4. **1610-1650: Buzz and Pipelines**

By 1660, the population and the physical space of Amsterdam, the third-largest town in Europe after London and Paris, had expanded dramatically. The city's population had increased from some 30,000 in 1580 to around 170,000 in 1650. In the early stages of growth, book production in the largest publishing centres had been dominated by just a handful of firms, but by the middle of the seventeenth century the number of publishers had increased significantly. As a result, the competitive context differed greatly from that in 1578, when Cornelis Claesz had first come to town. What did this mean for the Dutch book trade in general and Amsterdam's in particular? And how did the organization of production, especially geographic concentration and local specialization, facilitate or hamper its development?

In the previous chapter the qualitative improvements in Dutch book production have been interpreted as strategic responses to limitations on the demand side. New markets were reached as well as created through a series of process and product innovations that resulted in expansion of scale and scope of Dutch book production as well as quality improvement. The implicit assumption has been that the intensification of competition stimulated publishers to act quickly, provide up-to-date information, and to differentiate products through typographical changes and improvements. In this chapter I argue that competition indeed increased, but that there was more to the rise of Dutch book production than mere competitive pressure. Dutch publishers managed to reap the benefits of co-location while maintaining a sufficient distance from one another to allow for competition.

**A polycentric urban structure**

As illustrated in Figures 4.1 and 4.2, no single Dutch town had a monopoly position in book production. Amsterdam was by far the largest book centre, with Leiden a distant second. But with only one third of the total number of publishers in the Dutch Republic, Amsterdam was not a monopolist on the scale of London or Paris, or even sixteenth-century Antwerp. Estimates are that in seventeenth-century England, 75 per cent of the total number of people involved in book production worked in London. In France, book production was more dispersed, but increasingly Paris became the hub, housing 60 per cent of the country's printers.
between 1600 and 1640, a share that only further increased over the course of the century. Even Amsterdam’s predecessor Antwerp housed an estimated 60 per cent of publishers in the Northern and Southern Netherlands during the sixteenth century. The polycentric structure of Dutch book production can also be found in the spatial patterns of production of specific genres, such as almanacs. In other countries the
Table 4.1 Distribution of booksellers, titles, and non-ephemeral titles, 1610-1619 and 1650-1659

<table>
<thead>
<tr>
<th>1610-1619</th>
<th>Total booksellers**</th>
<th>Total titles</th>
<th>Non-eph. booksellers</th>
<th>% Total booksellers</th>
<th>% Titles</th>
<th>% Non-eph. titles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amsterdam</td>
<td>45</td>
<td>956</td>
<td>674</td>
<td>31.7</td>
<td>21.9</td>
<td>32.0</td>
</tr>
<tr>
<td>Leiden</td>
<td>20</td>
<td>712</td>
<td>442*</td>
<td>14.1</td>
<td>16.3</td>
<td>21.0</td>
</tr>
<tr>
<td>The Hague</td>
<td>4</td>
<td>321</td>
<td>58</td>
<td>2.8</td>
<td>7.4</td>
<td>2.8</td>
</tr>
<tr>
<td>Rotterdam</td>
<td>11</td>
<td>198</td>
<td>132</td>
<td>7.7</td>
<td>4.5</td>
<td>6.3</td>
</tr>
<tr>
<td>Utrecht</td>
<td>6</td>
<td>86</td>
<td>31</td>
<td>4.2</td>
<td>2.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Haarlem</td>
<td>5</td>
<td>105</td>
<td>76</td>
<td>3.5</td>
<td>2.4</td>
<td>3.6</td>
</tr>
<tr>
<td>Delft</td>
<td>7</td>
<td>127</td>
<td>78</td>
<td>4.9</td>
<td>2.9</td>
<td>3.7</td>
</tr>
<tr>
<td>Dordrecht</td>
<td>8</td>
<td>117</td>
<td>71</td>
<td>5.6</td>
<td>2.7</td>
<td>3.4</td>
</tr>
<tr>
<td>Middelburg</td>
<td>4</td>
<td>112</td>
<td>64</td>
<td>2.8</td>
<td>2.6</td>
<td>3.0</td>
</tr>
<tr>
<td>Groningen</td>
<td>2</td>
<td>96</td>
<td>19*</td>
<td>1.4</td>
<td>2.2</td>
<td>0.9</td>
</tr>
<tr>
<td>Franeker</td>
<td>4</td>
<td>154</td>
<td>61*</td>
<td>2.8</td>
<td>3.5</td>
<td>2.9</td>
</tr>
<tr>
<td>Alkmaar</td>
<td>1</td>
<td>15</td>
<td>6</td>
<td>0.7</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>Zwolle</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>0.7</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>s.n., s.l.</td>
<td>-</td>
<td>836</td>
<td>211</td>
<td>-</td>
<td>19.2</td>
<td>10.0</td>
</tr>
<tr>
<td>Rest</td>
<td>24</td>
<td>518</td>
<td>179</td>
<td>16.9</td>
<td>11.9</td>
<td>8.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>144</strong></td>
<td><strong>4356</strong></td>
<td><strong>2105</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1650-1659</th>
<th>Total booksellers**</th>
<th>Total titles</th>
<th>Non-eph. booksellers</th>
<th>% Total booksellers</th>
<th>% Titles</th>
<th>% Non-eph. titles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amsterdam</td>
<td>116</td>
<td>2219</td>
<td>1950</td>
<td>34.9</td>
<td>28.6</td>
<td>49.5</td>
</tr>
<tr>
<td>Leiden</td>
<td>33</td>
<td>1240</td>
<td>520*</td>
<td>9.9</td>
<td>16</td>
<td>13.2</td>
</tr>
<tr>
<td>The Hague</td>
<td>19</td>
<td>741</td>
<td>216</td>
<td>5.7</td>
<td>9.6</td>
<td>5.5</td>
</tr>
<tr>
<td>Rotterdam</td>
<td>17</td>
<td>251</td>
<td>145</td>
<td>5.1</td>
<td>3.2</td>
<td>3.7</td>
</tr>
<tr>
<td>Utrecht</td>
<td>21</td>
<td>671</td>
<td>235*</td>
<td>6</td>
<td>8.7</td>
<td>6</td>
</tr>
<tr>
<td>Haarlem</td>
<td>10</td>
<td>93</td>
<td>61</td>
<td>3</td>
<td>1.2</td>
<td>1.5</td>
</tr>
<tr>
<td>Delft</td>
<td>10</td>
<td>79</td>
<td>45</td>
<td>3</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>Dordrecht</td>
<td>14</td>
<td>194</td>
<td>150</td>
<td>4.2</td>
<td>2.5</td>
<td>3.8</td>
</tr>
<tr>
<td>Middelburg</td>
<td>11</td>
<td>123</td>
<td>49</td>
<td>3.3</td>
<td>1.6</td>
<td>1.2</td>
</tr>
<tr>
<td>Groningen</td>
<td>8</td>
<td>295</td>
<td>99*</td>
<td>2.4</td>
<td>3.8</td>
<td>2.5</td>
</tr>
<tr>
<td>Franeker</td>
<td>3</td>
<td>141</td>
<td>86*</td>
<td>0.9</td>
<td>1.8</td>
<td>2.2</td>
</tr>
<tr>
<td>Alkmaar</td>
<td>4</td>
<td>28</td>
<td>22</td>
<td>1.2</td>
<td>0.4</td>
<td>0.6</td>
</tr>
<tr>
<td>Zwolle</td>
<td>1</td>
<td>7</td>
<td>2</td>
<td>0.3</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>s.n., s.l.</td>
<td>-</td>
<td>1133</td>
<td>236</td>
<td>-</td>
<td>14.6</td>
<td>6.0</td>
</tr>
<tr>
<td>Rest</td>
<td>73</td>
<td>532</td>
<td>124</td>
<td>22</td>
<td>6.9</td>
<td>3.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>340</strong></td>
<td><strong>7747</strong></td>
<td><strong>3940</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Thesaurus; STCN accessed 4 August 2011; * excluding academic texts; ** average number of booksellers per year in decade.
production and selling of almanacs was never limited to just one centre, but nowhere was it as decentralized as in the Dutch Republic.

Even when a distinction is made between production and distribution, the position of Amsterdam does not come close to that of its foreign counterparts during the first decades of the seventeenth century. Here, all publishers are assumed to be booksellers, and therefore their number can serve as a proxy for distribution, whereas title count is a proxy for production (Table 4.1). Although the relative importance of Amsterdam increases when we consider title production instead of the number of booksellers, production was still relatively dispersed. Over time, though, production became increasingly concentrated in Amsterdam, and the differences between patterns in production and distribution amplified. To assess the importance of different towns in terms of the weight of local book production, a second distinction is made between ephemeral prints and books, by counting the categories of period documents, state publications, academic texts, and occasional publications as examples of the former. This shows that during the first half of the seventeenth century, Amsterdam's share in non-ephemeral titles in particular increased substantially, up to half of total production.

Although production was relatively dispersed, connections between colleagues and competitors from different towns were prolific. In the words of Michael Montias, ‘The scope of the printing, binding, and book distribution business clearly transcended the boundaries of individual cities.’ In fact, during the growth phase of Dutch book production, relations between printers and publishers in different towns only intensified. Fragmented evidence from the STCN and data in the form of lists of debtors and collaborations indicate many connections between booksellers and colleagues in different towns. For example, the network of Broer Jansz in Amsterdam, one of the most important almanac publishers, included a network of nineteen booksellers in Amsterdam, three in The Hague, one in Leiden, and one in Haarlem. The geographic network of his successors, Gillis Joosten Saeghman and Jan Jacobsz Bouman, was much more extensive, as it included not just three, but as many as eleven towns.

Booksellers in more peripheral towns like Leeuwarden and Groningen often functioned as distributors. Leeuwarden bookseller Tjerck Claesz, for instance, received many books and pamphlets, especially from Amsterdam, on a regular and rapid basis. Within these distribution networks, information flows played a crucial role. Newspaper advertisements functioned as devices to inform booksellers and customers about the books on offer from other locations. In the newspaper published by Amsterdam-based Jan van Hilten,
for instance, colleagues from Delft, The Hague, Utrecht, Haarlem, Leeuwarden, Leiden, Middelburg, Dordrecht, and Arnhem advertised their work. Eventually the Opregte Haerlemse Courant would become the most significant place for advertisements. A survey of 887 advertisements for new books and 431 advertisements for book auctions published in this newspaper between 1658 and 1675 shows that half of all advertisements related to the book trade and 15 per cent of book trade advertisements related specifically to book auctions.10

Another method of exchanging information between booksellers was through catalogues, especially the Catalogus Universalis. This catalogue, essentially a publishers’ biannual (later annual) compiled by Broer Jansz, was first published in 1639 under the subtitle Een Vertoogh van de meeste Boecken in dese Vereenighde Nederlanden, ofte gantsch nieuw, ofte verbetert ende vermeerderd, ghedruckt ende uytgegeven zijn (‘Account of the majority of new, improved, or augmented books printed and published in the Dutch Republic’).11 Its purpose was to present a list of all new titles published in the Dutch Republic. In collecting his records, Jansz was dependent on the publishers themselves to supply him with the correct information. Although the Catalogus Universalis may not be complete, it provides a relatively good representation of what was published throughout the Republic.12 Through the annual catalogue, we encounter works originating from 41 towns, 32 of which were located in the Dutch Republic. Of the 243 named printers and booksellers based in the Republic, 47 per cent (115) were located in Amsterdam, 10 per cent in Leiden (25), and c.5 per cent in the towns of Utrecht (11), Dordrecht (14), and The Hague (9).

The geographic dispersal of production and the advanced opportunities for book distribution should be understood within the framework of the country’s urban structure.13 Dutch towns were not very large, Amsterdam being the exception with 200,000 inhabitants around the middle of the seventeenth century, but they were numerous. As the Dutch Republic was fairly small, this resulted in a high population density, even in rural areas. The Dutch Republic had the highest urbanization rates in Europe. Early in the sixteenth century, Holland already had a remarkable 45 per cent urbanization rate, and by 1650 this stood even higher, at around 60 per cent.14 In other provinces of the Dutch Republic, the rate lingered at around 25 per cent. Still, one was never far from the next town, and during the seventeenth century the urban network only became further integrated due to innovations in transport infrastructure.15

The development of the barges (trekschuiten) network in particular was a major feature of the Dutch economy as it led to significant improvements in transportation compared to the existing alternative mode, the horse-drawn
coach. In comparison, stagecoaches were much more expensive, less comfortable, and their schedules were more difficult to maintain. Between 1632 and 1667, a system of passenger transportation by horse-towed barges was developed along a network of canals. Regular passenger services were maintained on routes in Holland, and later in Friesland and Groningen. By the middle of the century there were four networks, not yet fully integrated, but between 1656 and 1665 these merged into two – Holland-Utrecht and Groningen-Friesland – which connected some thirty towns. The barges generally ran either hourly or at least nine times per day and were relatively fast. One could travel, for instance, from Rotterdam to Delft in under two hours and from Rotterdam to Leiden in three hours.

Due to high levels of urbanization, the polycentric urban structure, and the well-developed transport options, the domestic market for books and the organization of book production and distribution were well integrated. Improvements in the field of book distribution further strengthened this integration, and consequently market growth. Even though production was concentrated in specific towns, in terms of distribution the Dutch book sector was certainly strongly polycentric. At the same time, the specializations and geographic concentrations revealed in the previous chapters were reinforced over time, with Amsterdam as a permanent and increasingly strong magnet for publishers. This strengthened competitive pressure in the book market.
Local competition

In many seminal works on printing, the lack of competition in French and English book production is considered an important cause of the overall low quality of printing in Europe during the seventeenth century. If lack of competition checked quality in these countries, could the reverse have been true for the Dutch Republic? Anecdotal examples of rivalry and competition between Amsterdam publishers are not difficult to come by. In the case of maps and globes production, for instance, the continuous product and process improvements can at least partly be ascribed to the famous rivalry between the Blaeu firm and the Janssonius-Hondius tandem. Publishers such as Blaeu and contemporaries all copied and adapted novel successful concepts introduced by others, and this surely increased the scale of production and

**Fig. 4.3 Entry rates, exit rates, turbulence rates, and number of newcomers (semi-log scale), per year in Amsterdam, 1580-1700 (clockwise)**

![Graph showing entry rates, exit rates, turbulence rates, and number of newcomers per year in Amsterdam, 1580-1700.](image)

Source: Thesaurus
intensified product differentiation and perhaps also quality of the printing. But such examples can be found for all places and periods. In order to more systematically map and analyse changes in the levels of competition, measures developed in empirical studies in the field of economics will be used.

**Survival rates and the threat of new entrants**

In this section, the measures of entry and exit rates are employed to assess changes in the structure of the Amsterdam book industry. Economic studies have shown that entry and exit rates can differ significantly across industries, and that they also change during the course of an industry’s life cycle. Higher levels of entry and exit rates tend to occur in emerging or growing industries, or in industries undergoing rapid structural change. Upon entering a market, new competitors may challenge market shares and profitability of incumbents if consumer demand does not increase concomitantly. In general, an attractive industry is characterized not only by high entry rates but also by high exit rates and accordingly also a relatively high turbulence rate. Waves of new entrants – whether they are bringing innovative and more competitive products to the market or simply trying their luck – tend to lead to large waves of exits, mainly of competitors whose abilities lie at the fringe of their industry.

Figure 4.3 presents the number of newcomers as well as entry, exit, and turbulence rates between 1580 and 1700. Between c.1610 and c.1640 the number of newcomers in Amsterdam was relatively stable, at only a handful a year. Hereafter the trend intensifies, but the rapid increase in the number of publishers in the 1640s can be partly explained by a large number of publishers who were only listed as active in a single year (so-called one-year hits). To illustrate this, the figure shows results for three samples: a sample including the one-year hits, one excluding them, and another one including only half of them. Even when the category of one-year hits is omitted in its entirety, the number of entrants still doubled, pointing to a dynamic industry.

However, to interpret the impact of the number of newcomers, the size of the industry also needs to be taken into account. Here the measure of entry rates can be applied: the share of newcomers in a certain year divided by the total number of active firms active in that year. The exit rate is the share of firms that ceased production in a certain year, divided by the total number of firms active in that year. The turbulence rate is the sum of entry and exit rates. The surges in these rates suggest that the level of competition increased, especially by the middle of the century.
Another measure of competitive pressure is that of survival rates of firms. In Figure 4.4 the probability of new firms, starting in specific decades, surviving for more than five or ten years is charted. Until c.1660, survival chances declined significantly. Because these survival rates are strongly influenced by the occurrence of firms that fail in their first year, the survival chances of new firms starting by decade were again estimated in several ways: including all one-year hits, including half, including a quarter, excluding none, and excluding all firms that did not make it past four years. For the sake of clarity only the samples with half of the one-year hits are included in Figure 4.4, but in all the above-mentioned samples the trend declined over time. This suggests that the impact of competition not only affected fortune-seekers attracted by a booming industry, but that Amsterdam publishers who managed to establish a company also found it more difficult to build a career. However, in order to interpret the impact and mechanisms of these more general changes in industrial structure, more specific measures such as firm size and specialization.

**Fig. 4.4** Five and ten year survival chances of new Amsterdam-based firms in their commencement decade, 1590-1700

Source: Thesaurus
should also be considered. Competitive pressure could, for instance, have also increased due to the similarities between the firms in terms of size and specialization.

**Firm size**

Obviously, there were large differences in the number of publications attributed to individual firms. Some firms were very large while others were minor players, and some were active in the international book trade whereas others focused on local markets. The performance of individual firms in terms of economic or cultural impact is difficult to assess in the absence of business archives and book-historical rankings such as the ones that exist in the field of art history.21 Though some names are world-renowned, such as Blaeu or Elsevier, and their oeuvres well charted, the number of existing studies on individual publishers is insufficient to develop measures of book-historical appreciation.

Instead, an alternative measure will be used: firm productivity as defined by number and type of book titles per firm according to the STCN. The measure is estimated by linking names of publishers to the number of titles they produced. In order to get a sense of how the size of Amsterdam publishing firms developed over time, we look at the output per firm for four benchmark years (Table 4.2). Admittedly, this does not allow for measuring market impact or cultural importance. Large firms are not by definition more innovative or differentiated, and therefore the quantitative studies will be accompanied by more detailed qualitative analyses. Between 1600 and 1674, the median number of titles produced per Amsterdam publisher doubled despite the rapid increase in the number of competitors. The average, although higher in absolute terms, shows a more modest growth pattern.

**Table 4.2 Output per firm active in Amsterdam 1585, 1600, 1630, 1674**

<table>
<thead>
<tr>
<th>Year</th>
<th>1585</th>
<th>1600</th>
<th>1630</th>
<th>1674</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-titles</td>
<td>556</td>
<td>1060</td>
<td>3759</td>
<td>7761</td>
</tr>
<tr>
<td>N-publisher</td>
<td>8</td>
<td>22</td>
<td>57</td>
<td>114</td>
</tr>
<tr>
<td>Maximum N titles per publisher</td>
<td>303</td>
<td>303</td>
<td>498</td>
<td>617</td>
</tr>
<tr>
<td>Average N titles per publisher</td>
<td>70</td>
<td>49</td>
<td>66</td>
<td>68</td>
</tr>
<tr>
<td>Median N titles per publisher</td>
<td>30</td>
<td>16</td>
<td>21</td>
<td>33</td>
</tr>
</tbody>
</table>

Source: Thesaurus; STCN, accessed accessed 20 June 2011
Table 4.3  Distribution of Amsterdam publishers according to size, 1585, 1600, 1630, 1674

<table>
<thead>
<tr>
<th>%</th>
<th>1585</th>
<th>1600</th>
<th>1630</th>
<th>1674</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major (&gt;99 titles)</td>
<td>12.1</td>
<td>9.1</td>
<td>15.8</td>
<td>17.5</td>
</tr>
<tr>
<td>Large (50-99 titles)</td>
<td>25</td>
<td>18.2</td>
<td>17.5</td>
<td>16.7</td>
</tr>
<tr>
<td>Intermediate (20-49 titles)</td>
<td>12.5</td>
<td>18.2</td>
<td>19.3</td>
<td>35.1</td>
</tr>
<tr>
<td>Minor (6-19 titles)</td>
<td>25</td>
<td>22.7</td>
<td>26.3</td>
<td>17.5</td>
</tr>
<tr>
<td>Occasional (1-5 titles)</td>
<td>25</td>
<td>31.8</td>
<td>19.3</td>
<td>13.2</td>
</tr>
<tr>
<td>Total (N)</td>
<td>8</td>
<td>22</td>
<td>57</td>
<td>114</td>
</tr>
</tbody>
</table>

Source: STCN; Thesaurus.

In Table 4.3 the structure of the Amsterdam book industry is further analysed according to firm size as measured by the number of titles published throughout a publisher’s career. A distinction is made between major (≥100 titles), large (50-99 titles), medium (20-49 titles), small (6-19 titles), and occasional publishers (1-5 titles). This chart reveals several changes in composition over the years. Around 1600, the share of publishers in each category was relatively equally distributed, but the major firms grew increasingly large, doubling their share. The occasional publishers’ share decreased significantly, first to the benefit of minor firms, and then, after 1631, to the advantage of intermediate firms. This trend suggests that the playing field in book publishing became increasingly level throughout the century, an observation that can be further examined by means of another measure designed to estimate competition levels within local industries: the industry concentration ratio.22

Industry concentration

The industry concentration ratio refers to the market share of the leading firms within an industry, generally the four or eight largest in the industry. If the concentration ratio of the top four firms is smaller than 40 per cent, the industry is considered to be very competitive because no one firm controls a majority share of the market. This measure, however, does not show the distribution of firm size or the changes in the market share between firms. For example, a 60 per cent concentration ratio may denote that one firm held 50 per cent and two others 5 per cent each, but it could also indicate that all three firms held a market share of 20 per cent each. To account for this, a second measure, the Herfindahl-Hirschman Index (HHI), is added. The HHI reflects the market shares of all firms, squared to place more...
weight on larger firms, and it ranges from zero (perfect competition) to one (monopoly).

### Table 4.4 Concentration indices Amsterdam 1585, 1600, 1630, 1674

<table>
<thead>
<tr>
<th>Year</th>
<th>1585</th>
<th>1600</th>
<th>1630</th>
<th>1674</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-titles</td>
<td>556</td>
<td>1079</td>
<td>3759</td>
<td>7761</td>
</tr>
<tr>
<td>N-publishers</td>
<td>8</td>
<td>22</td>
<td>57</td>
<td>114</td>
</tr>
<tr>
<td>Total $C_4$</td>
<td>523</td>
<td>711</td>
<td>1394</td>
<td>1974</td>
</tr>
<tr>
<td>Total $C_8$</td>
<td>556</td>
<td>934</td>
<td>2290</td>
<td>3137</td>
</tr>
<tr>
<td>Share $C_4$</td>
<td>0.94</td>
<td>0.66</td>
<td>0.37</td>
<td>0.25</td>
</tr>
<tr>
<td>Share $C_8$</td>
<td>1.00</td>
<td>0.87</td>
<td>0.61</td>
<td>0.40</td>
</tr>
<tr>
<td>HHI</td>
<td>0.35</td>
<td>0.15</td>
<td>0.06</td>
<td>0.03</td>
</tr>
</tbody>
</table>

Source: Thesaurus; STCN, accessed 20 June 2011. Estimates based on number of titles produced during the publisher’s career.

In order to estimate the concentration ratio, data from the STCN (number of titles produced per year) and the Thesaurus (number of active publishers per year) was used. The figures are based on the number of titles produced by Amsterdam publishers active in a certain year, throughout their entire career. Table 4.4 shows market concentration ratios for the largest four and eight producers ($C_4$, $C_8$) for the years 1585, 1600, 1630, and 1674. The increase in the number of active producers went hand in hand with a decreasing industrial concentration. The HHI for the Amsterdam book trade further confirms that the competitive pressure increased significantly during the seventeenth century. It is also possible to estimate concentration in production in any given year. Viewing all Amsterdam publications over three benchmark years – 1610, 1630, and 1674 –, the $C_4$ declined from 53 per cent in 1610 to 32 per cent in 1674 and the $C_8$ from 74 to 47 per cent over the same period. These figures confirm the increase in competitive pressure during the seventeenth century while at the same time showing how the Amsterdam book industry was characterized by an increasingly polycentric structure.

### Financial status

The observed changes in the industrial structure are corroborated by another source: tax registers. Estimates of wealth can be derived from tax registers; in our case, the 200th penny tax, charged in 1631 and 1674, which had a minimum wealth requirement of $1,000. About half of the publishers active in Amsterdam in 1631 and 1674 were identified in the
ledgers. Between these sample years, booksellers’ median wealth decreased from f6,000 to f4,000, and their average wealth from f9,350 to f7,016. A contemporary wealth classification allows us to compare the relative importance of different wealth groups in the book trade during the seventeenth century.

In Dutch tax collection in the seventeenth century, a distinction was made between ‘capitalists’, with more than f3,000 of taxable wealth, and ‘half-capitalists’, who held between f1,000 and f3,000 of taxable wealth. In 1641, the State considered, but did not pass, the motion for a third group: ‘super-capitalists’, who were estimated to be worth more than f10,000. When the 1631 and 1674 taxes are compared, it becomes apparent that the share of half-capitalist booksellers increased from 15 to almost 40 per cent. Of the twenty publishers identified in 1631, nine had an estimated wealth of f10,000 or more, and only three were taxed as half-capitalists. For 1674, estimates were found for 94 publishers. Twenty had an estimated income of f10,000 or more, and 35 publishers were assessed as half-capitalists. Although the number of super-capitalist publishers increased, their share diminished, whereas the share of capitalist publishers remained roughly the same.

If these wealth estimates are any indication of the income publishers derived from publishing, they corroborate the increasing importance of a sizable group of middle-sized producers during the seventeenth century. The existence of this large middle group of firms, of roughly equal size, may have added to the already high competitive pressure. It also testifies to a relatively open production system with room for small, large, and middle-sized firms. Still, the observed increase in competitive pressure according to both the HHI and concentration indices does not necessarily mean that rivalry between publishers intensified.

Rivalry

In theory, all publishers were competitors, but not all of them were rivals. For example, a producer of Bibles had little to fear from publishers of pamphlets and ordinances. Although they are often used interchangeably, competition and rivalry are not synonymous. The term competition refers to firms that depend on the same resources, in this case any book producer. Rivalry can be defined as direct competition, as an individual firm’s conscious behaviour towards other firms operating within the same market. In the book-historical literature we find many references to such direct competition between publishers, the most renowned example being the rivalry of neighbours Willem Jansz Blaeu and the Hondius-Janssonius dynasty.
The Hondius-Janssonius tandem was, however, not the only one challenging Blaeu. In 1632, Jacob Aertsz Colom published his own nautical manual *De Vyerige Colom* in which he proceeded to demonstrate and correct the perceived mistakes in the previous (i.e. Blaeu’s) manual.\(^{27}\) In other genres too, the scale, scope, and quality of illustrations rapidly evolved through competition.\(^{28}\) In 1615, Blaeu had, for instance, published all of Heinsius’s emblems, including some poems in a smaller format, for which the Van der Passe firm had adapted the plates to scale. When, in 1617, the latter decided to publish a similar work in the same size and format, Blaeu in turn responded quickly. Within a year, he published two books in the same format, with new plates by Michel Le Blon. In that same year, the Van der Passe firm published an adapted and expanded version of *Tronus Cupidinis*, increasing the number of emblems from thirty-one to eighty.\(^{29}\)

| Table 4.5 Concentration indices Amsterdam per genre 1600-1609, 1650-1659 |
|-----------------|-----------------|-----------------|-----------------|-----------------|
| Period          | 1600-1609       | 1650-1659       | 1600-1609       | 1650-1659       |
| Genre           | Dutch language and literature | Geography | Dutch language and literature | Geography |
| N-titles        | 31              | 311             | 46              | 143             |
| N-publishers    | 15              | 70              | 6               | 28              |
| Total C\(_d\)  | 13              | 99              | 44              | 68              |
| Total C\(_b\)  | 23              | 147             | -               | 92              |
| Share C\(_d\)  | 0.42            | 0.32            | 0.96            | 0.48            |
| Share C\(_b\)  | 0.74            | 0.47            | -               | 0.64            |
| HHI            | 0.08            | 0.04            | 0.66            | 0.08            |

Source: Thesaurus; STCN accessed 20 June 2011. Estimates based on number of titles produced in Amsterdam per decade, per genre.

In order to get a better sense of the levels of direct competition beyond anecdotal evidence, concentration ratios were calculated for specific genres on the basis of the STCN and the Thesaurus. Table 4.5 lists the results for the number of titles published in Amsterdam in the genres of poetry (Dutch language and literature) and geography (including maps, charts, atlases, and travel journals) during the end of the emergence phase (1600-1609) and the end of the growth phase (1650-1659). Both general trends and the available examples leave little doubt regarding the increase in competitive pressure in Amsterdam publishing between 1585 and 1674.\(^{30}\) The decline in concentration is significant for both genres but especially for geographical publications. These measures do not pretend to capture the full extent
of rivalry, as not all publishers active in these genres catered to the same demand groups. They could differentiate their products and niches, for example, by price or by language.\textsuperscript{31} Research on political pamphlets for instance has shown how competitive pressure increased in the market for that subgenre throughout the century. There were still major players that dominated production, but the cumulative impact of their smaller competitors was impressive.\textsuperscript{32}

**Guild regulations**

Finally, we turn to a more qualitative indicator of competition and rivalry. Analysis of local guild regulations suggests that levels of competition increased during the first half of the seventeenth century. In general, the rapid expansion of the industry fuelled the need for regulation that was tailored specifically to book production, but the timing and content of such regulations suggest that they came especially in response to increasing competition. In most Dutch towns, booksellers were originally members of craft guilds that encompassed a whole range of related economic activities, such as saddlers' guilds, or the more artistically oriented Guilds of St. Luke. Where booksellers were not organized in their own guild, they remained in the local Guild of St. Luke or, as in Utrecht, in the saddlers' guild.\textsuperscript{33}

During the seventeenth century, independent booksellers' guilds were established.\textsuperscript{34} On closer inspection, the dates upon which independent booksellers' guilds were established reveal that distinct phases in the life cycle of the Dutch book trade coincided with the establishment of booksellers' guilds. We can discern two phases. The first phase took place around the turn of the seventeenth century, when guilds were established in Middelburg in 1590, Utrecht in 1599, and Haarlem in 1616. The second phase set in when growth rates were already declining and was marked by the establishment of independent booksellers' guilds in the larger book production centres of Leiden in 1651, Amsterdam in 1662, Rotterdam in 1699, and The Hague in 1702. These will be discussed in chapters on the next phase in the life cycle of Dutch book production. Interestingly, a comparable phase of independent guild establishment around 1600 has also been observed for painters and interpreted as a reaction to the threat of imports from the Southern Netherlands following The Twelve Years Truce.\textsuperscript{35} Although the chronology of the first round of booksellers' guilds does not bear a clear relationship link to the protection of local traders against the import of Southern Netherlandish products, a comparable motive can be identified. Local entrepreneurs pushing for independent guilds aimed to restrict
competition, particularly from non-booksellers and non-local booksellers. This can be illustrated by a closer look at the concerns of Amsterdam printers active in the 1610s.

In 1579 in Amsterdam, the Guild of St. Luke separated from other trades to deal exclusively with the visual arts. The members included painters, tapestry makers, embroiderers, and engravers. Booksellers and binders were also included because it was considered that they too worked with brushes (*penseel en quast*). Printers, on the other hand, were not full members, and until the establishment of the booksellers’ guild in 1662, they were neither restricted nor protected. In 1616, a group of Amsterdam printers requested guild status, stressing the need for regulation in their trade. The printers, probably inspired by recent developments in Haarlem, attempted to organize themselves, along with booksellers and binders, into one guild. In the end, the request was turned down. Booksellers and binders remained within the Guild of St. Luke, and printers operated largely outside the corporate structure. The draft regulations of ten articles, addressed to the Amsterdam magistrate, however, still provide insight into the motives behind the request and the practices of the Amsterdam book trade.

The first proposed article was aimed at prohibiting booksellers from having their books printed outside Amsterdam without first consulting Amsterdam printers. Only if the books in question could not be printed to

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**Image 4.1 View on Dam Square in Amsterdam, 1654, Jacob van der Ulft**

Source: Rijksmuseum, Amsterdam
the same standard for a reasonable price in Amsterdam would booksellers be allowed to outsource printing to printers in other towns. In that case they would not be permitted to use 'Amsterdam' on the title page. Articles 2 to 5 suggest that booksellers and printers were, up to this point, also competing with one another: booksellers took printing jobs, and printers were paid in books that they, in turn, had to sell. An attempt to make a more clear-cut distinction between booksellers and printers can be detected in article 4, which stipulates that master printers were not allowed to receive payment for their work in the form of books. Booksellers and binders would be fined if they took printing jobs (article 2), and non-printers would not be allowed to print (article 3). Article 5 stated that printers should not print any more copies than the client had ordered.

The conditions for becoming a member were specified in articles 6, 7, 8, and 10. Printers from outside Amsterdam would not be allowed to set up a print shop within the town's limits, unless they had already worked in an Amsterdam print shop for two consecutive years. Apprentices could not establish their own shop either, unless they trained with an Amsterdam master for four years and completed a master test. Master printers would not be permitted to employ more than two apprentices at any one time. Article 9 proposed that two booksellers or bookbinders and one printer would be elected as deans. The draft regulations suggest that Amsterdam printers were experiencing competitive pressure from varying sides. They were fixed on strengthening their position vis-à-vis booksellers, outsiders, and non-printers. Experiencing competition from both outside and inside their market, they attempted to increase the entry restrictions and gain a monopoly on local print jobs. In the end, however, they failed, and as we will see below, printing and bookselling in Amsterdam, as well as in the other book centres of Leiden and The Hague, remained relatively unregulated during the growth phase, up until the middle of the seventeenth century.

Openness and embeddedness

The competitive structure of the Dutch book industry on both country and city level suggests a relatively open production system. But how open was local industrial organization and did this change over time? And what were the consequences for patterns of specialization and concentration? In the case of early modern cultural industries like book publishing, restrictions on entry were mainly imposed by local guilds. Guilds could, moreover,
influence the intensity of competition in several ways. They could limit the number of producers allowed in a local industry; they could regulate entry through the level of the entry fees and the requirements for becoming a member; and they could administer the reproduction of skills and routines through the system of apprenticeships.

In other countries, edicts and acts had a direct influence on the number of new industry entrants. The English 1662 Licensing Act, for example, restricted the number of printers, founders, and presses as well as the location in which presses could operate. In Paris too, several edicts were issued that limited the number of master printers. As a result, during the second half of the seventeenth century, the French book trade, especially in Paris, became characterized by large printing houses and an oligarchy of masters. In the Dutch Republic, such direct entry barriers were notably absent. There were no limitations on the number of guild members, and entry seems to have been fairly easy provided one could pay the membership fees. Entry fees ranged from 5 to 8, depending on the town and whether or not the applicant was a local. In Utrecht in 1599, the entry fee was 5, which increased to 6 in 1663. In Haarlem it was 6 and 3 for burgheers' sons, and in Amsterdam the fee was 7.10 and 4.10 respectively. Even at the time, these were relatively modest sums, corresponding to the earnings of a skilled labourer for a week's work. Locals were favoured over foreigners, and in all towns except Utrecht, sons and sons-in-law of masters received discounts on their fee and sometimes in the duration of their apprenticeship.

The Amsterdam magistrate, as well as the guild itself, was relatively lenient towards the participation of minorities. Catholic booksellers experienced little hindrance from their religious conviction. All known Catholic book producers were included in the Amsterdam Guild of St. Luke and later in the booksellers' guild. In terms of issuing privileges on conflicts, contracts, and requests, they were on a par with their Protestant colleagues, although it should be noted that no Catholic book producer was ever elected as dean. Jewish book producers had more difficulties breaking into the market. In 1632 the town council amended the 1616 terms of admission for Jews as citizens, in which the economic activities of Jews became strictly regulated: they were not allowed to sell goods in official shops, nor engage in trades and crafts which were organized in guilds. In 1640, Menasseh ben Israel's request to open a Hebrew bookstore was refused. Even though Jewish printer Joseph Athias entered the Guild of St. Luke on 24 March 1661, followed by other Jewish printers, they were not entitled to relief in
the case of illness or death, nor would their memberships pass on to future generations.⁴³

Although there were limits to guild openness and equality, printing and publishing activities in the largest book production towns were largely unregulated until the middle of the century. In Amsterdam, the relative importance of booksellers in the Guilds of St. Luke seems to have increased as the book trade expanded. Three years after the failed attempt at establishing their own guild in Amsterdam, booksellers obtained the right to elect one of the deans, and from 1633 onwards they were able to elect a second, out of a total of eight. Their influence is, however, not strongly reflected in guild regulation, as very few guild ordinances explicitly deal with bookselling or publishing. In The Hague, where booksellers were also members of the artists' guild, there was little explicit regulation concerning the book trade, or, when compared to painters, a strict administration of the fees or apprentices of binders or printers.⁴⁴ In Leiden, book production was not included in a guild at all. In most towns, aspiring booksellers had to meet certain requirements before they could enter the local book trade, but in general, these requirements were fairly relaxed. Formal entry restrictions were relatively low and scarcely constrained competition, and once established, local producers and traders encountered relatively few regulations.⁴⁵ As a result, it was relatively easy to become a master printer or bookseller in the Dutch Republic, especially in the larger centres of production.

Labour markets

A second element in explaining patterns of concentration and specialization is the reproduction of skills and knowledge. In Chapter 2, we saw how during the phase of emergence, local availability of specific printing skills and knowledge was initially limited, and how the foreign influx of skills and knowledge stimulated the development of local book industries. We also saw, though, how advanced printing skills were still relatively scarce during this first stage of Golden Age book production. Fifty years later, the number of Dutch printing firms had increased significantly, and Dutch printing in general had acquired world fame. By 1664 the German author Philipp von Zesen counted some forty large and small print shops in Amsterdam alone, and these included the best in the country.⁴⁶

In order to improve and sustain growth rates, printers and publishers had to transfer these resources across generations. The size and quality of the local labour force can be ensured or improved in two ways: by immigration (exogenous) or by reproducing skills locally (endogenous). Clearly
the expansion in book production through the first phase had relied on the former. In the growth phase, an increasing percentage of printers and publishers were born and trained within the Dutch Republic. Cornelis Claesz, at times referred to as an institution of higher learning in his own right, trained at least seven apprentices, all of whom stayed in Amsterdam and became important members of the local publishing and printing industry. And whereas in 1600 the share of locally born producers active in Amsterdam was 11 per cent, in 1630 it had increased to 40 per cent, and by 1674 it had reached 55 per cent. In fact, by 1674 hardly any of Amsterdam’s producers were born in other countries.

This may seem in conflict with Jan Luiten van Zanden’s estimate that about half the bookbinders and printers found in marriage banns between 1601 and 1700 were immigrants. Erika Kuijpers has estimated that among the bookbinders and printers in Lutheran membership registers between 1626 and 1640, 60 per cent were from outside the Republic and only 13 per cent from Amsterdam. The difference between the findings from the sample years and those from the marriage banns can probably be explained by the fact that the prosopography does not include data on the total workforce but only concerns independent printers and publishers. The larger workforce, including binders and typesetters, probably still depended to a large extent on immigrants, but further up the hierarchical ladder, the positions of publisher and printer were filled locally. The fact that an increasing share of active producers in Amsterdam was also born there suggests that they were trained locally and that skills and routines were reproduced locally. The exact structure of training and the way flexible labour was implemented in the Dutch book trade unfortunately remains somewhat of a mystery.

In early modern Europe, an apprenticeship was one of the most important means of acquiring occupational training. It could take place at home or in the shop of an established craftsman, on the basis of an oral or written contract between a master and the family of the apprentice. Such a contract generally stipulated details on the term, the payment, consequences of contractual breaches, but sometimes also on boarding, lodging, clothing, and leisure. In addition to these private arrangements, local institutions such as guilds could oversee the training process. There are no studies on apprenticeships or on the role of guilds in the training of publishers, printers, and booksellers. Since there is no evidence to suggest the use of manuals during this period, it is safe to say that the transfer of bookselling, binding, and printing skills and knowledge took place face to face on the shop floor. Although the paper trail is thin, two types of sources – guild
ordinances and notarial contracts – can provide some insight into the processes of training. Training was organized through the apprenticeship framework, and basic apprenticeship terms were laid down in local guild ordinances and in private contracts.

The role of the guild in the transfer of knowledge and skills has been subject to debate. According to Steven Epstein, a guild’s involvement could serve as a guarantee to recoup investments. Both on the side of the master craftsman and the apprentice, the expectation that they could reclaim their investments had to exist. Other scholars however, in a more critical stance towards guilds, generally view guild-regulated apprenticeships as an entry barrier, arguing that the fee paid by the newcomer was to ensure him a share of the guild’s rent. Similarly, the duration of apprenticeships and the use of masterpieces, as well as the level of entry fees, have been interpreted as an instrument to control both the labour and product markets.

In the Republic, apprenticeships were generally administered within the framework of the local guild, though it should be noted that not all crafts were organized in guilds and not all guilds regulated apprenticeships. On the whole, Dutch guild regulations concerning apprenticeships focused on four areas: registration, fees, duration, and the number of apprentices. Although masterpieces were the exception rather than the rule in craft guilds in Europe, they were fairly common in Dutch book production. Only Leiden and Amsterdam did not require former apprentices to produce masterpieces before entering the ranks of masters. In other towns, such as Middelburg, Haarlem, Utrecht, and The Hague, both binders and printers had to pass the test before they could enter the guild as masters.

As was the case in most Dutch craft guilds, none of the booksellers’ ordinances referred to the content of training. As a result, training was largely a private matter of which only the basic administrative framework was provided by the guild. Some indications of what printers may have learnt during apprenticeships can be found in the contracts that were kept in notarial archives. The contract between a carpenter’s widow and the Amsterdam printer Riewert Dircksz van Baart, for instance, stipulated that her 13-year-old son should learn to set type and print in several languages. The apprenticeship period was to last five years, fourteen hours a day, and his wage was 8 stuivers in the first year, 12 in the second year, 18 in the third, 30 in the fourth, and by the final year he was to earn 40 stuivers per week (without room and board). A contract dated 1649 states how a boy took an apprenticeship with printer Christoffel Coenradus for six years to learn typesetting, with room and board. The same printer also had an apprentice for four years, without room and board, for 6 stuivers in the first year, 10 in
the second, 15 in the third, and 20 in the final year.\textsuperscript{60} Apparently, the general terms set by the guild could be customized in private arrangements.

One important group has not yet been discussed: the journeymen, individuals who had completed their training as apprentices but who had not (yet) joined the ranks of masters.\textsuperscript{61} It is important to note that, by and large, masters were training future journeymen rather than direct competitors, as many apprentices would never become masters. Unfortunately we have very little information on this aspect of early modern Dutch book production. One exception is a contract signed by Amsterdam printer Joseph Athias in 1674.\textsuperscript{62} The contract shows how Athias hired six journeymen to print English Bibles. They were required to work five days a week, got paid per ream of paper, and were not allowed to work for others. If they would not deliver, Athias could fire them only after consulting the foreman or the oldest of the journeymen.

The absence of traces of journeymen printers and compositors in the archives is all the more unfortunate because the way they were employed may have been crucial to the competitive position of the Dutch Republic in the export of books. As with most cultural industries, demand was unstable and supply was often project-based. These characteristics called for a flexible supply of labour. It has been suggested that Dutch printers could keep the prices of mass-export products such as Bibles low by using a flexible labour strategy.\textsuperscript{63} Possibly, the practice of hiring journeymen on a project-by-project basis was indeed introduced relatively early in the Dutch Republic, but not enough sources are available to support this claim.\textsuperscript{64}

**Censorship and privileges**

In addition to guild regulations and apprenticeships, local specializations and competitive advantages could also be reproduced over time via books themselves. Through inheritances or mergers as well as auctions or other means of acquisition, books moved from bookseller to bookseller. They were durable goods and when booksellers died or quit their businesses, the products and sometimes also the exclusive rights to print them were put up for auction or were taken over directly by sons, partners, or competitors. Moreover, the structures of censorship and such exclusive rights on issuing specific titles (privileges) could strongly impact levels of competition. In cultural industries, copyright is more prominent than the use of patents, since the products are primarily artistic or literary expressions rather than technological inventions. Low-level protection for intellectual rights can discourage creative work, but overly strong protection may bring its own
negative effects. A heavily guarded market structure increases restrictions at entry level and encourages the kind of rent-seeking behaviour that may result in decreased investments in new product development.

Printing presses in the Dutch Republic enjoyed a large degree of freedom compared with other countries. Preventive censorship (censorship before publication) was never successfully imposed, and repressive censorship (censorship after publication) was difficult to enforce due to the highly localized nature of government structure. This does not mean that there was absolute freedom of the press. From the late sixteenth century to the end of the eighteenth, edicts were proclaimed and resolutions passed against seditious, scandalous, and libellous books. Especially in turbulent years, such as the period 1618-1621, the States General took a tighter hold of censorship. In all, the number of banned books was low. Fines prescribed by the States General increased throughout the seventeenth century, but different towns employed different practices.

Moreover, implementation of censorship proved to be a difficult issue for both secular and religious authorities, and there is ample evidence of convictions not being followed through on. We know of some publishers who received harsh punishment, but they are the exception rather than the rule. In fact, local officials, called upon to execute edicts and decrees, may often have had commercial interests similar to those of the booksellers. Besides, booksellers also knew how to play the game, even using convictions to their advantages. In 1642, for instance, 550 copies of the Socinian publication De vera religion by Johannes Volkelius and Johannes Crellius, published by Blaeu, were burned publicly in Amsterdam. A year later the publisher brought out a new edition, advertising it with the words 'Banned in Holland and burned by order of the magistrate', and this time he was not prosecuted.

In the surrounding countries, the situation was different. In England, printing required an elaborate system of licensing: every prospective publication had to be licensed by the censor and then recorded in the registers of the local booksellers guild, the Stationers’ Company. Here too, though, there were limits to the enforcement of the acts, and some scholars even stated that the Licensing Acts were largely ineffective and of little significance to the trade as a whole. Nonetheless, many printers and booksellers were harassed, fined, and imprisoned for misdemeanours under such acts, and this must have increased entry barriers. Increases in both title production and the number of printers during periods of lessened censorship suggest that the threat of censorship alone influenced the behaviour of possible entrants and existing booksellers. After the abolition of the act in 1695, neither the English government nor the Stationers’ Company were able to
limit the number of printers and presses, and the number of print shops increased rapidly both within and outside London. Furthermore, provincial printing immediately began to flourish, and the book trade became less concentrated in London.75

In most countries, monopolies further affected the structure of the book industry and accordingly also levels of competition. In England exclusive rights on the printing of almanacs, Bibles, church materials, and schoolbooks – arguably the most lucrative works – were in the hands of the English Stock, a collaboration of the wealthiest and most powerful printers of the Stationers’ Company.76 This monopoly heightened entry barriers, and it also kept both production costs and prices high, making it difficult to compete with printers on the Continent.77 In France, the Parisian book guild had exclusive rights to produce legal prints through royal privileges. Every published book had to be licensed before publication. At first, censors were theologians at the Sorbonne; later, secular officials took on the role; and around the middle of the seventeenth century a national ‘Administration of the book trade’ was organized to regulate censorship and exclusive rights throughout France.78 In the Southern Netherlands, the government also made ample use of privileges. The major monopoly involved the production of liturgical works, which was granted to the Officina Plantiniana; and the second-largest firm, Verdussen, acquired monopolies on mint ordinances, liturgical works for various religious orders, schoolbooks, and the official catechism.79

In the Dutch Republic, the issuing of privileges was much less related to issues of censorship. Notably, they were not monopolies in the true sense of the word. Government bodies such as the States General and the States of Holland could grant printers or publishers a monopoly over reprints, referred to as a privilege, for a specified period of time.80 Obtaining a privilege was not considered a special favour, and it did not imply the approval of contents. Estimates are that perhaps one per cent of all books were published by means of a privilege.81 In the early seventeenth century, no standardized legislation on the procedures and criteria required to obtain privileges existed, and the fines for infringements and the duration of privileges could vary. The fact that most books were not protected by privileges can be explained by various factors: the lack of a direct need for a privilege, the costs and time-consuming procedure to obtain one, and the potential problems of enforcing it. The costs of privileges were relatively high, around f50 and sometimes even as high as f600, and the process of acquiring them was lengthy.82 As a result, privileges were usually only requested for books that required significant investments, for steady
sellers that could ensure the livelihood of publishers, or for recurring annual publications such as almanacs. 83

Exactly those types of books that were granted monopolies in other countries were subjected to the open market. Although there were many disagreements between booksellers, only few were brought to court. 84 Some large conflicts resulted in the standardization of practice, the most notable one being the 1630s court case concerning one of the largest printing endeavours in the seventeenth century, the famous Statenbijbel. 85 This drawn-out conflict resulted in the devaluation of privileges by the States General, which is clearly evident by the scarcity of privileges issued by them in the eighteenth century. Instead, the States of Holland, the province where most printing presses were located, became the common issuer of privileges. Durations and fines became more uniform: generally fifteen years with a fine on infringements set at £300. Privileges on certain profitable and widely popular genres, such as schoolbooks, were disqualified. 86

Compared to other countries, it was possible to print almost anything in the Republic, and this provided Dutch booksellers with an international competitive advantage. The relative freedom of the press attracted scholars, authors, and dissident printers whilst also opening up export markets. But there was more. In the early modern period, the issue of monopolies on books had more to do, in general, with censorship practices than with copyright. In many countries, the granting of certain privileges provided governments with a device to control publications. Such exclusive rights on all lucrative works could, in theory, create considerable entry restrictions and limit the intensity of industrial competition. The fact that the Dutch book trade in general was relatively free, and that locally imposed regulations could often be circumvented by moving actual copies or the intended publication to a different town, added to a relatively open industrial structure.

**Financial administration of book production and book trade**

A fourth variable shaping patterns of local specialization and concentration was the financial administration of early modern book production. During the growth phase, Dutch publishers became increasingly tied into merchant networks and credit networks. In most explanations of the growth of Dutch printing, the well-developed transportation and trade networks of Dutch merchants feature prominently. 87 The position of the Dutch Republic – in particular Amsterdam, as a centre of trade – greatly facilitated the export of books produced in the Dutch Republic, especially with the increasing involvement of local paper merchants in financing mass
production for export. Dutch port towns came to function as stable markets in the distribution of books throughout Europe. Although it is impossible to measure the volume of international commerce in books, fragmented data on the distribution of English Bibles, Latin Catholic works, Hebrew religious works, and later works by controversial French authors show that these mass products, whether produced inside or outside the Netherlands, indeed followed common trade routes.

The local presence and practices of international merchants helped not only to widen the geographic reach of Dutch book production but also embedded it in local finance markets. In the early modern economy, not all transactions could be settled for cash, and accordingly credit was required. Between 1500 and 1800 the Dutch Republic was one of the first economies in Europe to boast large-scale public and private capital markets. The existence of an advanced credit market offered benefits for all early modern entrepreneurs and was highly important for book production. Wages and paper made up the bulk of production costs, and it could take years before print runs sold out, if even then. The weight of the investments did not so much reside in the printing presses, which went for about 250 new and 150 second-hand and could easily last a career, but rather in the accumulation of type, the purchase of paper, and the built-up stock. In other words, publishers faced serious liquidity risks in the light of high upfront investments, slow sales, and unpredictable demand.

Early modern publishers dealt with these uncertainties in various ways, and three features of the financial structure stand out: interest rates were relatively low, merchants became increasingly involved in large publishing projects, and booksellers themselves developed payment methods tailored to the specific needs of their trade. Throughout the seventeenth century there was significant growth and flexibility in the supply of capital throughout the Dutch Republic. The surplus capital and the development of novel financial techniques allowed interest rates on debt to drop from 8 per cent around 1600 to 4 per cent by 1650. Fragmented evidence, as well as the sizable archive of merchant Joseph Deutz (1624-1684), indicates that interest rates indeed averaged about 5 per cent. The implications of this can be illustrated by a calculation Paul Dijstelberge has made in order to estimate the costs of producing a relatively large-sized and therefore relatively expensive book. If a printer needed to borrow, say, 600 guilders for paper and wages, at an interest rate of 2.5 to 5 per cent, the loan would have cost him about 25 guilders per year. On returns of 3,000, assuming a selling price per sheet of half a stuiver, this was in fact fairly affordable.
Merchants could also finance book production by supplying paper which was then paid for by publishers in instalments at relatively low interest rates. No administrative records of Dutch booksellers from this period have survived, but fragmented evidence provides some indication as to the importance of such merchants/paper dealers. Accounts showing the financial situations of booksellers, drawn up in the event of financial problems, deaths or otherwise, almost without exception show the involvement of paper suppliers.\textsuperscript{96} From c.1630 onwards, paper merchants became increasingly involved in supplying the capital necessary to produce in bulk for export, most notably for English, Hebrew, and Roman Catholic religious texts.\textsuperscript{97} At first, the financiers of export products took a personal interest in the books: English merchants and preachers financed English Bibles, and Jewish merchants and rabbis financed Hebrew religious works. By the late 1630s – by no coincidence, the same decade in which the paper trade became fully established – Dutch (paper) merchants recognized the commercial opportunities and stepped in. From this point on they became increasingly involved in the production process of mass-export products such as Bibles, which typically required very large investments.\textsuperscript{98}

A second important group of financiers can be found in the ranks of the booksellers themselves. Sometimes, large booksellers functioned as direct creditors to their smaller counterparts, though this seems to have been relatively uncommon.\textsuperscript{99} A more widely used strategy was pooling resources to finance projects. This could take the form of joint ventures, in which a book was co-financed and the rights and risks were shared, or of agreements between publisher and booksellers to purchase a set number of copies against fixed prices.\textsuperscript{100} Collaboration on specific occasions and the long-term collaboration in formal joint ventures, the latter of which only became widely used after c.1660, will be discussed in the next chapter. For now, we take a closer look at another means of financing production by turning to the issue of distribution rather than production.

To broaden the stock on offer, publishers also had to acquire books published by others. There were three forms of exchange: cash, credit, and barter. The common form of exchange was barter, or change, a method in which books were traded sheet for sheet. When the relationship between the booksellers was unequal, smaller booksellers bought on credit and debts were settled once or twice a year.\textsuperscript{101} As most print runs sold out only over a period of years, if then, most of the capital remained in type, paper, and books in storage, leaving booksellers struggling with cash flows. The only other way to broaden the stock of books on offer was through booksellers’ auctions, a conduit that became increasingly important in
the seventeenth century. Auctions were an effective way for those trying to move their stock to obtain cash, and a relatively cheap way for others to purchase books. Consider, for example, Broer Jansz’s and Johannes Janssonius’s requests to auction portions of their stock in order to pay off creditors.102

In most towns, auctioning stock was allowed only in the event of death, when abandoning the trade, or in the case of insolvency. With the expansion of the book trade and the increasing number of auctions following deaths of collectors and booksellers, favourable payment procedures were developed: the so-called ‘booksellers’ bonds’ or IOUs. In trade in general, IOUs had been in use since the fifteenth century, and from the 1540s they were also employed by Dutch merchants to lend or borrow money in instalments of up to twelve months.103 The first suggestion of IOUs in the book trade is in 1610 at the auction of Cornelis Claesz’s stock. The usual payment conditions of cash or of six weeks on security, set out by Chamber of Orphans, did not apply in this auction.104 Instead, IOUs were introduced. Booksellers’ IOUs had a specific feature: they stipulated payment in instalments without charging interest.

This method allowed booksellers to buy more or more expensive books in bulk, as is demonstrated by a complaint filed by Willem Jansz Blaeu. According to the notarial source, he had heard rumours about changes in conditions of the Claesz’s auctions and protested against this, stating that he would have purchased more expensive goods if he had known this beforehand. Documents concerning the 1612 auction of bookseller Barent Adriaensz’s stock discuss the conditions in more detail. Apparently, they stated that when the buyer made a purchase of less than £100, payment was due within six weeks, but if he spent more, he had to sign an IOU to Adriaensz. In the case of purchases of more than £200, a term of three months applied; £100 was due at the end of each term, until the total sum was repaid. In documents from later years similar conditions can be found.105

**The case of Leiden**

How local organization outside the guild structure could play a role in the creation and reproduction of local competitiveness can be illustrated by the case of Leiden. The establishment of the university and the hands-on stance of the local government had triggered the development of a local book industry in Leiden. Amsterdam soon overtook Leiden. Nonetheless, Leiden booksellers managed to carve out a niche for themselves in regional and even international book markets, and they sustained their competitive
advantage. They competed on the basis of trade rather than production, and more specifically on second-hand trade. The commercial development of specialized book auctions and book auction catalogues can be viewed as micro-inventions by which Leiden’s publishers managed to create entire new markets for books. Although Leiden booksellers were not the first to employ devices such as book auctions or auction catalogues, they did develop printed book sale catalogues for the auction of second-hand books. According to Bert van Selm, the rise of the book auction catalogue was paramount for Leiden to become more than just another university printing centre.

Why did such micro-inventions occur in Leiden? Van Selm suggests that this can be explained by the fact that Leiden booksellers were not organized in a guild. This gave them a certain independence that expressed itself in the development of second-hand book auctions. Even if they were not entirely free of regulations, Leiden booksellers were permitted to auction books themselves, unlike their counterparts in other towns where town secretaries or others appointed by fiat administered the auctioning. These features prevented the booksellers elsewhere, where booksellers were either included in the Guild of St. Luke or in their own guild, from also holding auctions of used books. However, Laura Cruz has argued the opposite. Even though there was no formal guild, she recognizes the Leiden book trade as an organized industry displaying many features of guild structure. This organization, she argues, was crucial to the successful development of the book auction catalogue. Local booksellers cooperated and defended collective rights through a protectionist policy to keep foreigners from auctioning books in their town. For instance, Leiden booksellers requested that the auctioning of books by outsiders be prohibited. Through this and other protectionist measures, the period in which monopoly gains could accrue to the innovators would be prolonged, allowing Leiden booksellers to create a primary marketplace for second-hand books relatively early on and to sustain such dominance in this particular market segment.

In Cruz’s reading, the book industry resembles a cluster-like industrial structure, even without formalization in a guild, characterized not only by competition but also by collaboration and interrelations. In order to develop scale advantages, the production system consisting of small and medium-sized firms developed a collective body that lobbied governments, facilitated information transfer, and organized public events such as auctions. As will become clear in the following chapters, most towns would eventually see a shift from book production to bookselling as their
local markets started to mature and competitive pressure increased. Leiden, which had experienced an early growth spurt, simply reached this point earlier than other towns did, and it managed to adapt to the new market situation by developing and sustaining a unique resource. Two distinct characteristics around 1610 made an early lead in this field possible. Competitive pressure, both internally and from the outside, had increased by the end of the phase of emergence, and a ‘critical mass’ of booksellers was in place that made the development of the auctions and the catalogues viable.

**Conclusion**

Competitive pressure in Dutch book production increased, especially in the 1610s and the 1640s, both within local industries and between towns. This supports the proposition that the changes in form and content that took place around this time were shaped by market forces and economic motivations. The establishment of local booksellers guilds can also be appreciated in this light, as can the development of specialized methods of distribution, marketing, and payment. Throughout the period, local industrial organizations and practices became increasingly formalized and institutionalized. These specific local organizational structures reinforced patterns of specialization and concentration. In some cases, local demand conditions, factor conditions, and the presence of related and supporting industries made for competitive advantages that can be traced back to early sources of competitiveness, as with the Leiden auctions.

On the other hand, the relative openness of Dutch book production is also apparent. Entry barriers were low, publishers experienced competition from outside their locality, and they could tap into non-local markets through extensive distribution and information networks. Though firmly rooted in local specializations and cluster-like relationships, there were multiple connections with other towns. Economic geographers ascribe great importance to the interplay between local embeddedness, or ‘buzz’, and linkages with other regions or towns, conceptualized as ‘pipelines’. In this view, the combination of established local knowledge and skills and new or uncodified information from outside may improve the adaptive and innovative capabilities of local firms. Cluster literature, moreover, argues that it is the balance of competition and cooperation that differentiates a cluster from a loose set of firms or a hierarchical network. Too much connectivity or collaboration causes rigidity, while too much competition
offsets the positive cluster effects such as scale economies and knowledge and innovation processes. Arguably, Dutch booksellers had the best of both worlds, both at a local and regional level, at least for a little while.

Notes

2. Part of this argument has been published in Rasterhoff, ‘Carrière en concurrentie’.
3. The STCN and English Short Title Catalogue (ESTC) allow for a direct comparison as they have used comparable source material: imprints of books. For people, the Dutch and English databases cannot be directly compared, because no Thesaurus has been connected to the ESTC. For England there is the British Book Trade Index (BBTI, http://www.bbti.bham.ac.uk), but these records have been derived from a range of sources, printed and electronic, and from forms submitted by scholars and local researchers who have contributed their findings. See also Raven, The Business of Books.
5. Briels, Zuidnederlandse boekverkopers, pp. 5-6; Voet, Typografische bedrijvigheid, p. 240. When the Short Title Catalogue Flanders (STCV) is complete, it will be possible to make more precise calculations for the seventeenth century, as well as develop a thorough comparison between the Northern and the Southern Netherlands.
7. Montias, Artists and Artisans, p. 278 mentions as buyers at an auction of copper plates in Delft: Johannes Janssonius and Broer Jansz from Amsterdam, Jan van Waesberghe from Rotterdam, and Hendrik Hondius from The Hague.
11. De Kooker, Catalogus universalis; See also: Gruys and Bos, t’Gvlda iaer 1650.
12. Of the 2500 titles in the catalogues between 1640 and 1652, 48 per cent was in Dutch, 44 in Latin, 4 in French and the rest in German, Italian and Spanish.
14. De Vries and van der Woude, The First Modern Economy, pp. 57-71. They use 2500 inhabitants as a threshold.
20. See appendix I.
21. Ibid.
23. For the same calculations with and without ephemeral titles see Rasterhoff, ‘Carrière en concurrentie’.
24. Prosopograhies 1631 and 1674, see appendix I.
30. In the afore-mentioned general concentration measures, the effect of groups of firms was omitted, but for the subgenres this was taken into account by viewing collaborating publishers as one publisher. For example, Daniel and Louis Elzevier, who published many titles together during the 1650s, are considered one firm.
31. In future analyses the selection could be narrowed down to specific subgenres, such as Dutch travel journals, or secular amatory songbooks.
36. BKVB, Archief van het Amsterdams Boekverkopersgilde, inv. 56, in the front of the book.
37. Ibid.
40. Article 1, 1599 and article 1, 1663. Forrer, ‘Drie ordonnanties’, p. 98.
43. Van Eeghen, *Gilden*, pp. 111-112. Similar exceptions to the overall regulation were made in the case of surgeons and brokers.
45. Cruz, *Paradox of Prosperity*, p. 49.
47. Prospography, see appendix I.
48. Ibid.
52. Dirk de Bray, son of the Haarlem painter Salomon de Bray, offers the only account on bookbinding before the eighteenth century, but there are no signs that this quasi-manual was widely used. De Bray, *Kort onderweijis*. A later manual is David Wardenaar’s, as discussed in Janssen, *Zetten en drukken*.
53. On the debate on the role of the guild in the creation and reproduction of skills in the early modern period see Epstein, ‘Craft Guilds’; Epstein, ‘Craft Guilds, Apprenticeship’; Ogilvie, *Can We Rehabilitate the Guilds*?; Ogilvie, ‘Rehabilitating the Guilds’.
57. For more details see Forrer, ‘Drie ordonnanties’.
58. Van Dillen, *Bronnen tot de geschiedenis*, n. 769.
59. Ibid., n. 1134 and 1040.
60. See also: SA, Notarieel Archief, inv. 2044, f. 104 and inv. 2045, f. 132.
64. Darnton, *The Great Cat Massacre*, p. 80. The hiring of journeymen printers on a project-by-project basis only became common in France during the eighteenth century.
68. Groenveld, ‘Mecca of Authors?’, p. 78.
69. For example in Leiden: Cruz, *Paradox of Prosperity*, pp. 72-73.
70. Van Gelder, *Getemperde vrijheid*, pp. 165-166.
71. Ibid. Original text: ‘in Hollandt by scheepenvonis gedoemd en met vier verbrandt.’
72. The Stationers’ Company of London was the local booksellers’ guild.
74. Cf. Ibid.
82. Hoftijzer, ‘Nederlandse boekverkopersprivileges in de achttiende eeuw’, p. 58. Louis Elzevier II paid £600 for a privilege for a special edition of the bible.
83. Hoftijzer, ‘Nederlandse boekverkopersprivileges in de zeventiende en achttiende eeuw’; Van Eeghen, *De Amsterdamse boekhandel*, vol. V-1, pp. 196-201; Willem Jansz Blaeu’s general privilege by States of Holland in 1608, was an exception: ‘alle sijne eygen werken soo dien hij van nieuws geinventeert heeft, als degeene dien hij nogh inverteren sol’.
89. See the contributions in Berckvens-Stevelinck et al., eds., *Le magasin de l’univers*. 
92. A discussion of credit instruments used in Amsterdam in the seventeenth century can be found in Spufford, ‘Access to Credit and Capital’, pp. 304-305.
94. Other examples include interest terms between Widow Schippers and Joseph Athias. Van Eeghen, *De Amsterdamse boekhandel*, vol. IV, p. 106.
97. Ibid., pp. 59-62.
100. Ibid., pp. 306-307.
101. Many examples of this practice can be found in the letters in Sabbe, ed., *Briefwisseling*. In those cases in which trading relations were unequal, cash was preferred. For instance, a letter dated 28 May 1669, from Verduisen to Utrecht bookseller Arnoldus van der Eijnden, refers to Amsterdam bookseller Joachim van Metelen, who had to buy much in cash, as he himself printed very little, which made it hard to trade by barter ‘oock meeste boecken die hij heeft moet hij selfs (meest)al in gelt coopen, also hij niet veel besonders gedruckt en heeft om boecken tegen te connen mangelen’ (Letter XII, p. 17).
104. The following is based on Van Eeghen, *De Amsterdamse boekhandel*, vol. V-1, pp. 256-257.
106. Cruz, ‘Secrets of Success’.
108. Cruz, ‘Secrets of Success’, pp. 1-3; See also Cruz, *Paradox of Prosperity*, introduction.