split Labor Market”, *American Sociological Review*, 37 (1972), pp. 547–559.

18. Note that the “price of labour” depends not only on wages paid, but also on secondary provisions such as recruitment and educational costs, room and board; *ibid.*, p. 549.

19. Moshe Semyonov and Noah Lewin-Epstein, “Segregation and Competition in Occupational Labor Markets”, *Social Forces*, 68 (1989), pp. 379–396, 381.

20. Harriet Bradley, *Men’s Work, Women’s Work: A Sociological History of the Sexual Division of Labour in Employment* (Cambridge, 1989), p. 65.

ability and are usually labour-intensive, with consequently poor job security and limited career opportunities. Wages in the periphery tend to be low and labour organization limited, regardless of whether we are considering men or women, whites, or blacks.<sup>21</sup>

The dual labour market theory could prove to be valuable too as a framework for historical research into the early modern labour market, since the dual structure most probably predates modern capitalism.<sup>22</sup> The pre-industrial economy encompassed branches that were high-status, well-paid, and hardly accessible to subordinate social groups such as women or migrants. Often, such core professions, with their vocational training, were organized and regulated within guilds designed to protect the occupational interests of their members. In that sense the dual labour market approach is equally applicable to the early modern labour market. However, since the theory was developed to help analyse economic differences between sexual and ethnic groups in the modern industrial economy, it does not reveal historical mechanisms and changes in the labour market, so making the model rather static. In this article, I therefore aim to combine the economic mechanisms of the split labour market theory with the notions of sex segregation to be found in the dual labour market approach. I will try to link labour market dynamics and theories of patriarchy to historical social and economic developments. This will, on the one hand, historicize theories about the labour market and patriarchy, while on the other give more satisfactory explanations for past gender divisions of labour.

Katrina Honeyman and Jordan Goodman have written one of the few historical contributions to apply the dual labour market theory to early modern women's work. In their excellent survey of European women's work between 1500 and 1900, they claim that labour markets were indeed segmented as early as the seventeenth century and probably even before that. They argue that patriarchy and sex discrimination in the labour market were usually implicit determinants, which came to the surface only when the equilibrium of the segmented labour market was threatened in times of economic change. At such moments of crisis, gender conflicts occurred and, mainly through workers' organizations such as guilds and unions, patriarchal forces responded by redefining men's and women's roles in work. Honeyman and Goodman assume that only two such episodes have occurred in European history since the Middle Ages: roughly in the sixteenth and then the nineteenth centuries.<sup>23</sup> Honeyman

21. E.M. Beck, Patrick M. Horan, and Charles M. Tolbert II, "Stratification in a Dual Economy: a Sectoral Model of Earnings Determination", *American Sociological Review*, 43 (1978), pp. 704–720, 706–707. See also Wendy C. Wolf and Rachel Rosenfeld, "Sex Structure of Occupations and Job Mobility", *Social Forces*, 56 (1978), pp. 823–844.

22. See also Bradley, *Men's Work, Women's Work*, p. 66.

23. Katrina Honeyman and Jordan Goodman, "Women's Work, Gender Conflict, and Labour

and Goodman suggest a rather stable situation in the seventeenth and eighteenth centuries, without explicit gender conflict, and therefore without substantial changes in the sexual division of labour.

In this article, I should like to follow up on their work, using the framework of the dual labour market theory. Contrary to Honeyman and Goodman, however, I will argue that the gender division of labour was far from stable in the seventeenth and eighteenth centuries. There were forces other than explicit gender conflicts which stimulated changes in the labour market. Mechanisms of class conflict (the rise of capitalism) and sex segregation (patriarchy) might have worked together and reinforced one another.<sup>24</sup> To investigate the consequences for pre-industrial women's work, I posit the following research questions. How did the mechanisms of the dual labour market function in the pre-industrial economy, and how did they affect women's work? How can we explain changes in the sexual division of labour within the seemingly static framework of the dual labour market? What role did patriarchy and capitalism play, and how can we incorporate them into the model?

Following Marietta Morrissey,<sup>25</sup> I think it is useful to analyse the dual or segmented labour market at the level of a specific industry or even branch of an industry. An important reason for this is that we have no macro-level statistical data for most pre-industrial economies. For several reasons, my focus will be on the Dutch textile industry during the seventeenth and eighteenth centuries. First of all, because market production of textiles was one of the most important industries leading to Dutch economic growth. Although Dutch primacy in world trade has long been emphasized,<sup>26</sup> recently more attention has been given to the impact of industry on economic growth in the early modern Netherlands.<sup>27</sup> Secondly, such long-term analysis will make it possible to distinguish between periods of economic growth and decline; exactly those dynamics could prove decisive in explaining certain developments in the labour market. The third reason is that, like everywhere else in the world, traditionally both women and men played a large part in pre-industrial textile production in the Dutch Republic.<sup>28</sup>

Markets in Europe, 1500–1900", *Economic History Review*, 44 (1991), pp. 608–628, 608–610, 624.

24. This was suggested also by Heidi Hartmann, "Capitalism, Patriarchy, and Job Segregation by Sex", *Signs*, 1 (1976), pp. 137–169.

25. Marietta Morrissey, "The Dual Economy and Labor Market Segmentation: A Comment on Lord and Falk", *Social Forces*, 60 (1982), pp. 883–890, 887.

26. Most notably by Jonathan Israel, *Dutch Primacy in World Trade, 1585–1740* (Oxford, 1989).

27. Jan de Vries and Ad van der Woude, *The First Modern Economy: Success, Failure, and Perseverance of the Dutch Economy, 1500–1815* (Cambridge, 1997), p. 270.

28. *Ibid.*, pp. 270–272; Leo Noordegraaf and Jan Luiten van Zanden, "Early Modern Economic Growth and the Standard of Living: Did Labour Benefit from Holland's Golden Age?", in Karel



Figure 1. Map of the northern Netherlands, c.1629–1795.

It will appear that within the textile industry there was a distinct division of labour which can be linked to specific professions representing both core and periphery occupations. Furthermore, we shall see that even the conception of what were high-status, highly skilled and organized (and so “core”) jobs will prove to have been rather flexible in the seventeenth and eighteenth centuries.

Dauids and Jan Lucassen (eds), *A Miracle Mirrored: The Dutch Republic in European Perspective* (Cambridge, 1995), pp. 410–437, 426.

## TWO CASE STUDIES: LEIDEN AND TILBURG

In broad terms, we can divide the textile history of the Dutch Republic into two periods closely linked to the economic development of the region. In the first half of the seventeenth century, the province of Holland was the economic centre of the Republic and perhaps of the whole world. Leiden and Haarlem, two cities in Holland, specialized most notably in the weaving of respectively wool and linen. In the last quarter of the sixteenth century both cities had attracted from textile areas in Flanders and Wallonia a large number of Protestants who were fleeing Catholic Spanish troops. These refugees gave a new impulse to the existing Dutch textile industries.

A great many weavers settled especially in Leiden, and they successfully introduced the *sayette* industry, which produced a new kind of light drapery made from cheaper combed wool; this light drapery became very popular around that time. Leiden's textile industry boomed and the city became the largest European cloth producer for more than half a century. Although the *sayette* industry lost ground to international competition after 1630, the production of a new lighter type of cloth from carded wool (*laken*) kept Leiden's textile industry alive. It reached a peak in 1664, but then international and domestic competition started to affect its prominent position. Production figures began to decline swiftly after that date and continued to fall throughout the eighteenth century.<sup>29</sup>

From 1650, the weaving of wool and linen gradually shifted to more outlying and agrarian regions of the Republic, notably the eastern province of Overijssel and of Brabant in the south. Since the Peace of Westphalia in 1648, those border provinces no longer laboured under conditions of war. Merchants from Holland started to contract weavers and spinners in those regions, since wages there were much lower. The shift of weaving to such areas in the countryside caused Leiden and Haarlem to concentrate more closely on the highly skilled work of finishing textiles and trading in them. In fact, in Haarlem after 1650 the actual weaving of linen was abandoned completely.<sup>30</sup> Leiden, despite its drastic decline, still remained the largest producer of woollen wefts until about 1800, although competition grew during this period from Tilburg, a village in Brabant.

Around 1600, woollen cloth production in Tilburg was centred mostly on its own regional market. That changed, probably in the Twelve-Year Truce from 1609–1621, during which trade increased with the province of Holland. Because Tilburg was hostile territory until 1629 and after then

29. For production figures see N.W. Posthumus, *De geschiedenis van de Leidsche lakenindustrie*, 3 vols (The Hague, 1908–1939).

30. F. Mulder, "De Haarlemse textielnijverheid in de periode 1575–1800", in H. Rombouts (ed.), *Haarlem ging op wollen zolen: opkomst, bloei en ondergang van de textielnijverheid aan het Spaarne* (Schoorl, 1995), p. 64.



belonged to the Generality Lands of the Republic, many trade barriers continued to exist, mostly in the form of tariffs and excises. Still, production rose steadily and in 1687 the central authorities granted Tilburg special permission to trade textiles with Holland without the usual taxes, which stimulated its economy even more.<sup>31</sup> Although we do not have much data, it appears that Tilburg, like Leiden, experienced a decline in the first half of the eighteenth century, but Tilburg seems to have recovered in the later eighteenth century, since at the beginning of the nineteenth it had outgrown Leiden as a cloth-producing area.<sup>32</sup>

Because Leiden and Tilburg were two of the most important textile areas, and each experienced a quite different economic development, they serve as excellent comparative and complementary case studies. Moreover, in both municipalities quantitative as well as qualitative source material allows us to draw conclusions about labour market developments. In the next section, I shall briefly elaborate on the sources, and on my method.

#### SOURCES AND METHOD

It is not easy to make a reconstruction of the early modern Dutch labour market. Systematic occupational data on the entire population, which are available for the nineteenth and twentieth centuries, had not then been collected. No statistical institutions existed to take samples or otherwise investigate the occupational structure of the population. The federal political structure of the Republic until 1795 did not exactly stimulate the development of a national statistical practice.<sup>33</sup>

Fortunately, many local taxation and census registers have survived – sometimes with data on occupation. They, of course, offer us only a snapshot of the early modern labour market at any particular moment, which certainly does not do justice to the usual complexity and flexibility of the early modern labour market, in which people had more than one job, frequently changed their jobs, and often did seasonal work. We must also reckon with the fact that many people, and most especially women, performed economic activities not formally regarded as professions.<sup>34</sup> Such individuals, and among them women, were registered, if at all, probably without an occupational record; while usually in any case only

31. Gerard van Gorp, *Brabantse stoffen op de wereldmarkt: Proto-industrialisering in de Meierij van 's-Hertogenbosch 1620–1820* (Tilburg, 2004), pp. 46–53.

32. *Idem*, “De Tilburgse lakenhandel met Holland en Brabant in de zeventiende en achttiende eeuw”, *Textielhistorische bijdragen*, 38 (1998), pp. 60–61. See also *idem*, *Brabantse stoffen op de wereldmarkt*, pp. 181, 198.

33. P.M.M. Klep and I.H. Stamhuis, *The Statistical Mind in a Pre-Statistical Era: The Netherlands 1750–1850* (Amsterdam, 2002), pp. 19–20.

34. Knotter, “Problems of the *Family Economy*”, p. 44; Ogievie, *A Bitter Living*, p. 24.

heads of households were listed, and that of course left unrecorded the work of many women who were married or resident in households.

All the same, these sources give us the most complete information there is about the entire early modern labour market, and of course include female heads of households. For Leiden as well as Tilburg there are several useful sources for a gender analysis of the labour market throughout the period. In the Leiden archives, registrations of all heads of household have survived for 1581, just before the economic rise of the textile industry, and for 1749, the period of its decline. For the more prosperous period there is a tax registration of 1674, which unfortunately only listed fewer than 5 per cent of the entire population, though that still amounted to about 20 per cent of all the city's heads of households. Although women were clearly underrepresented in this register, it still gives us some important clues about women's work in textiles.<sup>35</sup> For Tilburg there is a tax list for 1665, when the wool industry was just about to expand hugely, and there is a census from 1810, which contains lists not only of heads of households, but of *all* family members, including married women (working or otherwise) and children.<sup>36</sup>

Table 1 gives an overview of the percentage of female household heads with an occupation listed in the various sources used. Increasing or declining numbers of female heads of households will tell us little about female labour participation but can make clear how many women were at least responsible for providing for a family's income. For the work of women such as married women or daughters, who were not heads of households, other archive material will be used. Judicial records containing occupational information on married women, and the registration of children who were hired out under contract, can shed more light on their work.<sup>37</sup>

Because the source material mostly provides data on all male as well as female heads of households, it is possible to make a comparative quantitative analysis at different instants, results from which can help to discern and try to explain changes in the labour market throughout the early modern period. Using the framework of the dual labour market, it will be possible to analyse the division and changes in labour by gender.

35. Regionaal archief Leiden [hereafter, RAL], Stadsarchief II [hereafter, SA II], inv. no. 1289, Register van de Volkstelling. See also Posthumus, *De geschiedenis van de Leidsche lakenindustrie, vol. 2. De nieuwe tijd (zestiende tot achttiende eeuw). De lakenindustrie en verwante industrieën. Tweede en derde deel* ('s-Gravenhage, 1939), pp. 18–40; RAL, SA II, inv. no. 1078, Kohier van het Klein Familiegeld. See also G.J. Peltjes, *Leidse lasten. Twee belastingkohieren uit 1674* (Leiden, 1995); RAL, SA II, inv. nos 4121–4128, Kohieren van de omslag 1749.

36. Regionaal Historisch Centrum Tilburg [hereafter, RHCT], Dorpsbestuur, inv. no. 180–I, and *ibid.*, Volkstellingen, inv. nos 1275–1277, Volkstelling 1810.

37. RAL, Archief Hallen, inv. nos 127a–j, “Leerjonghensboucken”, 1638–1656; *ibid.*, inv. nos 216–221, Qwestyboecken, 1638–1767; RAL, Oud Rechterlijk archief, inv. no. 3, Criminele vonnisboeken.

Table 1. Sources and their coverage

Region and year	Type of source	Registration coverage	% female heads of households with occupation
Leiden 1581	Population registration	All heads of households	13.6
Leiden 1674	Tax registration	Heads of households with income of 365 guilders a year or more	10.7
Leiden 1749	Tax registration	All heads of households	20.1
Tilburg 1665	Tax registration	All heads of households	12.2
Tilburg 1810	Population registration	Whole population, incl. married women and children	22.9

## MALE AND FEMALE TEXTILE WORKERS IN LEIDEN

At the end of the sixteenth century Leiden's economy was already firmly industrially based, with about two-thirds of all heads of households working in the industrial sector. Although the absolute numbers differed greatly, percentages were similar for male and female heads.<sup>38</sup> However, within the sector there were large differences between men's and women's occupations, clearly indicating a segmented labour market (see Table 2 overleaf).

In 1581, almost all female heads of households who worked in industry were seamstresses or cleaners in garment production (24 per cent), or in textile production (more than 73 per cent). For male heads, the range of professions was much broader although textiles (30 per cent) formed the most important branch for them too. But the other 70 per cent worked in the construction, wood, leather and metal branches, or in the production of garments, or food. All these occupational groups contained about 10 per cent of the total number of male heads of households in the industrial sector, and most of the occupations were organized into craft guilds, which represented organized, often well-paid and highly skilled labour, having many of the characteristics of core industries. Women were usually excluded from guild membership, except that in some guilds they were accepted as craftsmen's widows. Usually, then, they were barred from core industries.<sup>39</sup> It is of course possible that wives and daughters of craftsmen assisted in or even took over the work of their husbands or fathers, but if so that hardly ever appears in official records, and their participation was neither institutionalized in any way, nor especially beneficial to them as individuals.<sup>40</sup>

38. 1,352 (66.2 per cent) of all 2,043 male heads and 211 (65.7 per cent) of all 321 female heads with an occupational record worked in industry; RAL, SA II, Volkstelling 1581.

39. P. Lourens and J. Lucassen, "De oprichting en ontwikkeling van ambachtsgilden in Nederland (13de–19de eeuw)", in C. Lis and H. Soly (eds), *Werelden van verschil. Ambachtsgilden in de Lage Landen* (Brussels, 1997), pp. 54–55.

40. See for example Tilly and Scott, *Women, Work and the Family*, pp. 47–49.

Table 2. *Male and female heads of households per industrial sector: Leiden, 1581 and 1749*

Branch	1581				1749			
	m	%	f	%	m	%	f	%
Construction	133	9.8			438	8.7	4	0.3
Chemistry	9	0.7			37	0.7	1	0.1
Earthenware/glass/stone industry	36	2.7			38	0.8	1	0.1
Fine arts	3	0.2			13	0.3		
Food and tobacco	178	13.2	4	1.9	402	8.0	19	1.3
Garment industry	106	7.8	51	24.2	207	4.1	216	15.1
Leather	161	11.9			251	5.0	3	0.2
Metalworking	137	10.1			101	2.0	2	0.1
Oil/grease/soap production	16	1.2			16	0.3		
Paper production					9	0.2		
Printing	7	0.5			34	0.7	2	0.1
Textile industry	404	29.9	155	73.5	3,230	64.2	1,176	82.1
Wagon/shipbuilding	31	2.3			28	0.6		
Weapon/instrument production	1	0.1			48	1.0	1	0.1
Wood/cork/straw working	130	9.6	1	0.5	180	3.6	8	0.6
	1,352		211		5,032		1,433	

Sources: see n. 35

The segmentation of the labour market could also reveal itself at a branch level, as the textile industry shows (see Table 3).

Most female heads of households in this branch worked as wool spinners or combers. In the category “other” we also find some women carding and pilling wool. All in all, women’s work mainly concerned the low-skilled preparatory stages of cloth production. Only three women were listed as drapers, and there was but one female weaver. For male heads of households the situation was entirely different. In 1581 the woollen industry was the largest employer for men too, but in contrast to the situation for women they could find jobs in any stage of the production process. Some men worked as combers or spinners, but most of them were linen or wool weavers, drapers, or cloth finishers.

The segmentation of the labour market by gender was quite marked in 1581. While men worked chiefly in jobs with a higher status, like weaving and finishing, women’s work was restricted to relatively low-paid activities like spinning and combing.<sup>41</sup> This segmentation was not

41. The low level of wages hand spinners received, in spite of the large demand for spinning labour, is often ascribed to the fact that it was a “by-employment” for women and children, and because it was a less skilled job. Conversely, it might just as well be argued that spinning was poorly paid precisely because women and children did it; M. Berg, *The Age of Manufactures 1700–1820: Industry, Innovation and Work in Britain* (London, 1994), pp. 134–143; Simonton, *A History of European Women’s Work*, pp. 70–83.

Table 3. *Men and women in the textile industry: Leiden, 1581, 1674 and 1749*

Occupation	1581		1674*		1749	
	m (n = 404)	f (n = 148)	m (n = 450)	f (n = 40)	m (n = 3230)	f (n = 1176)
	% of all men in textiles	% of all women in textiles	% of all men in textiles	% of all women in textiles	% of all men in textiles	% of all women in textiles
Draper	13.4	1.9	27.6	37.5	3.3	0.7
Wool weaver	17.1	0.7	20.0	7.5	40.3	0.4
Spinner	1.7	80.7	1.3	0	23.9	69.3
Knitter	1.5	0.7	1.6	7.5	1.7	9.3
Finisher	7.2	0	8.7	2.5	10.5	0.1
Dyer	3.7	1.3	12.9	20.0	3.7	0.1
Twiner	0.3	0	2.4	10.0	2.5	12.2
Comber	3.0	7.7	6.7	2.5	2.3	0.4
Linen weaver	35.9	0	0.7	0	0.1	0
Other	16.3	7.1	18.2	12.5	11.7	7.5
Total	100	100	100	100	100	100

\*NB: Only heads of households who earned 365 guilders or more per year are included.

Sources: see n. 35

necessarily linked to the dominance of guilds. The Leiden weavers' guild had been abolished in the 1560s, but weaving was still not accessible equally to women. Explicit formal rules excluding women from weaving were likewise absent, and it seems almost that the prevailing segmentation was "natural" or at least widely accepted. Although there are hints that craftsmen's wives and daughters in fact received training informally in their husband's or father's professions, that gave them no formal prerogative to carry on the business on their own account.<sup>42</sup>

The relevance of formal training is reflected also in data on child labour. In seventeenth-century Leiden many children were contracted out to master spinners and weavers either by orphanages or by their parents. Orphans, sometimes as young as four of five, were sent out to spin, wind, or weave for low wages. Although officially sent out to learn a profession, in practice they were usually no more than a cheap source of labour for their masters. In the first half alone of the seventeenth century, about 3,500 orphans, boys and girls, were registered as working in the textile industry.<sup>43</sup> Children who still had a family were contracted out to work

42. RAL, *Questyboeken*, 5–9–1767.

43. RAL, *Bestedingsboeken weeskinderen*.

with a master for typically a couple of years, being usually somewhat older when they started, perhaps about eleven or twelve. In the period from 1638 to 1697 nearly 8,500 children were hired out by their parents or other relatives they might have been living with, some to earn piece-rates or even weekly wages, but the majority receiving only free board and lodging for two or three years. That was of course in itself a great relief to many a poor family, because not only did the child learn how to spin or weave, he or she was also out of the family's responsibility for a substantial period of time.<sup>44</sup>

Even among children, a certain degree of division of labour by gender can early be discerned. Both girls and boys were hired while very young to perform low-skilled duties like spinning and winding, and the wages they received varied according to age rather than sex. But it seems that, in contrast to girls, most boys were able to make progress in their professional training. When boys reached the age of thirteen or fourteen, they were usually allowed to learn weaving or shearing. Their salaries increased significantly when they moved to the higher-status jobs. Most girls kept on with their spinning, sometimes for years, until they were young adults. Their weekly wage did rise, but only slightly in keeping with their experience. Most of them, apart from the occasional cloth trimmer, were not expected to learn any trade within the industry other than spinning.<sup>45</sup>

Apparently, the segmentation of the labour market was established in the early phase of adolescence, when vocational training started, and in Leiden that often happened outside the framework of a guild. From a young age, schooling was adjusted to boys' and girls' expected future roles, although in truth marriage was not every woman's prospect. In most of Europe, as in the Republic, there was an imbalance in the sex ratio, with 10 to 20 per cent of all women never being married.<sup>46</sup> Unmarried women did not have the protection of a husband, nor did they gain the rights some widows inherited; and for them the dual labour market implied exclusion from high-status, well-paid jobs.

The tax registration of 1674 lists only those heads of households who had an average daily income of one guilder or more.<sup>47</sup> As we expect that many women worked in the lower-paid textile professions, that is

44. RAL, *Leerjonghensboucken*.

45. Compare RAL, *Bestedingsboeken*, with RAL, *Leerjonghensboucken*. A similar division of labour between male and female apprentices has been found elsewhere. See for instance D. Simonton, "Apprenticeship: Training and Gender in Eighteenth-Century England", in M. Berg (ed.), *Markets and Manufacture in Early Industrial Europe* (London, 1991), pp. 227–260.

46. Judith M. Bennett and Amy M. Froide, "A Singular Past", in *idem* (eds), *Single Women in the European Past 1250–1800* (Philadelphia, PA, 1999), pp. 1–27, 2.

47. One guilder = 20 stuivers. The average daily income of a carpenter (fairly skilled work) around 1650 was 24–28 stuivers. A 12-pound ryebread cost around 15 stuivers in the same period; Leo Noordegraaf, *Daglonen in Alkmaar 1500–1850* ([The Hague], 1980), p. 138; *idem*, *Hollands welvaren? Levensstandaard in Holland 1450–1650* (Bergen, 1985), pp. 26–27.



Figure 2. A weaver is assisted by a woman, probably his wife or daughter. In the middle, another woman is reeling yarn, while a little boy is watching, holding his baby sister. This scene illustrates that women indeed worked together with their husbands and fathers, even if they are absent in official sources.

“Weaver’s Shop”, painting by Cornelis Beelt, c.1650. Collection Museum Bredius, The Hague.

probably not the most representative source for them. Nevertheless, relatively many female heads of households who were subject to tax worked in the textile industry. Apparently forty women, only half of whom were widows,<sup>48</sup> were able to make a more than reasonable income from this industry, most of them as cloth drapers. Of all drapers and weavers in the cloth industry 8 per cent were women; a high number compared to the 3 per cent of drapers and weavers who were female in 1581 and the mere 0.9 per cent in 1749. The prosperity of the Leiden textile industry, at its zenith in the 1660s, had created some opportunities for both widowed and unmarried women in core textile jobs.

Another striking development was a gender reversal among wool-combers. In the sixteenth century, wool-combing had been a female affair, while a century later it had become almost exclusively male. Around 1700, a wool-combers’ guild was established and the only women who could

48. Ariadne Schmidt, *Overleven na de dood. Weduwen in Leiden in de Gouden Eeuw* (Amsterdam, 2001), p. 123.

join this guild were the widows of deceased members.<sup>49</sup> The explanation for the change is again linked to economic trends. Although the textile (notably carded wool) industry flourished until the 1660s, the *sayette* (combed wool) industry had deteriorated after 1630. It is probable that with this falling market share, men tried to protect their employment in the industry, even if only in peripheral jobs. To secure their profession, they institutionalized it into a guild, thereby formally excluding women, whether married or not. This institutionalizing could not prevent further decline in the long run, as revealed by a petition in 1750, in which the wool-combers complained of the “languishing state” of their guild.<sup>50</sup>

But also in the booming cloth industry, we see that men were entering “peripheral” professions. From the beginning of the seventeenth century numbers of male spinners increased, many of whom were so-called “master spinners” who subcontracted other wage earning spinners on behalf of drapers and weavers,<sup>51</sup> so that the putting-out system and subcontracting then became widespread in the textile industry at Leiden. Drapers or master spinners engaged normally home-based workers, providing them with the necessary raw materials and paying them when they had spun their yarn or woven their fabric. So it was that wage labour became increasingly significant. Developments of organization of this kind similarly stimulated the distinction between wage-labouring spinners, who were most likely to be female, and subcontracting master spinners, almost all of them male. Although they entered peripheral jobs like wool-combing and spinning, men distinguished themselves from women by institutionalizing their work, or by calling themselves “master spinner” or using other such guild-like titles – even in the absence of a guild.

A comparison between the registers of 1581 and 1749 shows some remarkable differences. Leiden’s economy had stagnated and even declined since the 1660s, but still the total population of the city was three times what it had been in 1581,<sup>52</sup> since when the industrial sector had grown immensely. That growth had been brought about mainly by the incredible rise in textile production during the seventeenth century. Shifts among several branches of industry indicate that Leiden’s economy had become ever more dependent on textile production. In 1749, more than 58

49. RAL, Archief Gilden, inv. no. (1374), Nieuwe ordonnantie voor de wolkammers en sajeterkopers.

50. RAL, Archief Gilden, inv. no. 1374/12, Wool-combers’ guild request to City Council.

51. See RAL, Archief H.G. Weeshuis, inv. nos 3844–3849, Bestedingsboeken weeskinderen. In the course of the century, this phenomenon grew; N.W. Posthumus (ed.), *Bronnen tot de geschiedenis van de Leidsche textielnijverheid. Vijfde deel, 1651–1702* (’s-Gravenhage, 1918), pp. 569–570; 613–614.

52. 1581: 12,000, and 1749: 37,000 inhabitants. The city had approximately 70,000 inhabitants around 1660 – the heyday of the textile industry; B.M.A. de Vries, “De Leidse textielnijverheid in de zeventiende en achttiende eeuw”, in J.K.S. Moes and B.M.A. de Vries, *Stof uit het Leidse verleden: Zeven eeuwen textielnijverheid* (Utrecht, 1991), pp. 77–89, 85.



per cent of all male heads of households working in industry were employed in the textile branch, compared with fewer than 30 per cent in 1581. The proportion in the textile branch had been even larger around 1650, when the industry still flourished.<sup>53</sup>

The last two columns in Table 3 (p. 201) provide detailed information about Leiden's male and female textile workers in 1749. While at the end of the sixteenth century more than 13 per cent of all male heads of households employed in textiles were drapers, and so closely involved with the management or organization of the production process, that percentage had dropped to 3.3 in 1749. The percentage of male wool weavers, on the other hand, had more than doubled by 1749, which together points to a concentration of power in the industry. The proportion of independent producers and drapers diminished as more weavers became wage labourers for fewer and richer entrepreneurs.<sup>54</sup>

The partial movement of weaving to Tilburg meant that finishing and dyeing had become more important, as mentioned above, but the most appreciably remarkable change since 1581 was the enormous rise in the number of male spinners. In 1581 only seven male heads of households were spinners, a figure representing not even as much as 2 per cent of all male heads in the industry; but by the middle of the eighteenth century almost one-quarter of all male heads of households were spinners. Indeed, there were almost as many men (771) as women (815) registered as "spinner" in 1749. Apparently, the process of proletarianization led many men to become wage-labouring spinners, which greatly affected the segmentation of the labour market by gender. For female heads of households in the textile branch, spinning was still the most important activity, but the percentage had dropped from over 80 per cent in 1581 to 69 per cent in 1749.

In fact, and contrary to the suggestion of Honeyman and Goodman, the division of labour between men and women was reshaped constantly during the seventeenth and eighteenth centuries, a state of affairs influenced by both economic and institutional developments. Certainly, during the heyday of the wool industry in Leiden, the economic possibilities for women increased and in 1674, just after the industry's peak, there were relatively large numbers of women in core professions like draping and dyeing, in comparison with the years 1581 and 1749. However, when parts of the industry began to decline, women were not only pushed out of highly skilled jobs, they also faced increasing competition from men in lower-skilled peripheral jobs. The same situation almost certainly affected female labour participation rates too. While in 1749 28.3 per cent of all

53. H.D. Tjalsma, "Leidse textielarbeiders", in Moes and De Vries, *Stof uit het Leidse verleden*, pp. 91–99, p. 93.

54. See also Posthumus, *De geschiedenis van de Leidsche lakenindustrie*, vol. 2, pp. 502–504.



Figure 3. Although the man in this painting is usually referred to as “male spinner”, he is actually reeling the yarn. Male spinners are seldom depicted by artists, but they certainly existed in the pre-industrial period.

“A Wool Spinner and His Wife”, painting by Quirijn Gerritsz van Brekelekenkam, c.1653. Philadelphia Museum of Art: John G. Johnson Collection, 1917, cat. 535.

officially registered textile workers were women, in 1808 the proportion was only 21.7 per cent.<sup>55</sup> Although many more men were now present in lower-skilled jobs like spinning, women’s labour opportunities in the textile industry declined completely.

#### THE LABOUR MARKET IN TILBURG: 1665 AND 1810 COMPARED

Despite its expanding textile industry, Tilburg’s economy remained predominantly agrarian around 1665. More than half of all heads of households were farmers, peasants, or agricultural day labourers. The industrial sector was by then already somewhat developed, but social and economic services were barely in existence in Tilburg. Occupational opportunities for women differed vastly from those of men. Only 13 per

55. H.A. Diederiks, “Beroepsstructuur en sociale stratificatie in Leiden in het midden van de achttiende eeuw”, in H.A. Diederiks, D.J. Noordam, and H.D. Tjalsma (eds), *Armoede en sociale spanning. Sociaal-historische studies over Leiden in de achttiende eeuw* (Hilversum, 1985), p. 51.

cent of all working heads of households were women and of them fewer than one-fifth worked in agriculture. Female day labourers in the field were rare, and no unmarried women were listed as farmers. All women listed as “farmer” were widows who had most probably continued to work the farm they and their husbands had built up together.

In the industrial sector, textiles were by far the most important component, for men and women alike (see Table 4 overleaf). However, while one-quarter of male heads of household worked in other branches, women did not have such alternative options. Trades requiring a specific skill, shoemaking, woodworking or printing for instance, or relatively well-paid jobs such as carpentry, and any capital-intensive businesses like milling, were all performed by men. Although there were very few guilds in Tilburg,<sup>56</sup> these core branches of industry were not open to women.

In the Tilburg textile industry there was little occupational differentiation for either sex. Almost all women were spinners, and there were hardly any female weavers, apart from the occasional widow who probably continued her husband’s craft. For men, by contrast, weaving was by far the most important trade in the textile industry. Three-quarters of all male heads of households who worked in textiles were weavers, most of them weavers of wool, although linen weaving was very important too (see Table 5 overleaf).

Apart from spinning and weaving, there were few alternatives for men in the textile industry. The Estates General allowed Tilburg to produce only “white cloth”, which was further processed outside the village. White cloth was brought to several cities of Holland, including Amsterdam, Rotterdam and, increasingly, Leiden, where it was dyed and finished by other craftsmen.<sup>57</sup> If a man in the textile industry did not weave, the chance was that he was a spinner. There were 54 male heads of households who were spinners, and we know for certain that 39 of them spun wool. Of the 131 female spinners, only 6 definitely spun wool. It is not precisely known what raw material all the other female spinners used, but it seems that when nothing is explicitly mentioned they were spinning flax.<sup>58</sup> Thus it appears that men were more likely to be spinners of wool and women spinners of flax to provide yarn for the village’s many linen weavers. A gender division in labour based on the raw materials processed might then explain the relatively high percentage of male spinners. Presumably, spinning of the more valuable material – wool – paid better than the spinning of cheaper flax and so was done mostly by men. Even within a peripheral activity like spinning, a hierarchy was discernible, generally assigning to men the best-paid and higher-status processing of wool.

56. Database Guilds IISH. I am grateful to Piet Lourens here.

57. Van Gorp, *Brabantse stoffen op de wereldmarkt*, pp. 48–53.

58. See also Hilde van Wijngaarden, *Zorg voor de kost. Armenzorg, arbeid en onderlinge hulp in Zwolle 1650–1700* (Amsterdam, 2000), p. 167.

Table 4. *Male and female heads of households per industrial sector: Tilburg, 1665 and 1810*

Branch	1665				1810			
	m	%	f	%	m	%	f	%
Construction	13	3.4			63	5.3		
Chemistry	1	0.3			1	0.1		
Earthenware/glass/stone industry	1	0.3			15	1.3		
Fine arts								
Food and tobacco	12	3.1			45	3.8	1	0.2
Garment industry	28	7.2	1	0.7	47	3.9	55	10.8
Leather	20	5.2			65	5.5	1	0.2
Metalworking	11	2.8			23	1.9	1	0.2
Oil/grease/soap production					3	0.3		
Paper production								
Printing	1	0.3						
Textile industry	285	73.5	139	99.3	894	75.0	452	88.6
Wagon/shipbuilding					8	0.7		
Weapon/instrument production					5	0.4		
Wood/cork/straw working	16	4.1			23	1.9		
	388		140		1,192		510	

Sources: see n. 36

By 1810, more than a century and a half later, there had been a transformation of the labour market. Agriculture, the most important sector in the mid-seventeenth century, now provided work for only about 15 per cent of the entire population. Economic services, notably trade and transport, had grown somewhat, both relatively and in absolute terms, but it was the industrial sector that had expanded most. Over 67 per cent of all heads of households worked in the sector at the beginning of the nineteenth century, growth caused primarily by the expansion of the textile industry, although other branches such as construction, food production, and clothing manufacture had all developed greatly since 1665. In fact, this mainly affected the situation for men, since women still had few job opportunities outside textile and garment production (see Table 4). Of all 510 female heads of households in industry, only three – all widows – worked outside textile and garment production: one of them in the metal industry, one in leather, and one in food production.

In the textile industry as a whole, an increased occupational differentiation can be detected when compared to the situation in 1665 (see Table 5), at least for male workers. The shearing and dyeing of cloth, finishing processes that were hardly carried out at all in seventeenth-century Tilburg, were now done by 132 (male) heads of households, a development which confirms the general view that textile production there had gradually become more autonomous as dependence on merchants and

Table 5. Male and female heads of households in the textile industry: Tilburg, 1665 and 1810

Occupation	1665				1810			
	m (n = 285)		f (n = 139)		m (n = 830)		f (n = 447)	
	% of men in industry	% of men in textiles	% of women in industry	% of women in textiles	% of men in industry	% of men in textiles	% of women in industry	% of women in textiles
Spinner	13.9	19.0	93.6	94.2	19.1	27.5	81.6	93.1
Knitter	0	0	1.4	1.4	0	0	0.4	0.5
Piller	0	0	0	0	0.2	0.2	3.9	4.5
Comber	0	0	0	0	2.9	4.1	0	0
Wool-weaver	33.8	46.0	1.4	1.4	32.7	46.9	1.4	1.6
Cloth manufacturer	0	0	0	0	1.1	1.6	0	0
Finisher	0	0	0	0	9.1	13.1	0	0
Dyer	0	0	0	0	1.9	2.8	0	0
Linen-weaver	21.4	29.1	1.4	1.4	0.1	0.2	0	0
Other	4.4	6.0	1.4	1.4	2.5	3.6	0.2	0.2
Total	73.5		99.2		69.6		87.5	

Sources: see n. 36

putting-out salesmen from Holland had lessened in the eighteenth century. That did not mean that the weavers themselves had been able to maintain their individual independence. On the contrary, they were on the payrolls of the many cloth manufacturers in the town, who tended to be men born in Tilburg.<sup>59</sup> From other sources, we can see that wage-earning weavers became ever more dependent, since in the seventeenth century they could still buy wool for themselves and sell the cloth they made with it, but during the eighteenth century they were increasingly commonly weaving on the orders of manufacturers.<sup>60</sup> Another factor contributing to this proletarianization was the circumstance that most of them did not own enough land to grow their own food, not least because Tilburg's population had risen by almost half since 1665.<sup>61</sup>

About half of all male heads of households working in textiles in 1810 were weavers. There were only 7 female weavers, all of them widows. But many more male heads of households were listed as "spinner" than had been so in 1665: 228 men (or 27.5 per cent of all male textile workers) were spinners. Capitalist developments clearly not only degraded the profession of weaving, they also led to increasing numbers of men in peripheral jobs like spinning. Some women were able to find alternative employment in the garment industry, where changes in fashion had increased demand for tailors and seamstresses. That was the case particularly for women's clothing, which was usually produced by women.<sup>62</sup>

Again, the dual labour market manifested itself as early as in childhood. Of all boys under the age of eighteen years, about 25 per cent had an occupational record in 1810, while for girls the percentage was even a little higher at 28 per cent. Table 6 shows how important the textile industry was for those working boys and girls. Almost 90 per cent of girls and more than 70 per cent of boys worked as spinners. Furthermore, fifty-five boys were classed as weavers as opposed to only two girls. Boys were far more likely than girls to receive training in other branches of industry. In weaving, the division of labour between girls and boys was almost complete in Tilburg, as it was in Leiden, but for spinning it was much less clear. In many ways then, from the ages of twelve or fourteen

59. P.J.M. van Gorp, *Tilburg, eens de wolstad van Nederland. Bloei en ondergang van de Tilburgse wollenstoffenindustrie* (Eindhoven, 1987), p. 71. Of all sixty-nine manufacturers, only eleven were not born in Tilburg. Two of them were born in Germany, two came from Leiden, and two from Amsterdam. The other five were all from the province of Brabant; RHCT, Volkstelling 1810.

60. This follows from my analysis of large numbers of civil court trials about wool payments and wage conflicts in the seventeenth and eighteenth centuries; RHCT, Schepenbank Tilburg, inv. nos 1600–6000.

61. Gerard van Gurp, "Proto-industrialisatie in Tilburg en Geldrop", *Textielhistorische bijdragen*, 39 (1999), p. 37.

62. Bibi Panhuysen, *Maatwerk: kleermakers, naaisters, oudkleerkopers en de gilden (1500–1800)* (Amsterdam, 2000), pp. 104–107.

Table 6. *Labour of boys and girls younger than eighteen: Tilburg, 1810*

	Boys	%	Girls	%
Spinning	324	71.7	476	87.8
Weaving	55	12.2	2	0.4
Textile other	4	0.9	6	1.1
Other industries	29	6.4	10	1.8
Farming	20	4.4	4	0.7
Servant	16	3.5	44	8.1
Other professions	4	0.9	0	0.0
Total	452	100	542	100

Source: RHCT, Volkstelling 1810

years the labour division mirrored the situation characterizing the adult labour market.

Apparently, a woman's expected future was to be a housewife and mother, even though that did not always occur in fact.<sup>63</sup> In Tilburg, there was a surplus of women, which naturally meant that many of them remained unmarried, most of whom (93 per cent) worked. Many of them found work as live-in servants, but a substantial number of unmarried women headed their own households. Usually they worked in textile or garment production, and occasionally as day labourers. We can indeed find a few widows working in other crafts, or as farmers, merchants, or innkeepers, but that was not the case for independent single women. The segmentation of the labour market therefore weighed heaviest on them.

Although Tilburg's textile industry and economy experienced growth in the late eighteenth and early nineteenth centuries,<sup>64</sup> the individual weaver and spinner in general does not seem to have profited from it. This was especially true for women, and most of all for single women. Whereas there were opportunities for some men to become shearers or dyers, those were core professions and equally inaccessible to single and married women. Most people, men and women, had become wage-dependent over the past centuries and only large textile entrepreneurs and some independent weavers could profit from the declining influence of merchants from Holland.

63. Hettie Pott-Buter, *Facts and Fairy Tales about Female Labor, Family and Fertility: A Seven-Country Comparison, 1850–1990* (Amsterdam, 1993), p. 53, claims that the bourgeois domesticity ideal was already firmly embedded in Dutch society in the seventeenth century. Although it is debatable whether this applied to all classes alike, I myself find many – direct and indirect – indications in the archival sources for contemporary consensus about the role of women (working-class or otherwise). Although in practice many women had to work, raising children and housekeeping were important arguments (for the Poor Relief authorities, for instance) for relieving married and widowed women of the duty to work, whereas men and young single women were expected to make a living by their own efforts.

64. Van Gurp, *Brabantse stoffen op de wereldmarkt*, pp. 198–200.

The growth of the proletariat also translated into an increased proportion of men in peripheral jobs like spinning. Male weavers had lost much of their independence, and their employers could decide to set them to spinning too. Since men would rather be spinners than unemployed, they were willing to perform such low-paid work. Textile entrepreneurs thus solved the problem of the large demand for cheap labour, and in doing so increased their power over the labour force so that they could exploit the dual structure of the labour market. Women's labour market opportunities were consequently limited even in their age-old trade of spinning. Capitalism might have changed unequal power relations between the sexes, but it certainly did not eliminate them.<sup>65</sup>

#### MIGRANT WORKERS

To understand how the segmented labour market functioned in the pre-industrial period it is useful to compare female with migrant workers. In Leiden, many textile workers were migrants; but all the same, the dual labour market theory is only partly valid for them, at least for most of the seventeenth century. Lucassen and de Vries have shown that in that period Leiden was the centre of a west European "textile-worker-migration system", in which highly skilled migrant workers were intentionally recruited from textile-producing regions outside the Republic. These immigrants, bringing with them specific weaving skills and specializations, were then very welcome in Leiden, while its textile industry boomed between 1580 and 1660,<sup>66</sup> but even so, the textile occupations with the highest status, such as finishing and shearing, were nearly always performed by workers from within the Dutch Republic.<sup>67</sup>

Because of this selective immigration, relatively few low-skilled migrant workers worked in the Leiden textile industry in the first half of the seventeenth century. Elsewhere, Lucassen and de Vries have suggested that low-skilled jobs were mostly done by women and children.<sup>68</sup> The textile-worker-migration system disappeared when the textile industry began its decline. My assumption is that once that happened, first- and second-generation male immigrants were the first to go into lower-skilled trades, replacing those women and children. There is some evidence for this, for instance when we look at the membership lists for Leiden's wool-combers'

65. See also Hartmann, "Capitalism, Patriarchy", p. 152.

66. Leo Lucassen and Boudien de Vries, "The Rise and Fall of a West European Textile-Worker Migration System: Leiden, 1586–1700", in Gerard Gayot and Philippe Midard (eds), *Les ouvriers qualifiés de l'industrie (XVIe–XXe siècle). Formation, employ, migration* (Lille, 2001), pp. 24–42, 28–30.

67. *Ibid.*, p. 34.

68. Leo Lucassen and Boudien de Vries, "Leiden als middelpunt van een Westeuropees textiel-migratiesysteem, 1586–1650", *Tijdschrift voor Sociale Geschiedenis*, 22 (1996), pp. 138–163, 160.



Table 7. *Migrant and non-migrant workers in Tilburg, 1810*

	Men		Women	
	Born in Tilburg	Not born in Tilburg	Born in Tilburg	Not born in Tilburg
All heads of households (HH)	72% (1,372)	28% (529)	73% (466)	27% (173)
HH in industry	79% (938)	21% (255)	77% (393)	23% (117)
HH in textiles	86% (715)	14% (115)	79% (354)	21% (93)
HH spinning	86% (195)	14% (32)	80% (333)	20% (83)
HH weaving	93% (362)	7% (27)	Not significant	Not significant
HH high-skilled (dyeing, finishing, etc.)	70% (109)	30% (46)	Not significant	Not significant

guild, which contain remarkably many names of French men.<sup>69</sup> The waning of child labour towards the end of the seventeenth century could also be ascribed to their replacement by migrant male workers.<sup>70</sup>

In Tilburg, there seem to have been only small differences in the percentages of migrants in peripheral jobs. Contrary to what the dual labour market theory predicts, the percentage of migrant workers seems to be if anything slightly higher in jobs of higher status (see Table 7).

In the textile industry, where we should expect more migrants than in other industries, the percentage of migrants is lower than it is in the whole industrial sector. Within the textile industry, we find surprisingly fewer migrants in spinning and weaving, which were lower-status jobs, and more in dyeing and finishing, which bore a higher status. Since total immigration figures were low in this period, we might conclude that only more highly skilled migrants could manage to settle in Tilburg. This evidence on Tilburg supports the findings for Leiden, where highly skilled migrant workers were generally welcome, especially in economically favourable periods.

## CONCLUSIONS

It is clear that a segmented labour market existed in the pre-industrial period. Even before the emergence of capitalism at the end of the sixteenth century, there was a distinct gender division of labour according to “core” and “peripheral” occupations, also at branch level. The core professions in the textile industry comprised mostly guild-organized, highly skilled, and

69. RAL, SA II, Archief Gilden, inv. no. 1374/3; Register en alfabetische naamlijsten van meester-wolkammers, 1700–1722.

70. Posthumus, *De geschiedenis van de Leidsche lakenindustrie*, vol. 2, p. 600.

well-paid jobs done by men. In the periphery we find low-paid, low-status, and non-organized work, done mainly by women. Not only did this dichotomy manifest itself within a particular branch, it is equally visible between branches, and even between regions. In this geographical division, Holland represented the core, where most highly skilled finishing labour was done, while lower-skilled spinning and weaving was increasingly put out to peripheral areas like Tilburg.

However, the dual labour market was far from stable during the seventeenth and eighteenth centuries. Instead, influenced by economic fluctuations, the division of labour between men and women was regularly reordered. When the economic tide was favourable, as it was in Leiden for most of the seventeenth century, the core was somewhat more accessible to women; but when the economy declined, men tried to secure their own employment to the disadvantage of migrants, but even more so of women. For migrants, explicit regulations could be introduced, but mechanisms against women in the labour market were usually more subtle, as men utilized the existing patriarchal relationships embedded in society to respond to economic changes. However, instead of what Honeyman and Goodman predict, that process did not necessarily involve explicit gender conflict or guild pressure.

Guilds did indeed form part of men's strategies of exclusion, but they were by no means requisite for them. I have shown that guilds, rather than creating the dual labour market, merely symbolized and then strengthened it. After all, core trades that were not guild-regulated, like weaving in Leiden and Tilburg, were also scarcely accessible to women. Official regulations against women barely existed in fact, but as an unwritten rule their exclusion was generally accepted – I shall come back to this point. For migrants, things were rather different, for rules explicitly excluding them did exist more often than not, although if individuals having the right skills also had enough money to buy themselves citizenship, they were allowed to join the guild. So it seems that structural segmentation of the labour market affected female workers much more than it did migrants, at least in the early modern period.

Another means of securing men's position in core professions was the possibility of them receiving formal training. I have shown that in Leiden and Tilburg, both within and outside the guild system, women right from the start of their work in the textile industry did not have the same access to formal training as boys and men did. Obviously, "skill" is partly a subjective criterion, for instance as measured by the number of years of formal training, regardless of whether such a duration is actually needed to learn the basics of a craft.

A third protective mechanism in times of economic change was the creation of new hierarchies in the organization of labour. When men were effectively forced on to the periphery by economic decline and by the rise

of capitalist relations, that circumstance obviously led to their proletarianization and with it the loss of independence and status. By defining their own work in relation to women's work, some men nevertheless managed to salvage their job status. In the Leiden cloth industry for example, only men became "master spinners", who were in effect subcontractors between drapers and wage-earning spinners. It was a means by which men tried to distinguish their work from women's, hoping to redefine it to higher-status "core" jobs. A clear example of this was the proletarianization of weaving, which occurred both in Leiden and Tilburg. Although the status of weaving declined in the context of the entire textile production process, it was still protected against the encroachment of women, so in relation to the work of women weaving remained more highly skilled and better paid, and again relatively speaking a core profession.

The split labour market theory predicts that employers will use the threat of cheap labour to undermine the position of better-paid workers. In order to keep wages low, employers can make use of cheap labour, confined to the peripheral professions. Women's work was often considered as additional to the family income although still necessary. Migrants were in the position that on entering the labour market, they would take on (however temporarily) almost any work for just about any wage. Therefore both these groups were likely sources of cheap labour.<sup>71</sup> Following this line of reasoning, it would be logical to suppose that in such circumstances more women would enter the market as cheap labour, but I have shown that things worked in precisely the opposite way. In fact, when the economy declined, more men entered such peripheral occupations as combing and spinning. In some cases, they even competitively displaced some women. Moreover, for women it became harder than ever before to enter core professions.

Pure economic reasoning does not suffice to explain these developments. Rather, it seems appropriate to apply the institutional approach of the dual labour market theory, which would see a counter-reaction in the labour market by established groups (i.e. male burghers). To prevent competition, men tried to protect certain parts of the labour market, by simply excluding outsiders. The *stability argument* no doubt plays an important role here: because men were considered to be breadwinners, their work had to be stable and fairly well paid. Again, it is important to emphasize the relationship with prevailing economic trends. When the economy flourished, restrictions might have been loosened, but when the economy declined, the reins were usually tightened. At such times exclusive reactions against women became much more likely. It even happened that previously female trades became guild-organized when men entered them, as occurred around 1700 in the case of the Leiden wool-

71. Bonacich, "Theory of Ethnic Antagonism", pp. 550–551.

combers' guild. Many of these combers were second-generation male migrants who, in preference to many of the women, were thought of as breadwinners. That such a thing could happen without much conflict might be explicable because the majority of women actually approved, for although 10 to 20 per cent of them never married, their exclusion favoured male and widowed female breadwinners.

The stability argument affected single women even more than it did strangers. Whereas some migrants were wanted for their specific skills, women's vocational training had usually been hampered ever since adolescence, as the data on child labour in Leiden and Tilburg show. Trades on the periphery were mostly low-skilled, although only relatively so, and of low status, certainly hardly able to provide any chance of social mobility. That was exactly the kind of work married women could leave and return to after giving birth and then raising their infants, a task practically confined to them. Because of it, they were considered too unreliable a workforce for more highly skilled work.<sup>72</sup> The stability argument also explains why some widows did manage to enter jobs of higher status. They were usually in a more stable stage of their life, often being past childbearing age. That meant they could guarantee the continuity of their labour. Although single women did not fit the pattern described here, their job opportunities depended on the segmented labour market founded upon these same ideals.

To conclude, labour-market segmentation in this period did not display a static but rather a dynamic pattern. Depending on the economic circumstances, accessibility to "core" and "periphery" occupations varied. Furthermore, the esteem in which trades were held changed over time, leading to different notions of job status, and then to different ideas of what constituted "core" and "periphery". Cities, employers, and ordinary working men made use of patriarchal and capitalist relations, often unintentionally, to regulate the labour market, especially when times were hard. Their means of legitimization lay in their need to safeguard an ideal of the male breadwinner. On the one hand, they could make sure that there was enough stable, well-paid work for part of the workforce, preferably male citizens, while, on the other hand, employers assured themselves of sufficient cheap workers in labour-intensive industries where labour was a large proportion of overhead costs. Women, not migrants, were the first to feel the consequences of economic hardship. Gender antagonism then, rather than class or ethnic differences, structured and reshaped the pre-industrial labour market in times of economic change.

72. Wolf and Rosenfeld, "Sex Structure of Occupations and Job Mobility", pp. 825 and 827.