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# The international textile trade in 1913: the role of intra-European flows

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## Introduction

The textile industry has probably been the most studied industry within the field of economic history. It has been analysed using many different approaches since the cotton industry emerged as one of the main driving forces of the British Industrial Revolution. It has been related to almost every central topic in the field, such as economic growth, technical innovation, modernization, the living standards debate, the British climacteric debate, comparative advantages in international trade, organization of the working class, and so on.

In this article, however, textiles are analysed using a different approach. Firstly, we focus on multilateral trade, which enables us to go beyond the British case and include a wide range of other countries. One hundred and thirty-three countries have been taken into consideration, almost all of which were world political units in 1913. Secondly, the category of textiles, used in this article, is a very broad one. It includes a variety of manufactures at different stages of processing, i.e. yarns, fabrics and ready-made items; from a wide range of textile fibers such as cotton but also wool, linen, silk and jute. This multilateral, multifibre and multiproduct trade analysis sheds new light on the traditional view of British hegemony over European textile markets during the first era of globalization. The main result that this approach reveals is the importance of the role of intra-European trade, as well as the key role of the UK, not only as a producer but as a market for exported manufactured goods on the eve of the First World War. Furthermore, the present anal-

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ysis emphasizes the important role of Germany and France as main textile exporters to European markets. This conclusion relates strictly to European textile markets, meanwhile in the case of third countries, the hegemonic position of the UK is beyond any doubt.

In 1913, at the end of the so-called first globalization, textiles and cotton goods in particular were no longer at the forefront of technological development. With the second technological revolution, the British textile industry was no longer the main driver of technological innovation. But even so, textiles were still predominant in international markets and remained among the main products traded during the first globalization. Without considering raw materials, in 1913 textiles represented around a third of exports of manufactured goods in the world.<sup>1</sup> This figure was even higher in the case of some European countries. For instance, textiles accounted for 61% of Italian manufactured exports, 53% in the case of Switzerland, 49% in the UK and 41% in France. However, textiles accounted for a lower proportion of German trade (19%), where goods from the second technological wave, such as chemicals, were much more important.

The large share held by textiles in international markets means that a study of this industry surpasses the limits of a mere sectoral analysis.<sup>2</sup> A study of textiles in 1913 reveals a great deal about the international trade dynamic of the first globalization, and highlights the central role of the European markets. Despite the importance of north-south trade relations, north-north economic links were also fundamental for international trade. Intra-european linkages were relative strong in the textile sector just before the First World War and long before the European integration agreements. In this sense, the textile sector would be a clear example that intra-industrial trade had long historical roots in the European case.

The article is organized as follows. The first section describes the database. The second section summarizes the main features of international textile markets. The third section presents the importance of Europe in international markets from a supply side perspective. The fourth section describes the patterns of textile consumption from a demand side approach. The fifth section briefly presents the characteristics of international textile raw material markets. The sixth section evaluates the weight of Europe in the international textile trade. The seventh section analysis the geographical composition of intra-european textile trade. Conclusions are presented in the final section.

1. Maizels (1963)

2. Farnie and Jeremy (2004), focusing only in the cotton industry, have emphasized its role as a main driver of international trade, p. 13.

## Database: a new international bilateral textile trade data

The data used in this article comes from a German source published in 1917. The author, A. Kertesz, compiled different types of textile data from 133 countries for 1913. Trade data come from the official foreign trade statistics of each of the 133 countries, while information about textile production and consumption are complemented through private international and national textile association reports.

In Kertesz's book, textile data are presented with different levels of aggregation. They are summarized for the world textile industry as a whole and also for each continent. Kertesz also presents the data disaggregated for each country, for each textile fibre, for three stages of manufacturing (raw materials, intermediate goods and finished goods) and for various specific textile goods. All the information is provided in German marks, calculated by the author using the exchange rates for 1913. Each official and private source used by Kertesz, as well as the complete list of exchange rates, is presented at the end of the book. As a result, Kertesz's textile data are presented rigorously, appear to be reasonably accurate and are organized systematically for each country, each textile fibre, and each product.

Although the Kertesz data appear to be reliable enough, as they are mainly based on the official foreign trade statistics for each country they contain the same accuracy problems of those original sources.<sup>3</sup> Kertesz presents each country's exports and imports as they appear in the official records. A simple way to test their accuracy is to compare the exports of one country with the imports of its trade partner: in theory they should be exactly the same, but in practice they hardly ever coincide.

There are many explanations for these discrepancies among official trade records. It may be due to the fact that exports used to be expressed in FOB prices, while imports usually used CIF prices. Alternatively, it may be because countries used different criteria to classify each type of traded goods, to assign the country of origin or destination of each traded product or to determine its value. Finally, data between countries may differ because of intentional or unintentional errors in the registration process. Tariffs have to be accounted for in the latter case. The textile data used here have been corrected when possible, according to the accuracy literature. The systematic compari-

3. The most important contributions on this subject are those by Morgenstern (1963), Federico and Tena (1991) and Tena (1991, 1992). If Morgenstern expressed many doubts as to the reliability of official foreign trade data, Tena and Federico (1991) and Tena (1991, 1992) proved that they are reliable enough to be used in international trade studies. I have carried out some previous work on the accuracy of official foreign trade statistics in Carreras-Marin (2005, 2008) and Carreras-Marin and Badia-Miró (2005, 2008), strengthening the reliability of such statistical sources in bilateral terms.

son of data, coming from each trade partner, has allow to identify disparities in the Kertesz's original records. These problems of accuracy are due to the original official trade statistics, used by Kertesz without any further correction.

Although statistical accuracy has improved over time due to the gradual adoption of international standardization processes, in 1913 the international efforts to homogenize it were still very little widespread. For that period, Tena (1991, 1992) and Federico and Tena (1991) have proven the existence of a positive correlation between statistical accuracy and economic development. As the main textile exporters in 1913 were mainly countries with high levels of economic development, it seems that export data may be more reliable in this case than data coming from the importers. Taking that into account, textile data has been mainly reconstructed through export records contrasted and complemented with information from the import records of each trade partner. There have been two exceptions to this rule. The literature on the accuracy of trade data has shown the poor statistical reliability of some particular countries: like Austria-Hungary and the Netherlands. In these cases, their official trade data have been excluded and data from their trade partners have been used instead, after correction for freights included in these values.<sup>4</sup> As a result one of the main contributions of the article is in presenting comprehensive and reasonably accurate statistics on textile trade of finished goods (raw materials and intermediate goods have been excluded of our trade data).

### **Europe in international textile markets: a global overview**

Textiles played an important role during the period prior to the First World War. Their impact on international trade was high, but it was even higher in domestic markets. The main changes in competitive positions in international trade were due to the conquest of domestic markets by the domestic textile industry. A consequence of this was the orientation of foreign trade towards the colonial markets, especially in the British and French cases. But there was also a great increase in competition within European markets. British hegemonic position over cotton goods, forced the other European textile producers to adopt competitive strategies, probably based more on differentiation than in prices. Consular reports of the time, as long as further studies on particular countries, have stressed this kind of arguments (such as the im-

4. A detailed analysis of the accuracy of textile data can be found in Carreras-Marín (2008).

portance of colours, designs, or the packaging) when analyzing the textile competitive position for some countries.<sup>5</sup>

It is useful to start looking at textile production and consumption before looking in more detail at the trade in foreign markets. Kertesz's data also provide global information on textile production and consumption in 1913. These two world totals would be expected to be the same, since all world production must be consumed inside or outside the country. However there is a small difference of 7% in the Kertesz data. The author gives two reasons for this discrepancy. The first is a consequence of the discrepancies between the exports and imports of trade partners which we mentioned earlier. The second is due to the fact that the data for some smaller countries are missing from Kertesz's estimates of textile production and consumption. In any case these discrepancies are small in the overall aggregated data by country.

Kertesz's textile production figures have been drawn up for each country by weight based on information on initial raw materials. They are converted into finished production by applying the technical processing coefficients of the German textile industry. Intermediate and finished traded textiles are added or subtracted depending on whether they are imported or exported. The conversion of the figures from weights to values are made through German prices. Kertesz's figures for consumption are obtained from domestic production estimates minus exports plus imports. It has to be taken into account that there is a German bias in all these calculations because technical coefficients and prices have been taken from this country. However, this bias can be considered to be small in the overall perspective. Kertesz's estimates for textile production and consumption are shown in table 1.

The data in table 1 show the basic characteristics of the international textile markets in that period. Except for raw materials, a key factor of the textile industry in 1913 seems to have been the extremely high geographical concentration of both production and consumption on Europe. It represented 59% of world textile production, followed by America (21%) and Asia (20%). The concentration of the textile industry in Europe is well known as it is closely related to the spread of industrialization. But a less well-known aspect is that Europe was not only the main textile producer of the world, it was also the main textile consumer.

Europe's share of world textile consumption in 1913 – 48% – is closely related to its economic size: according to data from Maddison (2008), European countries represented 46% of total world GDP. American markets accounted

5. Among many others supporting the idea of product differentiation in textiles, there are many consular sources of the time as Witham (1907), Odell (1911,12), Report of the Tariff Board (1912), Dehn (1913), Pratt (1917), Boix (1918), or Forrester (1921); meanwhile related to later studies, some examples can be found in Sandberg (1968), Marrison (1975), Temin (1988), Brown (1992,95), Rose (1991) or Farnie and Jeremy (2004).

**TABLE 1 • World textiles production and consumption in 1913 (in millions of marks)**

	Textile production <sup>1</sup>	Raw materials <sup>2</sup>	Domestic consumption <sup>3</sup>
Europe	26,259.4	1,685.3	19,860.4
America	9,235.6	4,530.2	11,029.6
Asia	8,664.2	3,789.3	9,195.0
Australia	85.1	702.2	503.5
Africa	102.3	688.5	800.0
World	44,346.6	11,395.5	41,388.5

<sup>1</sup> Domestic production of textile manufactures.

<sup>2</sup> Raw cotton, wool, silk, linen and jute, including waste.

<sup>3</sup> Domestic consumption of finished textile manufactures

Source: Kertesz (1917)

for 27% of world textile consumption, not far from their share of world GDP (25%) and Asian textile markets accounted for 22%, again quite similar to their proportion of world GDP (25%). Although markets in Asia and America were also significant, these figures indicate that the main textile markets were clearly the European ones. This fact emphasizes that one of the main characteristic of textiles during this period was the conquest of domestic European markets. On the other side, when the focus is located at markets outside Europe, we can explained a bit more than 50% of textile markets, which is of course also relevant although we are not going to develop this topic in the present article.

Although Europe held sway in textile production and consumption, the situation was quite different as regards raw materials. Only 15% of the world production of raw materials came from Europe. This is quite well known in the case of cotton, but even when all other textile fibres (wool, silk, linen and jute) are added, the figure does not change substantially. Textile fibres were mainly produced in America (40%) and Asia (33%). Australia and Africa played a minor role in the production of manufactured textiles. They also represented really low shares in the international textile consumption (1% and 2%, respectively) and they had only some importance as producers of raw materials representing each one of them around 6% of the world total.

### **International textile production: European countries in the international context**

When the data are broken down by country, it can be seen that European hegemony within the top 5 largest textile producers in the world was not total (see table 2).

**TABLE 2 • Top 5 largest textile producers in the world**

Main textile producers	Main textile producers per capita	Main cotton producers	Main wool producers	Main silk producers	Main linen and jute producers
USA	Switzerland	USA	UK	USA	UK
UK	UK	China	Germany	France	British India
Germany	France	UK	USA	Germany	Germany
China	Belgium	Germany	France	China	France
France	USA	British India	Russia	Japan	Russia

Source: Kertesz (1917)

For textiles as a whole, the USA appeared as the biggest producer with 18% of the world total. Industrialization in the USA during the 19th century was based mainly on the development of the domestic market, and as a result, although it held an important position in world production, it was far from the top in the international textile trade, as will be shown later. The USA's top position in textile production coincides exactly with its GDP share of the global economy. Following Maddison's data,<sup>6</sup> the USA's GDP in 1913 was 18% of total world GDP. The domestic market was the main key for USA's textiles. But USA's market was also relevant for some European textile exporters. As it will be shown later, this country was the second most important importer for British, German as well as for French textiles.

The UK still represented a huge amount of world textile production with a share of 14%, but Germany, with 12%, had almost caught up. If these figures are compared with Maddison's GDPs, both countries represented around 8% of the world total in 1913, but Germany was yet a bit over UK on that period. China represented 9% of world textile production, quite close to its share of total world GDP. France also had 9% of world textile production, but its share of world GDP was smaller (5%). Russia had almost 8% of world textile production, again quite close to its share of total world GDP. The USA's, Chinese and Russian shares of world textile production were clearly related to their economic size, according to Maddison's data on GDP. But the UK, Germany and France had greater importance in textile production in comparison to their economic size.

European countries were much more hegemonic in per capita terms. In this sense, the main textile producers were Switzerland, the UK, France, Belgium, and the USA. World textile production was more diversified by country as regards each different fibre. In the cotton industry, the main producers were the USA (20%), China (14%), the UK (14%), Germany and British India (9%). In the wool industry, the main producers were the UK and Germany (17%), the USA (16%), and France and Russia (12%). In the silk industry, the

6. Maddison (2008)

main producers were the USA (24%), France (17%), Germany (15%), China (11%) and Japan (9%). In the linen and jute industries, the main producers were the UK (19%), British India (15%), Germany (14%), France (13%), and Russia and Austria-Hungary (9%). Despite the European hegemony over textile production, it is also remarkable that the USA and certain Asian countries also emerged at the top of the list of main producers in 1913.

If Europe was central as regards world textile production, inside Europe the UK dominated, being the main character within European textile production. The traditional British hegemony in textiles was still very evident in 1913. The UK was the main European producer of jute goods (31%), ready-made items and cotton goods (29%), linen goods and woollen goods (22%). France was the main European producer of silk goods (32%) and the second in ready-made items (29%). Germany was the second European producer of silk (22%), wool and jute (21%), cotton (19%) and linen goods (18%).

The UK, France and Germany accounted for 82% of European textile production. Only few other European countries emerged as main producers in particular cases. As far as the silk industry was concerned, Italy and Switzerland also excelled. In the cotton, wool and linen industries, Russia played a significant role. In the jute and ready-made items industries, Austria-Hungary also appeared in the top positions of European production.

In the European context, Spain played only a modest role. Spanish textile production as a whole accounted for 2% of European production, placing Spain in ninth position overall. This share was lower than the economic size of the country. In 1913, following Maddison's data (2008), Spain represented around 3% of European GDP. Spain had a bigger role in the jute industry than its economic size would suggest, accounting for 4% of European production. It also accounted for 3% of Europe's cotton industry, 2% of its wool industry and the same of its silk industry. The agrarian uses of the jute textiles will probably explain this fact.

### **European textile markets: a demand side approach**

Table 3 shows European textile consumption by country. It needs to be taken into account that Europe concentrated 48% of world textile consumption in 1913, as shown in Table 1. However, this percentage varied greatly for each different textile fibre. In the case of linen manufactures consumption, Europe accounted for 74% of the world total. For woollen goods it was 66%. Shares were much lower for ready-made items (46%), jute goods (41%), silk (37%) and cotton manufactures (35%). Nevertheless, even in the lowest case for cotton, European demand accounted for over a third of the world market. This figures point out the importance of Europe not as a producer but as a market.

**TABLE 3 • European textile consumption in millions of marks in 1913**

	cotton	wool	jute	linen	silk	ready-made items
Germany	1885.40	1349.10	139.70	308.70	305.00	128.20
UK	1149.00	1099.20	125.80	237.30	311.60	234.90
France	987.30	947.70	93.70	253.80	291.60	135.80
Russia	1778.30	1243.30	42.20	252.50	156.10	27.60
Austria-Hungary	753.40	530.90	48.00	194.20	128.50	58.30
Italy	539.90	405.00	25.10	27.40	93.00	38.00
Switzerland	94.10	71.30	3.40	20.00	23.50	40.90
Belgium	198.30	188.70	18.60	55.90	38.20	21.60
The Netherlands	187.30	89.30	2.80	11.70	3.40	61.20
Spain	339.50	193.80	34.70	10.10	38.10	4.70
Portugal	84.00	46.20	8.20	6.80	4.70	5.70
Sweden	130.30	124.70	8.20	9.90	13.20	12.90
Norway	39.90	62.10	4.20	4.70	3.90	6.40
Denmark	50.30	53.40	0.00	3.30	11.10	11.40
Finland	43.90	38.60	0.80	5.40	3.80	6.40
Turkey	307.50	190.10	8.50	4.00	10.00	16.30
Romania	73.20	71.90	4.00	14.10	11.10	17.90
Bulgaria	41.70	70.60	0.90	3.80	2.60	4.70
Greece	33.20	28.60	0.00	0.30	0.60	0.70
Serbia	21.50	34.20	0.00	3.60	1.10	2.70
<b>Total</b>	<b>8738.00</b>	<b>6838.70</b>	<b>568.80</b>	<b>1427.50</b>	<b>1451.10</b>	<b>836.30</b>

Source: Kertesz (1917)

Germany was the main consumer of textile goods with 21% of European textile consumption. Russia was around 18%, the UK 16% and France 14%. But these shares of the main consumers, change for each particular textile fiber. Cotton goods consumption was the most similar to the European textile average: Germany was the main consumer (22%), being followed by Russia (20%), the UK (13%) and France (11%). Although geographical diversification in the European wool consumption by countries was a bit higher, the top 4 main consumers were the same as in the cotton case: Germany (20%), Russia (18%), the UK (16%) and France (14%). However, the importance of these countries changed in the case of the consumption of jute goods. In this case, the main consumers in Europe were Germany (25%), the UK (22%), France (17%) and Austria-Hungary (8%). We can also see some particularities in the case of the consumption of linen goods, where the main consumers were Ger-

many (22%), France (18%), Russia (18%) and the UK (17%). For the silk, British share of consumption was a bit higher than the other European countries, being the main consumers: the UK (22%), Germany (21%), France (20%) and Russia (11%). British importance as a consumer was even greater regarding to ready-made items. In this latter case, the main European consumers were: the UK (28%), France (16%), Germany (15%) and The Netherlands (7%).

Within Europe the main textiles consumed were cotton (44%) and woollen goods (34%). More marginal were silk (7%), linen (7%), ready-made items (4%) and jute (3%) consumption. As regards ready-made items, it should be stressed that mass consumption began only much later, in the 20th century. Most textile demand in 1913 was based on fabrics to be turned into clothing in the domestic sphere. In this sense textile fabrics were almost entirely finished goods for final consumption by families rather than intermediate manufactures as would be considered today. Ready-made textile items included such things as couture clothes, hats and carpets.

Table 3 also shows the consumption pattern of each European country by fibre showing that the European pattern of textile consumption varied widely by countries. Some countries were above the European average in their consumption of cotton goods. These countries were Turkey (57%), Spain (55%), Portugal (54%), the Netherlands (53%), Greece (52%), Russia (51%), Italy (48%) and Germany (46%). Cotton goods consumption in the UK, the traditional origin of the cotton industry, was less than the European mean, with cotton accounting for 36% of its total textile consumption. In the case of woollen manufactures, the countries above the European mean were Bulgaria (57%), Serbia (54%), Norway (51%), Greece (45%), Sweden (42%), Denmark (41%), Finland (39%), Romania (37%), Belgium (36%), Italy (36%), Russia (36%), Turkey (35%), France (35%) and the UK (35%).

In the case of ready-made textile items, the countries above the European mean were the Netherlands (17%), Switzerland (16%), Romania (9%), Denmark (9%), the UK (7%) and Finland (6%). In the case of silk manufactures, the countries above the European mean were France (11%), the UK (10%), Switzerland (9%), Denmark (9%), Italy (8%), and Austria-Hungary (8%). For linen manufactures, the countries above the European mean were Austria-Hungary (11%), Belgium (11%), France (9%), Switzerland (8%), and the UK (8%). For jute manufactures, the countries above the European mean were Spain (6%), Portugal (5%), the UK (4%), Belgium (4%), Norway (3%), France (3%), Germany (3%), Austria-Hungary (3%) and Sweden (3%). These figures indicate that the consumption patterns among textile fibers were very different by country.

## **International textile raw material markets: Europe's dependency on other countries**

Textile raw materials had an important role in trade connections throughout the 19th century. This has been studied in detail in the literature on colonial history, which stresses its influence on political dependence among countries. The origin of textile raw materials, particularly in the case of cotton, has been also identified as one of the key elements of competitiveness in the textile industry. Here we will focus on only a limited area of the subject: a geographical description of international textile markets for raw materials.

As mentioned earlier, according to table 1, Europe lost its hegemony only in the raw materials market. In this case, America and Asia were the two big producers. There was also a high degree of geographical concentration by country in this area. Textile raw production in America was mainly raw cotton (87%) from virtually a single country, the USA, which represented 95% of all American raw cotton production. In addition to cotton, America also produced wool. In this case there was more geographical diversification, with two main producing countries: the USA (39%) and Argentina (39%).

Textile raw materials in Asia were more diversified than in America. Raw cotton was also the main fibre, but it accounted for 50% of Asian production. Silk was the second main textile raw material, representing 27%. Then came jute with a share of 20%. Cotton production was highly concentrated in China (56%) and British India (42%). Silk production took place basically in China (50%) and Japan (47%), while Asian jute production was located in British India (95%).

The absence of any great degree of textile raw material production in Europe, bearing in mind its developed textile industry (particularly in the case of cotton), meant that it was dependent on international trade. As a result, textile raw materials played a central role in the international trade globalization of the 19th century. In terms of volumes traded, they accounted for even more than the trade in textile manufactures.<sup>7</sup>

European production of raw materials was mainly wool (48%), which came from Russia (34%), the UK (15%), Turkey (10%) and France (9%). Europe also produced jute and linen (24%), which came basically from Russia (74%). There was also some raw cotton production (15%), which again came basically from Russia (85%). Silk accounted for 13% of European production of raw materials (Italy being the main producer (57%) followed by Turkey (16%) and Russia (11%).

7. Farnie and Jeremy (2004)

## European exports to international markets

Excluding raw materials, all the textile information analysed above clearly indicates the dominant weight of Europe in textiles in 1913. The value of textile international trade was 13% of world textile production. This means that the main bulk of textile production was more dependent on domestic markets than on foreign trade, at least from a global perspective. Despite the low percentage of textiles traded abroad, their role in the international manufactured goods trade was more significant. Textiles accounted for 34% of world trade in manufactured goods in 1913.<sup>8</sup> The high proportion of textiles in international trade makes them crucial in order to understand the dynamics underlying the first globalization process. Textile trade data used in this section refers strictly to finished textile goods, and it has been obtained adjusting Kertesz original data for accuracy reasons between trade partners, as explained above.

As mentioned earlier, textiles presented a high degree of geographical concentration in Europe. This feature is even higher when we look at trade. Table 4 shows the distribution of textile exports by continent. Europe represented 89% of total world textile exports in 1913. Such a high level of geographical concentration in Europe was not unique to the textile sector. Europe had the largest share of international trade in general at that time, representing 59% of world exports.<sup>9</sup> Far behind this figure, Asia had some minor participation in the textiles trade, although it was greater than American textile exports. Asian textile trade was mainly played by Japan. This country was characterized particularly by its silk industry, but its cotton sector was also growing fast at this period. Even though in 1913, the Japanese cotton textiles didn't occupy the first positions in the world markets, they will surpass the British during the twentieth century.<sup>10</sup>

Geographical concentration is maintained when disaggregating by country. The UK still had a predominant role in textiles, although two other countries – Germany and France – had risen as competitors. These three European countries accounted for more than 70% of the world textile trade in 1913. At a much lower level, some other countries have been singled out by the literature for other reasons.<sup>11</sup> Spanish participation in the international textile trade

8. Maizels (1963).

9. Kenwood and Loughed (1986), Foreman-Peck (1995)

10. Farnie and Jeremy (2004)

11. Italy, for instance, has attracted much attention partly because of the geographical diversification of its exports: 31% of Italian textiles went to Asian markets, 29% to European countries, 28% to America and 12% to Africa. Just over 19% of Italian textiles were sold in the UK. Around 16% went to Turkey and Argentina. British India represented 8%, Egypt 5%, and the USA and Uruguay 3%.

**TABLE 4 • World textile foreign trade**

	Million marks	%
Europe	5133.41	89.14
Asia	489.10	8.49
America	136.58	2.37
Africa	0.02	0.00
<b>Total</b>	<b>5759.11</b>	<b>100.00</b>

Source: Carreras-Marín (2008)

**TABLE 5 • Textile exporters in 1913**

Countries	Million marks	%	Countries	Million marks	%
UK	2412.36	41.89	Persia	26.26	0.46
Germany	923.23	16.03	China	16.19	0.28
France	768.41	13.34	Turkey	14.59	0.25
Switzerland	292.83	5.08	French Asia	5.64	0.10
British India	290.52	5.05	Portugal	3.97	0.07
Italy	248.35	4.31	Bulgaria	2.87	0.05
Austria-Hongary	160.20	2.78	Finland	1.50	0.03
Japan	148.45	2.58	Dutch India	1.20	0.02
USA	136.58	2.37	Philippines	0.55	0.01
Belgium	104.44	1.81	New Zealand	0.29	0.00
The Netherlands	101.32	1.76	Serbia	0.23	0.00
Russia	70.78	1.23	Romania	0.22	0.00
Spain	28.11	0.49	Southafrica	0.02	0.00

Source: Carreras-Marín (2008)

was very modest,<sup>12</sup> while Japan also had a very low presence in international trade but would overtake the UK in 1933 in terms of export volumes and in 1951 in terms of export values.<sup>13</sup>

12. The Spanish textile industry was basically oriented towards the domestic market (Nadal, 1975 1992; Sudrià, 1983; Blasco and Carreras-Marín, 2004; Rosés, 1998, 2001, 2003; Calvo, 2002). An exception to this inward-looking view was the knitwear industry (Llonch, 1998).

13. Farnie and Jeremy (2004)

**TABLE 6 • Geographical distribution of textile World export, by continents, million marks 1913**

<b>Destination Origin</b>	<b>Europe</b>	<b>Asia</b>	<b>America</b>	<b>Africa</b>	<b>World</b>
Europe	1934.40	1334.94	1413.11	450.96	5133.41
Asia	113.35	136.99	216.24	22.52	489.10
America	11.44	30.27	90.26	4.61	136.58
Africa	0.02	0.00	0.00	0.00	0.02
<b>World</b>	<b>2059.82</b>	<b>1488.69</b>	<b>1732.98</b>	<b>477.94</b>	<b>5759.11</b>

Source: Carreras-Marín (2008)

**TABLE 7 • Geographical distribution of textile Intra-European exportation, by countries, million marks 1913**

	<b>Exportation</b>		<b>Exportation</b>
Germany	609.81	Turkey	11.79
France	410.48	Russia	5.47
UK	394.22	Spain	3.71
Switzerland	175.36	Bulgaria	2.76
Austria-Hungary	125.33	Finland	1.50
Italy	112.77	Serbia	0.23
Belgium	60.36	Romania	0.22
The Netherlands	20.39	Europa	1934.40

Source: Carreras-Marín (2008)

### **The intra-European textile trade: the weight of trade within Europe**

The international textile trade was not only dominated by European countries, but to a great extent trade also took place within Europe (see table 6). A 34% of the world textile trade was intra-European, 25% was between Europe and America, and 23% was between Europe and Asia. The textile trade within Asian countries and within American countries represented only 2% of the world total. The main markets for exported textile goods were the European (36%), but America (30%) and Asia (26%) were also of some importance. Africa had the smallest share representing only 8% of the international market. Europe was by far the main origin of exported textiles, but it was also the main destination, although not so far from America and Asia.

Focusing only on intra-European trade, which accounted for slightly over a third of the world textile trade in 1913, table 7 shows its geographical distribution by European countries. These results are not very different from those in the analysis of the geographical distribution of world trade (as seen in table 5), but certain special features make an appearance. Germany, France and the UK are still dominant in this trade, representing 73% of the total. However, the weight of each of these three European countries changes substantially. Germany now has the highest share, with 32% of intra-European trade. France occupies second position with 21%, close to the UK with 20%. Well below these percentages, Switzerland accounted for 9% of intra-European trade, Austria-Hungary and Italy 6%, Belgium 3%, the Netherlands and Turkey 1%. The other countries had lower participation in the intra-European textile trade. The Spanish share was only 0.19%.

These results paint a different scenario to that shown by the geographical distribution of total world trade. The fact that the UK was behind Germany and even France in the intra-European textile trade reveals quite a different situation to that of the international markets. In the world totals it is possible to explain the main part of the whole story by reducing the analysis to just one country: the UK. But this is quite different in the case of intra-European trade. We have to take into account the three main European textile exporters in order to understand the dynamics underlying intra-European trade. In some way it seems as if the British export decline in the textile trade came about earlier within Europe than in the rest of the world. It is quite reasonable to assume that product differentiation strategies had enabled Germany and France to successfully compete with the UK, the textile exporter par excellence. Farnie and Jeremy (2004) explain it as follows with reference to the German cotton industry: «Germany succeeded in adapting its export to the exact need of foreign customers and shipped special varieties of cloth to high in-

**TABLE 8 • Geographical distribution of British, German and French textile exports in million marks 1913**

<b>Exports from:</b>	<b>UK</b>	<b>%</b>	<b>Germany</b>	<b>%</b>	<b>France</b>	<b>%</b>
Asia	1016.36	42.13	58.49	6.34	48.99	6.38
Europe	394.22	16.34	609.81	66.05	410.48	53.42
America	749.31	31.06	227.62	24.65	202.95	26.41
Africa	252.47	10.47	27.31	2.96	105.99	13.79
<b>World</b>	<b>2412.36</b>	<b>100.00</b>	<b>923.23</b>	<b>100.00</b>	<b>768.41</b>	<b>100.00</b>

Source: Carreras-Marín (2008)

**TABLE 9 • Geographical distribution of British, German and French textile exports within Europe, million marks 1913**

	<b>UK</b>	<b>Germany</b>	<b>France</b>
UK		237.90	275.20
Germany	99.80		32.00
Turkey	67.56	24.10	14.32
The Netherlands	37.90	63.60	0.00
France	39.70	25.50	
Switzerland	10.00	52.80	20.20
Belgium	29.3	18.70	22.30
Russia	13.8	30.20	1.40
Austria-Hungary	10.40	45.50	7.80
Denmark	3.66	18.20	0.75
Sweden	11.40	19.70	0.53
Italy	16.90	35.40	17.00
Romania	7.50	7.60	5.32
Norway	8.20	12.40	0.00
Spain	6.60	5.80	5.50
Portugal	11.51	2.63	1.10
Greece	11.80	1.30	5.30
Bulgaria	5.02	1.00	1.30
Finland	1.50	3.20	0.00
<b>Europe</b>	<b>394.22</b>	<b>609.81</b>	<b>410.48</b>

Source: Carreras-Marín (2008)

come markets». <sup>14</sup> Also for the cotton industry, Brown (1992, 1995) has stressed the importance of German differentiation strategies in its competition with the British.

The above statement is consistent with the British geographical distribution, which is shown in table 8. Europe was not the first destination of British textiles, but accounted for only 16%. Asian markets were much more important, representing 42% of total exports. Of these markets, the most relevant country was British India with 19%. By country, the main importers (apart from British India) were USA (10%), Australia (9%), Canada and China (8%), SouthAfrica and Argentina (5%), and Germany (4%).

The geographical distribution of German textiles differed radically from that of Britain, as shown in Table 8. While Europe was a secondary market for

14. Farnie and Jeremy (2004), p. 42.

**TABLE 10 • Composition of British, German and French textile exports (%)**

Exports to:	Exports from: UK		Germany		France	
	World	Europe	World	Europe	World	Europe
Cotton goods	73.20	58.14	43.95	39.26	35.59	44.83
Wool goods	18.74	35.99	28.72	30.73	26.06	11.94
Ready-made items	5.72	3.80	15.24	17.07	25.29	31.10
Silk goods	2.35	2.07	12.09	12.94	13.06	12.12
<b>Total</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

Source: Kertesz (1917)

British textiles, it was the main market for Germany (66%). Well below this percentage, America accounted for 25% of German exports, and neither Asia (6%) nor Africa (3%) were much significant. The UK was the biggest importer of German textiles (26%), followed by the USA (12%), the Netherlands (7%), Switzerland (6%), Austria-Hungary and Argentina (5%) and Italy (4%).

The European orientation of French textile exports was not so strong as in the German case (53%). American markets represented 26%. Africa had a 14% share, due to the importance of French colonialism, while Asia was far behind, representing only 6%. UK was the first destination for French textiles, with a 36% of its exports. USA had the second position accounting for a 16%. Tunisia and Algeria received 9% of the French textile exports, Argentina 5% and Germany 4%.

Having highlighted the importance of intra-european trade on textiles, table 9 shows its geographical distribution. The main European importers of British textiles were Germany (25%), Turkey (17%), France and The Netherlands (10%). The main European destinations for German textiles were the UK (39%), The Netherlands (10%), Switzerland (9%), and Austria-Hungary (7%). In the case of France, the main importers were UK (67%), Germany (8%), Belgium and Switzerland (5%).

The geographical distribution by country also varies according to each particular textile fibre (see table 10). As is well known, cotton goods were the main British textile exports, although exported wool goods had also some importance. The textile composition with Europe varied greatly. 51% of British wool exports went to Europe, but only 24% of silk goods, 21% of cotton goods and 18% of clothing. It was the main destination for all German textiles, accounting for 80% of silk exports, 77% of wool and ready-made items, and 64% for cotton. German textile exports to Europe were composed of 39% cotton goods, 31% woollen goods, 17% silk goods and 13% ready-made items. European markets represented 80% of French exports of silk manufactures, 79% for wool and 59% for ready-made items, but only 29% for cotton. French

textile exports to Europe were composed of 45% silk goods, 31% woollen goods, 12% ready-made items and cotton goods.

In the British and German case the gap between cotton goods and woollen goods narrowed in the European markets, meanwhile in the French case cotton goods grew in Europe at the expense of wool goods. However, cotton was still the main textile exported in 1913 both in the World market and the European. Ready-made items had more presence on German and French export to Europe, but just the opposite in the British case. The importance of silk goods was almost the same in the World than in European markets.

## Conclusions

This article has carried out a detailed analysis of the nature and geographical composition of international textile markets in 1913. It highlights the extraordinary importance of Europe in every textile sphere except that of raw materials. The textile sector in 1913 showed high levels of geographical concentration. Europe represented 59% of world textile production and 48% of world textile consumption. But the highest European figures were for trade: 89% of world textile exports.

When looking at only the world totals, the story can be easily summarized as that of just one country. The UK accounted for almost 42% of world exports of textile manufactures in 1913. Its main competitors lagged far behind. Germany had 16% of world markets and France had 13%. These three European countries accounted for more than 70% of the world textile trade.

An original contribution of this paper is that it has identified that the textile trade not only involved mainly European countries, but that it was largely composed of trade within Europe. Intra-European trade was 34% of the world textile trade. Isolating only this amount of intra-European trade, the three main textile exporters still represented 70%, but each country's share is not the same in this case. The intra-European textile trade was dominated by Germany (32%), followed by France (21%) and the UK (20%). The fact that the traditional British dominance in textiles no longer applied in intra-European trade indicates that European markets were somewhat different to those of the rest of the world in 1913.

The analysis of textile markets show different geographical patterns. In the British case, the main foreign markets were Asian (42%). Europe only accounted for 16% of British exports. The UK's main European trade partner was Germany, followed by Turkey, France and the Netherlands. British textile composition was also different as regards Europe. In this case cotton goods decreased while woollen goods gained in popularity. The geographical pattern for the UK was quite different from those for Germany and France. Europe

was the main market for German (66%) as well as for French (53%) textiles. But the importance of Europe for German and French textile exportation was mainly due to the British market share, which represented 26% of German exports and 36% of that of France.

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### *The international textile trade in 1913: the role of intra-European flows*

#### ABSTRACT

This article analyses the textile trade using an international, multilateral and multifibre approach. Its main contribution is to present new data on international textile trade in 1913, which reveals how, within European countries, there was a clear dominance of German exports, followed closely by those from France and Britain. The scenario that emerges is quite different to that obtained from an analysis of intercontinental trade, where British hegemony was still very evident in 1913. The fact that, when looking only at the intra-European textile trade, Britain lags behind Germany and is almost on par with France, indicates that we are dealing with very different markets to those emerging on aggregate data, in which analysis can be reduced to a single country.

KEY WORDS: Textile Industry, International trade, European Trade: pre-1913, Textile Manufacturing in Europe pre-1913. JEL Codes: F14, F10, N13, N63.



### *El comercio textil internacional en 1913: el papel de los flujos intraeuropeos*

#### RESUMEN

Este artículo analiza el comercio textil, bajo un enfoque internacional, multilateral y multifibra. Su principal aportación consiste en presentar una nueva serie de datos sobre el comercio textil internacional en 1913. El análisis de estos datos muestra cómo entre países europeos, durante la Primera Globalización, se produjo un claro dominio de las exportaciones alemanas, seguidas muy de cerca por Francia y el Reino Unido. Ello constituye un escenario absolutamente distinto del que se obtendría del análisis del comercio intercontinental, donde la hegemonía británica todavía era muy importante en 1913. El hecho de que para el comercio textil intraeuropeo, el Reino Unido se sitúe por detrás de Alemania y casi a la par con Francia, indica que estamos ante unos mercados muy diferentes de los que emergen con los datos mundiales agregados, donde reduciendo el análisis a un solo país se explica casi todo.

PALABRAS CLAVE: Industria textil, Comercio Internacional, Comercio europeo 1913, Industria textil europea: 1913. Códigos JEL: F14, F10, N13, N63.

