

**The British Multinational Enterprise in Japan before 1945:  
The Case of J. & P. Coats  
(Summary)**

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**I. INTRODUCTION**

This paper delineates how J. & P. Coats, a leading British multinational enterprise manufacturing cotton thread, did business through foreign direct investments in Japan before 1945.

To J. & P. Coats, Japan was the key market in Asia and, thus, a total of five local businesses became involved in the manufacture and sale of the Coats thread between 1907 and 1941. A first manufacturing local company was established in 1907; two manufacturing and one selling companies appeared between 1930 and 1936; and, a selling company was founded in 1941.

This paper aims to construct a general picture of what these local businesses were like and how they were managed.

## **II. J. & P. COATS AS A MULTINATIONL**

### **2.1 AROUND THE WORLD**

\* <TABLE 1>, <TABLE 2>

(1) J. & P. Coats was founded in Paisley near Glasgow, Scotland, in 1830.

By the early 20<sup>th</sup> century, the company had grown into a major big business. In terms of capital, J. & P. Coats was the largest textile company in Britain in 1905, the largest textile company in the world in 1912, and the largest manufacturing company in Britain in 1919.

(2) Perhaps the most important factor for the success of J. & P. Coats was that the company had pioneered in foreign direct investments.

J. & P. Coats secured its first foreign manufacturing base in USA in 1869. For the next 45 years until 1914, the company had carried out a total of some 53 initial investments in 15 countries.

Earlier researches suggest that the investments by J. & P. Coats took place in either 10 or 19 countries. In terms of the number of countries involved, then, J. & P. Coats appears to have been the first among the contemporary British multinational enterprises including Lever Brothers and British American Tobacco.

(3) Before 1914, J. & P. Coats implemented investments mainly in developed countries in Europe and North America (11 of the 15 countries, 73%; 49 of the 53 investments (92%). By comparison, the company was much less interested in developing or under-developed countries in Latin America and Asia (4 countries, 4 investments).

(4) After 1914, J. & P. Coats continued to carry out foreign investments for local production and local sale, probably more frequently and more aggressively than before.

As far as Asia was concerned, J. & P. Coats paid attention to a greater extent after 1914 than before in terms of either the number of investments or the number of countries involved. However, it appears that, even after 1914, Asia remained less important for J. & P. Coats in comparison with other continents, not only North America and, presumably Europe, but also Latin America.

## **2.2 IN ASIA**

**\* <TABLE 3>**

(1) For the Asian markets, J. & P. Coats began to export its products from the late 19<sup>th</sup> century. By the 1920s, Coats's cotton thread was sold to some 19 countries or regions located in Middle East, Southeast Asia, Oceania and Northeast Asia.

As far as export was concerned, Australia was the largest market, followed by China, British India and Japan. Australia, China and British India all had maintained long and intimate relationships with Britain. So, these three countries may have been presumably regarded as, say, easy markets to J. & P. Coats.

For Japan, British-made cotton thread was sold to a lesser extent, but, instead, locally-made products became increasingly available from the early 20<sup>th</sup> century.

(2) All the four main markets received foreign investments, 10 in total, from J. & P. Coats.

Japan explained half the total investments (5), two of which were for its colonies, Korea and Manchucuo. 3 investments took place for British India and 1 each for China and Australia. Japan was the only country in Asia in which J. & P. Coats secured local bases for both manufacture and sale.

By comparison, the businesses for Australia, China and British India appear to have been relatively less important in nature and size than Japan for J. & P. Coats.

## **III. J. & P. COATS IN JAPAN**

### **3.1 FIVE LOCAL COMPANIES**

**\* <FIGURE 1>, <FIGURE 2>, <TABLE 4>**

(1) For the Japanese market, J. & P. Coats had secured a total of five local companies between 1907 and 1941. ① TSKK, ② TKHKK, ③ NKKK, ④ MSKK, ⑤ TeSKK.

(2) ① In 1907, TSKK, a first manufacturing company, was established in Osaka with a factory in nearby Yao.

② In 1930, TKHKK, a first selling company, was established.

③ In 1930, NKKK, a second manufacturing company, was acquired in Kyoto.

④ In 1936, MSKK was established in Japan, presumably in Osaka, for the Manchukuo market with a factory in Manchukuo.

⑤ In 1941, TeSKK was established in Japan, presumably in Osaka, for the Korean market.

(3) Among the five companies, TSKK was the key subsidiary. TSKK was a joint venture in which J. & P. Coats and Murai Brothers of Tokyo were the partners. Then, TSKK acted as the de facto holding company, owning the other four companies partially (TKHKK, NKKK, and MSKK) or wholly (TeSKK).

As far as NKKK was concerned, the company was an independent company when it joined TSKK to found TKHKK. Shortly after that, however, NKKK was acquired by TSKK and other shareholders.

### **3.2 GROWTH OF THE LOCAL COMPANIES**

\* <TABLE 5>

(1) The activities of J. & P. Coats in Japan before 1945 can be divided roughly into three: ① settlement in 1907-1929; ② expansion in 1930-1936; and, ③ status quo in 1937-1945.

(2) In the period of settlement (1907-1929), J. & P. Coats made its first direct investment by founding TSKK in 1907. The British company had since invested slowly but gradually in the Japanese business for more than twenty years until the 1920s with the result that Coats's brands had successfully settled down in the country.

The nominal capital of TSKK was 1 million yens at the time of foundation in 1907 and it was only in 1926 that the capital increased by two times to 2 million yens. Similarly, the money invested by the British headquarters for the Japanese businesses in 1924-1925 appears to have been much less than those for other major foreign businesses in USA, Europe, and Brazil.

(3) In the period of expansion (1930-1936), J. & P. Coats became involved in the Japanese businesses to a greater extent than before.

Above all, TSKK had experienced an accelerated growth. The nominal capital increased from 2 million yens in 1926 to 4 million yens by 1936. More importantly, the increasing capital enabled a series of investments to be made for the extension of the Yao Mill of TSKK particularly in the first half of the 1930s. Also, two manufacturing (NKKK and MSKK) and one selling (TKHKK) companies were secured.

(3) In the period of status quo (1937-1945), during which the Sino-Japanese War had lasted, J. & P. Coats made every effort to protect its interests of significant size in the country against the increasingly adverse attitudes of the Government, the customers and even the local management of TSKK. Investments for TSKK were made much less frequently than before.

Meanwhile, the nominal capital of MSKK, in which TSKK, together with NKKK, held an interest of 40%, increased from 1 million yens to 5 million yens between 1936 and 1938. Also, a small selling company (TeSKK) was founded for the nearby Korean market.

#### **IV. FACTORS FOR THE INVOLVEMENT OF J. & P. COATS** **IN THE JAPANESE MARKET**

##### **4.1 POPULATION, INCOME, AND THE COTTON INDUSTRY IN JAPAN**

\* <TABLE 6>, <TABLE 7>, <TABLE 8>, <TABLE 9>, <TABLE 10>

(1) Cotton thread is an intermediate good used for the manufacture of cotton cloths and clothes; it could be used in factories, at tailor shops, or at home; and, it could be used with the help of sewing machines or needles and hands.

As cloths and clothes are essential for the ordinary people's lives, the basic factor for the demand for cotton thread is the size of population.

Also, of great significance to how well cotton thread could be demanded are: the standard of living, or the level of personal income; and, the extent of the development of cotton and other related textile industries.

(2) In Japan, from the 1860s with the beginning of the Meiji era, the population and the level of personal income had rapidly increased, and the cotton and other textile industries had been well established. This appears to have presumably contributed to the continuing and active involvement of J. & P. Coats in the Japanese market.

① The population was 26 million persons in 1867, but it had doubled to 52 million persons by 1913, five years later the first investment for the foundation of TSKK. The population further increased to 64.5 million persons in 1930, when TKHKK and NKKK were secured by TSKK.

② The level of personal income had risen more rapidly from 31.7 yen in 1878 to 108.9 yen in 1914, and then to 197.1 yen in 1930.

③ The cotton industries, particularly spinning, had been well developed. The number of spindles was merely 8,000 in 1877, but it recorded more than 2.4 million, which surpassed those for major European countries including Spain, Belgium, and Switzerland.

A variety of other textiles - such as wool, silk, rayon, muslin, and sail cloth - had also flourished with the result that the textile industries explained more than a half of the economy as a whole in terms of employment in the 1920s.

#### **4.2 MAGEMENT OF THE LOCAL BUSINESSES**

\* <TABLE 11>, <TABLE 12>

(1) Another important factor for the successful connection of J. & P. Coats with the Japanese market was, it appears, that the local businesses had been efficiently managed in order to overcome the changing business climate.

(2) At the British headquarters of J. & P. Coats, the board of directors and a variety of functional standing committees supervised the global network of manufacture and sales at home and foreign countries including Japan.

From 1931, Japan Liaison Committee was set up and, also, ad hoc committees were occasionally created to deal with matters of importance for Japan.

(3) For TSKK, the key Japanese subsidiary, British and Japanese staff alike joined the management. Some of the British directors of TSKK were based at the British headquarters, while others resided locally in Japan. The Japanese staff consisted of the Murai family members and professional managers.

(4) For NKKK, TKHKK, and MSKK, in which TSKK held controlling interests, a number of key Japanese TSKK staff were involved in the management.

## **V. CONCLUSIONS**

This paper attempted to construct a general picture of the ways in which J. & P. Coats carried out foreign direct investments for the manufacture and sale of cotton thread for the Japanese market before 1945.

The findings and interpretations suggested in the paper have yet to be elaborated and confirmed. Further information on origins, management and performance of the five local businesses needs to be collected from J. & P. Coats's archival materials. Also, perhaps more importantly, new information from a variety of secondary sources needs to be utilized in order to properly evaluate J. & P. Coats's involvement in the Japanese market particularly in the context of the country's cotton textile industries.

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**<Table 1> Foreign direct investments by J. & P. Coats before 1914**

**(A) Overview**

	The number of countries involved			The number of initial FDIs		
	<u>Total</u>	Before 1896	After 1896	<u>Total</u>	Before 1896	After 1896
World	15	5	10	53	13	40
Europe	9	3	6	36	7	29
Non-Europe	6	2	4	17	6	11
North America	2	2	-	13	6	7
Latin America	3	-	3	3	-	3
Asia	1	-	1	1	-	1

**(B) By Country (The number of FDIs / Years of FDIs)**

	NORTH AMERICA	EUROPE	LATIN AMERICA	ASIA
<u>Before 1896</u>	USA (3 / 1869-92) Canada (3 / 1876-93)	Russia (4 / 1886-91) Austria (2 / 1893) Spain (1 / 1893)		
<u>After 1896</u>	USA (6 / 1896-1908) Canada (1 / 1904)	Russia (6 / 1896-1907) Austria (2 / 1898-1900) Spain (2 / 1903) Belgium (7 / 1899-1913) Hungary (1 / 1901) Germany (1 / 1904) Portugal (1 / 1905) Italy (8 / 1905-12) Switzerland (1 / 1906)	Barbados (1 / 1907) Brazil (1 / 1907) Mexico (1 / 1913)	Japan (1 / 1907)

Source: Dong-Woon Kim, J. & P. Coats as a multinational before 1914, *Business and Economic History* 26-2 (1997).

**<Table 2> Major British multinational enterprises before 1914:  
The number of foreign countries involved (Europe / Non-Europe)**

Company	Stopford (1974)	Archer (1990)	Company	Stopford (1974)	Archer (1990)
J. & P. Coats	10 (5 / 5)	19 (13 / 6)			
Lever Brothers	14 (4 / 10)	14 (6 / 8)	British American Tobacco	11 (2 / 9)	10 (2 / 8)
Royal Dutch Shell	8 (3 / 5)	7+ (2 / 5+)	Burroughs Wellcome & Co.		8 (1 / 7)
Dunlop	7 (1 / 6)	6 (2 / 4)	Reckitt & Sons	6 (1 / 5)	7 (2 / 5)
Vickers	6 (3 / 3)	6 (3 / 3)	Gramophone Co.	3 (1 / 2)	7 (6 / 1)
Babcock & Wilcox	-	5 (4 / 1)	English Sewing Cotton Co.	4 (2 / 2)	5 (2 / 3)
Pilkington Brothers	4 (3 / 1)	4 (3 / 1)	Bryant & May	4 (0 / 4)	3 (0 / 3)
Liebig Extract of Meat	3 (1 / 2)	-	Nobel Explosives	2 (0 / 2)	3 (0 / 3)
Courtaulds	2 (1 / 1)	1 (0 / 1)			

Sources: J.M. Stopford, 'The Origins of British-Based Multinational Manufacturing Enterprises', *Business History Review* 43 (1974); H. Archer, 'The Role of the Entrepreneur in the Emergence and Development of UK Multinational Enterprises', *Journal of European Economic History* 19 (1990).



**<Table 3> Foreign direct investments by J. & P. Coats for Asia before 1945**

**(A) Overview (Total = 10 initial investments; Number)**

<u>WHERE</u>		<u>WHAT</u>	
Japan	(5) [Japan (3), Korea (1), Manchukuo (1)]	Manufacture	(7) vs. Sale (3)
British India	(3)	Market-oriented	(10) vs. Supply-oriented (0)
China	(1)	Subsidiaries	(8) vs. Associate companies (2)
UK	(1) [Australia (1)]		
<u>WHEN</u>		<u>HOW</u>	
Before 1914	(1) [1900s (1)]	Founded	(9) vs. Acquired (1)
After 1914	(9) [1920s (1), 1930s (5), 1940s (3)]	Wholly-owned	(6) vs. Joint venture (4) [ >50% interest (2) ]

**(B) By country**

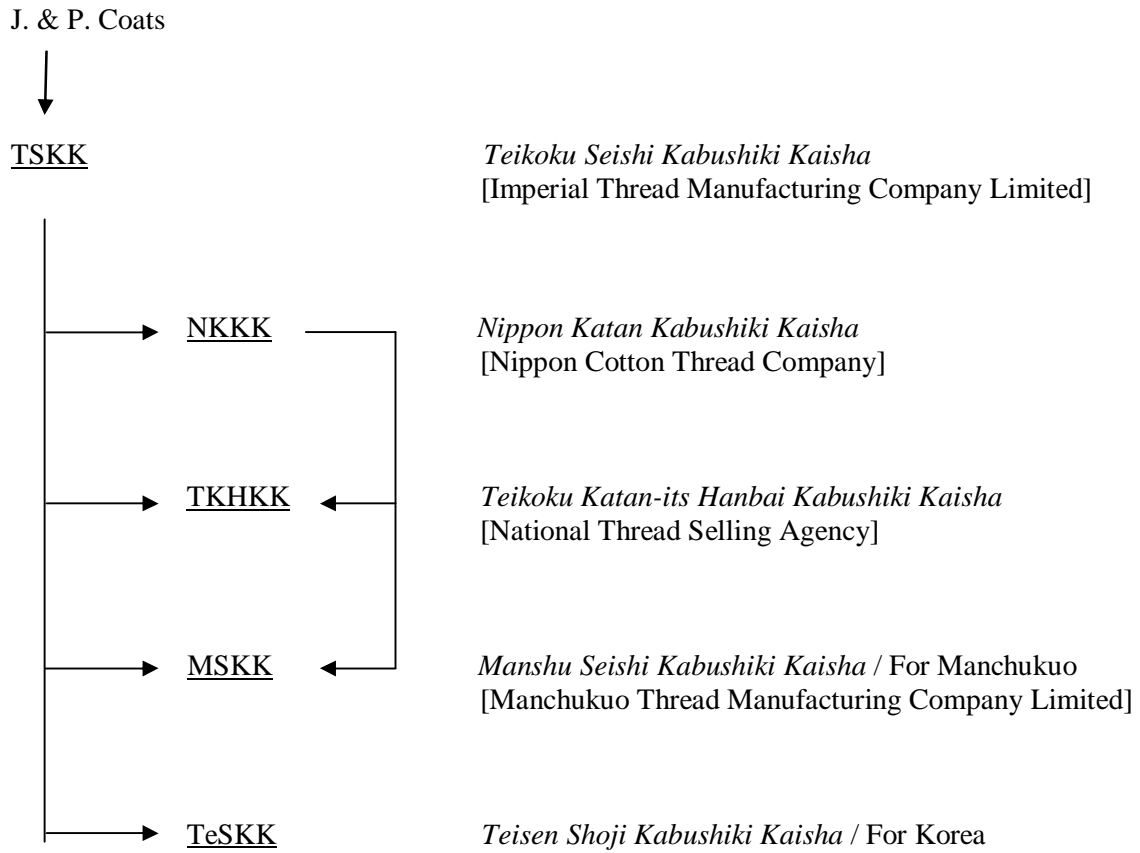
	JAPAN	UK	CHINA	BRITISH INDIA
1907	M/F/J Teikoku Seishi Kabushiki Kaisha (TSKK)			
c1929		S/F/W [for Australia] Central Agency (Australia) Limited		
1930	S/F/J Teikoku Katan-its Hanbai Kabushiki Kaisha (TKHKK)			
c1930	M/A/J Nippon Katan Kabushiki Kaisha (NKKK)			
1934			M/F/W Mien Wha Thread Company Limited	
1936	M/F/J [for Manchukuo] Manshu Seishi Kabushiki Kaisha (MSKK)			
1938				M/F/W Jumna Thread Mill
1941	S/F/W [for Korea] Teisen Shoji Kabushiki Kaisha (TeSKK)			
1942				M/F/W Jumna Thread Mill Limited
1942				M/F/W Tube manufacturing plant

Note: 1) M = for manufacture, S = for sale; F = Founded, A = Acquired; W = Wholly-owned, J = Joint venture.

2) TSKK (60% interest owned by J. & P. Coats), TKHKK (60%), NKKK (unknown), MSKK (less than 40%);  
Subsidiary = more than 50% interest, associate company = less than 50% interest.

Sources: J. & P. Coats Archives, Business Record Centre, Glasgow University.

**<Figure 1> Foreign Direct Investments by J. & P. Coats for Japan before 1945:  
(1) Overall Structure**



**<Figure 2> Map of Japan**



**<Table 4> Foreign Direct Investments by J. & P. Coats for Japan before 1945:  
(2) Origins**

**(A) Overview (Total = 5 initial investments; Number)**

<u>WHEN</u>	<u>WHAT</u>
Before 1914 (1) [ 1900s (1) ]	Manufacture (3) vs. Sale (2)
After 1914 (5) [ 1930s (3), 1940s (1) ]	Market-oriented (5) vs. Supply-oriented (0) Subsidiaries (3) vs. Associate companies (2)

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<u>WHERE</u>	<u>WHY</u>	<u>HOW</u>
Osaka (1)	Competition (3)	Founded (4) vs. Acquired (1)
Kyoto (1)	Others (2)	Wholly-owned (1) vs. Joint venture (4)
Unknown (3)	Tariffs (0)	[ >50% interest (2) ]

**(B) By company**

	<u>WHEN</u>	<u>WHERE</u>	<u>WHAT</u>	<u>WHY</u>	<u>HOW</u>			
	Year	City	M/S	C/O/T	F/A	W/J	Capital (Yen)	Partners (%)
TSKK	1907	Osaka Yao (factory)	M	O	F	J	1,000,000	J. & P. Coats (60) Murai Brothers (40)
TKHKK	1930	-	S	C	F	J	1,000,000	TSKK (60) NKKK (40)
NKKK	c1930	Kyoto	M	C	A	J	-	TSKK KBKK Others
MSKK	1936	- [Manchukuo] (factory)	M	C	F	J	1,000,000	TSKK/NKKK (40) KBKK (20) Saichi Tatsuke (20) Mr. Taketome (20)
TeSkk	1941	-	S	O	F	W	100,000	TSKK (100)

Notes: 1) What: M = Manufacture, S = Sale.

2) Why: C = Competition, O = Others (market attraction), T = Tariffs.

3) How: F = Founded, A = Acquired, W = Wholly-owned, J = Joint venture.

Capital = initial nominal capital.

For TSKK: Murai Brothers was based in Tokyo.

For TKHKK: NKKK was an independent partner at the beginning; the share of trade - Central

Agency (30%; the British selling arm of J. & P. Coats), TSKK (50%), NKKK (20%)

For NKKK: KBKK = Koto Boseki Kabushiki Kaisha (an independent company); the interest owned by KBKK was transferred to Saichi Tatsuke, the president of NKKK, in 1934

Sources: J. & P. Coats Archives, Business Record Centre, Glasgow University.

**<Table 5> Growth of Local Companies in Japan**

**(A) Nominal vs. Paid-up Capital of TSKK and MSKK, 1907-1938 (Million Yens)**

<u>TSKK</u>	Nominal	Paid-up	<u>MSKK</u>	Nominal	Paid-up
July 1907	1	-	November 1936	1	0.25
After July 1907		1	March 1937	2	1.5
January 1926	2	1.5	September 1938	5	-
September 1934		1.75			
October 1936	4	2.5			

**(B) Investments for the Yao Mill of TSKK, 1926-1941**

When	Amount	For What
1926 / September	c £ 28,000	Additional hoisting, bleaching & polishing machinery etc.
1931 / July	Yen 4,366	New shed for birch wood
October	c £ 25,000	Twisting machinery + related new building
1932 / April	Yen 23,560	Reconstruction of Tokyo Depot & office premises
July	Yen 70,686	A plot of land at Yao Mill (3,741 tsubo ≐ 3 acres)
1934 / September	< £ 1,440	A plot of land at Yao Mill for boiler plant
1935 / January	£ 2,000-2,500	Automatic balling machinery
April	£ 62,500	Spinning plant: building ( £ 20,000) + machinery ( £ 42,500)
September	£ 43,300	Extension of bleach & dye works ( £ 29,300) + another extension ( £ 14,000)
November	£ 13,350	Extension of buildings + machinery
November	Yen 3,580	A plot of land at Yao Mill (195 tsubo)
1936 / April	£ 1,874	A German drying machine
1937 / March	£ 6,100	Extensions
1941 / June	ÖYen 216,000	A plot of land at Yao Mill (Ö8,000 tsubo ≐ 6.6 acres)

**(C) Investments by J. & P. Coats for foreign subsidiaries (A, £ ), Return (B, £ ), and Return to investment (B/A, %), July 1924 - March 1925**

	A	B	B/A		A	B	B/A
USA (Pawtucket)	4,930,269	240,816	5	Czechoslovakia	558,775	142,704	25
USA (Newark)	3,889,228	291,404	7	Italy	496,554	85,877	17
Brazil	800,377	296,292	37	Canada	447,799	90,815	20
Austria	680,390	159,644	23	Switzerland	121,564	94,351	78
Belgium	665,458	13,015	2	<u>Japan</u>	99,382	6,625	7
Spain	663,026	80,017	12	Mexico	87,510	5,013	5
Portugal	598,095	47,512	8				

Notes: 1) Capital: decided. 2) Investments: amounts for plots of land (except of 1941) and extensions of 1937= actually spent; those for the others and a plot of land of 1941 = approved or decided.

Sources: J. & P. Coats Archives, Business Record Centre, Glasgow University.

<Table 6> Population, Income, and Cotton Industry in Japan, 1867-1950

Year	Population (Million, A)	Income		Cotton Industry		
		National (Million Yen)	Per Capita (Yen, B/A)	Spindles (000)	Looms (power/hand, 000)	Yarn Output (Million lb.)
<u>Meiji Period</u>						
1867	26.0					
1873	35.2					
1877				8		
1878		1,117	(31.7)			
1887				77		
1890		2,308				
1893				382		88
1897				971		220
1900		3,640	(79.0)			
1903	46.1			1,381		317
1907				1,540		393
<u>Taisho Period</u>						
1913	52.0			2,415		607
1914		5,665	(108.9)			
1920	56.0	6,316	112.8	3,814		727
1922					383 (218/165)	
1925	59.7	9,268	155.2	5,186		975
1926					367 (262/105)	
<u>Showa Period</u>						
1929		10,962		6,650	363 (277/86)	1,117
1930	64.5	12,715	197.1			
1932		13,843				
1933				8,525		
1935	69.3			10,330		
1936		16,133	(232.8)		393 (342/51)	
1937				12,297		
1940	73.1					
1945				2,064		
1950	83.2					

Notes: 1) The Meiji Period (明治時代; 1868-1912), The Taisho Period (大正時代; 1912-1926), The Showa Period (昭和時代; 1926-1989).

2) Population: The figures for 1873 and 1903 are estimates based on local records of family registrations and corrected in the light of subsequent Census returns; the figures for 1920 and later years are based on the Census returns.

3) National Income = Real National Income Produced at 1928-32 prices.

4) Per Capita Income of 1878, 1900, and 1936 are divided by the population of 1873, 1903, and 1935.

5) Spindles are mainly ring spindles, the number of mules being very small.

6) Power-looms: 1922 (122 narrow / 96 wide looms), 1926 (116 / 146), 1929 (106 / 171), 1936 (76 / 266).

Sources: 1) Population (except 1867 and 1913) ó Imperial Cabinet, Bureau of Statistics, *Statistical Year Book of the Empire of Japan* (in Japanese); Real National Income Produced ó K. Ohkawa, *The Growth Rate of the Japanese Economy since 1878* (1957), p. 248 (Reproduced from G. C. Allen, *A Short Economic History of Modern Japan* (London: George Allen & Unwin Ltd., 1962), pp. 194, 224).

2) Population (1867 and 1913) ó H. Kinder and W. Hilgemann (translated by E.A. Menze), *The Penguin Atlas of World History, Volume II: From the French Revolution to the Present* (Harmondsworth: Penguin Books, 1978), p. 115.

3) Cotton Industry - Department of Commerce and Industry, *Statistics of Commerce and Industry* (Annual; in Japanese); Japan Cotton Spinners' Association, *Cotton Statistics of Japan* (1903-35) and *Bi-Annual Reports* (in Japanese); Oriental Economist, *Foreign Trade of Japan: A Statistical Survey* (1935); Toyo Spinning Company, Institute of Economic Research, *Statistical Digest of Japanese Textile Industry* (Quarterly) (Reproduced from Allen, *A Short Economic History of Modern Japan*, pp. 72, 113, 206).

**<Table 7> The Number of Spindles in Japan and European countries, 1880-1914  
(thousands)**

	1880	1890	1900	1910	1914
United Kingdom	44,207	44,509	47,857	52,818	55,653
Germany	4,800	6,071	8,434	9,900	11,186
Russia	4,400	6,000	7,146	7,900	9,212
France	4,800	5,040	6,150	6,700	7,400
Austria	1,950	2,400	3,450	4,000	4,909
Italy	1,150	1,686	2,435	4,200	4,600
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Japan	8	77	971	1,540	2,415
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Spain	1,865	2,050	2,600	1,850	2,000
Belgium	840	930	880	1,200	1,492
Switzerland	1,900	1,722	1,600	1,500	1,398
Portugal	110	160	230	378	480
Netherlands	250	260	-	386	479

Notes: 1) UK: Figures of 1880-1900 include doubling spindles; 1880 for 1878, 1900 for 1903, 1910 for 1908, 1914 for 1913. 2) Germany: Figures of 1880-1914 include spindles in Alsace-Lorraine; 1880 for 1882/3, 1890 for 1891/2, 1900 for 1904, 1910 for 1908, 1914 for 1913. 3) Russia: Figures for the Russian Empire including Finland; 1880 for 1882/3, 1890 for 1891/2, 1900 for 1903, 1910 for 1908, 1914 for 1913. 4) France: Figures of 1880-1914 exclude spindles in Alsace-Lorraine; 1880 for 1882/3, 1890 for 1891/2, 1900 for 1904, 1910 for 1908, 1914 for 1913. 5) Austria: Figures for the Austria-Hungarian Empire; 1880 for 1882/3, 1890 for 1891/2, 1900 for 1904, 1910 for 1908, 1914 for 1913. 6) Italy: 1880 for 1882/3, 1890 for 1891/2, 1900 for 1904, 1910 for 1908, 1914 for 1913. 7) Spain: 1880 for 1882/3, 1890 for 1894, 1900 for 1904, 1910 for 1908, 1914 for 1913. 8) Belgium: 1880 for 1882/3, 1890 for 1891/2, 1900 for 1898, 1910 for 1908, 1914 for 1913. 9) Switzerland: 1880 for 1882/3, 1890 for 1891/2, 1900 for 1904, 1910 for 1908, 1914 for 1913. 10) Portugal - 1880 for 1882/3, 1890 for 1894, 1900 for 1904, 1910 for 1908, 1914 for 1913. 11) Netherlands - 1880 for 1882/3, 1890 for 1891/2, 1910 for 1908, 1914 for 1913. 12) Japan - 1880 for 1877, 1890 for 1887, 1900 for 1897, 1910 for 1907, 1914 for 1913.

Sources: 1) European countries: B. R. Mitchell, *European Historical Statistics 1750-1970*, Abridged Edition, (1978, London, Macmillan), pp.258-9.

2) Japan: <Table 6>.

**<Table 8> Textile industry in Japan:  
(1) Distribution of Factory Employment and Output among Industries, 1923-36  
(%)**

Year	Textiles	Machinery	Chemicals	Metals	Food	Others	Total
<u>Employment</u>							
1923	52.2	13.0	5.5	5.2	9.6		100
1929	50.4	13.8	6.4	6.2	8.7		100
1933	43.4	15.9	8.0	7.4	6.8		100
1936	37.9	18.3	11.1	9.7	6.7		100
<u>Output</u>							
1930	36.5	11.6	15.2	8.5	16.0		100

Notes: 1) The total employment: 1929 (1,825,000 persons), 1933 (1,901,000), 1936 (2,593,000);  
Output is by value-added.

2) Machinery = Machinery, Vehicles, Tools, etc.; Food = Food and Drink;  
Chemicals include rubber and paper.

3) The figures exclude small factories with less than 5 workers and government factories.

Sources: Department of Commerce and Industry, *Factory Statistics* (Annual; in Japanese)

(Reproduced from G. C. Allen, *A Short Economic History of Modern Japan* (London: George Allen & Unwin Ltd., 1962), pp. 197, 204).

**<Table 9> Textile industry in Japan:  
(2) Distribution of 100 Largest Firms by sales/assets among Industries, 1920-50  
(Number)**

	Textiles	Food	Chemicals	Metals	Engineering	Steel	Others	Total
<u>1920</u>								
Sales	31	15	7	9	9	6		93
Assets	28	15	9	9	9	8		96
Total	37	19	11	11	11	9		118
<u>1935</u>								
Sales	32	14	14	10	6	8		100
Assets	30	13	17	8	8	7		100
Total	38	15	18	10	9	8		118
<u>1950</u>								
Sales	23	12	13	7	9	11		100
Assets	22	8	13	10	12	9		100
Total	24	12	14	10	12	11		112

Note: Metals = Nonferrous metals. Other industries include paper, electrical, ceramics & rubber, oil, and automobiles.

Sources: Y. Suzuki, *Japanese Management Structures, 1920-80* (Basingstoke: Macmillan, 1991), p. 89.

**<Table 10> Textile industry in Japan:  
(3) Textile firms by sector belonging to 100 largest firms by sales/assets, 1935**

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(1) Cotton: Fukushima Cotton Spinning [*Fukushima Boseki*]  
 Kurashiki Cotton Spinning [*Kurashiki Boseki*]  
 Naigaiwata (Naigai Cotton Spinning)  
 Toyo Cotton Mill [*Toyo Boseki*]

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(2) Wool: *Chuo Keito Boseki* (Chuo Wool Spinning)  
*Shinko Keori* (Shinko Wool Textile)  
*Showa Keito Boseki* (Showa Wool Spinning)

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(3) Silk, Rayon, Artificial Fibre: Gunze Silk Mfg [*Gunze Seishi*]  
*Kurashiki Kenshoku* (Kurashiki Rayon)  
 Nippon Rayon  
 Toyo Rayon  
*Teikoku Jinzo Kenshi* (Teikoku Artificial Fibre)

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(4) Muslin, Sail Cloth, Cambric: Kyoritsu Muslin  
*Tokyo Muslin Boshoku* [Tokyo Mulsin Spinning & Weaving]  
 Toyo Muslin  
*Omi Hampu* (Omi Sail Cloth)  
*Tiekoku Seima* (Teikoku Cambric Mfg)

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(A) Spinning & Weaving: Dai Nippon Spinning & Weaving [*Dainippon Boseki*]  
 Hinode Spinning & Weaving [*Hinode Boshoku*]  
 Kishiwada Spinning & Weaving [*Kishiwada Boseki*]  
*Meisei Boshoku* (Meisei Spinning & Weaving)  
*Nagasaki Boshoku* (Nagasaki Spinning & Weaving)  
*Nikka Boshoku* (Nikka Spinning & Weaving)  
*Toyoda Boshoku* (Toyoda Spinning & Weaving)  
 Wakayama Spinning & Weaving [*Wakayama Boshoku*]

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(B) Spinning: *Doko Boseki* (Doko Spinning)  
 Fujigas Spinning [*Fujigas Boseki*]  
 Kanegafuchi Spinning [*Kanegafuchi Boseki*]  
*Kinka Boseki* (Kinka Spinning)  
 Kureha Spinning [*Kureha Boseki*]  
 Nisshin Spinning [*Nisshin Boseki*]  
*Shanghai Seizo Kenshi* (Shanghai Spinning)

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(C) Weaving: *Izumo Seishoku* (Izumo Weaving)  
*Tenman Orimono* (Tenman Weaving)  
 The Nippon Weaving [*Nippon Keori*]

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(D) Others: *Asahi Bemberg Kenshi* (Asahi Bemberg)  
 Katakura Industry [*Katakura Seishi*]

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Sources: Y. Suzuki, *Japanese Management Structures, 1920-80* (London: Macmillan, 1991), pp. 331-333.



**<Table 11> Management for the Local Companies in Japan:  
(1) British Headquarters**

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(1) The Board of Directors

Number of Directors: 1920 (13), 1925 (14), 1930 (14), 1935 (15), 1940 (16), 1944 (13)

---

(2) Standing Committees: Functional Committees

Number of Committees: 1922 (10), 1925 (15), 1930 (16), 1935 (21), 1940 (25), 1944 (34)

Types of Committees: (General) a) General Purposes, Special  
b) Capital Expenditure, Costings and On Cost, Salary, Finance  
c) Grading, Joint, Office, Trainees, Organisation  
d) Taining of Young Men  
e) Charities and Donations, Superannuation Fund, Charities and Superannuation, Welfare, Superannuation, Pensions, Charities and Welfare  
(Manufacture) a) Cotton Buying, Cotton, Yarn Buying, Yarn, Raw Materials, Spools and Spoolwood  
b) Depreciation, Production and Development, Manufacturing  
c) Artificial Silk Experiments, Research  
(Sales) a) Advertising  
b) Selling, Selling and Exchange, Joint Selling  
c) Standards, Trade Marks, Merchandising

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(3) Standing Committees: Japan Liaison Committee

Number of Members: 1931 (3), 1932 (3), 1933 (5), 1934 (5), 1935 (5), 1936 (4), 1937 (4), 1938 (6)  
1939 (5), 1940 (5), 1941 (6), 1942 (4), 1943 (4), 1944 (4)

Members (years of service): C.J. Hirst (1931-44), R. Laidlaw (1933-44), A.P. Kirsop (1933-41),  
T.W. Hirst (1935-44), P.V. Birrell (1931-35), Ian P. Coats (1931-32),  
T.H. Coats (1933-34), J. Henderson (1938-39), J.C.W. Buxton (19380),  
C.F. Paul (1940-41), C.W. Bell (1941-43), C.M. Martin (1944)

(Supervision of the Japanese business before 1931): C.J. Hirst (? - 1927, 29-31), T.H. Coats (?- 1927),  
W.H. Sutton (1927-28), E.S. Coats (1929-31),  
Ian P. Coats (1929-31)

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(4) Ad hoc Committees for Japan

(May 1907) 3 members, to arrange details for the formation of TSKK

(January 1926) 3 members, to consider increasing the capital of TSKK

(June 1929), 3 members, to arrange details for the formation of TKHKK

(March 1933), 3 members, to consider (a) the installation of a spinning plant at Yao and (b) the erection of an extensive plant in China or Manchukuo

(May 1937) 5 members, to consider (a) difficulties resulting from the increase in the paid-up capital of TSKK and (b) competition from Japanese competitors

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Notes: 1935 = Japan (with China) Liaison Committee, 1944 = Far East Liaison Committee  
Sources: J. & P. Coats Archives, Business Record Centre, Glasgow University.

**<Table 12> Management for the Local Companies in Japan:  
(2) For local companies**

**(A) For TSKK**

British staff

(At the British Headquarters) E.A. Philippi (Director; ? - <1932), P.V. Birrell (Director; <1931- 1935),  
A.P. Kirsop (Director; >1933 - >1937)  
(Resident in Japan) W.F. Wenyon (Director; >1918 - >1927), Charles Wallace (Director; >1927 - >1940),  
J.C.W. Buxton (Director; 1938 - >1940), C.V. Curtis (>1925 - >1940)  
(Short stay in Japan) R. Laidlaw (>1933 - ?), C.F. Paul (1938),  
G.W. Probst (Inspector, 1927-28; Liaison officer & Mill Manager, 1938 - ?)

Japanese Staff

(The Murai family) Kichibei Murai      Managing Director (>1907 - <1926)  
Teinosuke Murai      Managing Director (>1907 - ?), Chairman (<1933 - 1938)  
Shiro Murai      Director (1934 - 38), Inspector (>1938 - ?)  
I. Murai      Director (1934 - ?)  
G. Murai      Inspector (? - >1938)

(Non-family members)

Sadami Horinaga      Managing Director (>1924-1939), Chairman (1938-39, 1940-41)  
Susumu Baba      Secretary (1931 - ?), Mill Manager (General Manager) (>1936 - ?),  
Director (1938 - ?), Chairman (1939 - >1940)  
M. Uematsu      Mill Manager (<1931 - 1937), Director (? - 1937)  
I. Nakajima      Head of Accounting Dept. (? - 1938), Director (1938 - ?)  
S. Tanaka      Director (1937-40)  
Mr. Toma      Inspector (? - c1939)  
Lieut. General Chiba      Liaison Officer for Government Contracts (<1938 - ?)  
H. Shimada      Director (>1940 - ?)  
H. Akita      Inspector (>1940 - ?), Director (1941 - ?)  
Taizo Sawada      Director (1940 - ?)

**(B) For NKKK, TKHKK, and MSKK**

TSKK Staff

Susumu Baba      NKKK: Director (<1939 - 1940), Chairman/Managing Director (>1939 - 1940)  
TKHKK: Managing Director (1940)  
I. Nakajima      NKKK: Director (>1939 - ?), Inspector (>1940 - ?) /  
MSKK: Inspector (>1940 - ?)  
Sadami Horinaga      NKKK: Director (<1940 - ?) / MSKK: Director (<1939 - >1941)  
H. Shimada      NKKK: Director (1940 - ?) / TKHKK: Inspector (>1940 - ?)  
Mr. Toma      TKHKK: Director (1940 - ?)  
Teinosuke Murai      MSKK: Chairman (? - >1940)

Others

Mr. Arao      NKKK: Director (? ó 1933)  
Saichi Tatsuke      NKKK: Director (>1934 - ?)  
Mr. Sakai      TKHKK: Director (1940 - ?)

Notes: 1) For instance, =>1907ø indicates -in or after 1907; the years of service without years of start or end mean that the years are unknown. 2) It is difficult, or even not possible, to pinpoint years of service from the sources and the years are, in most cases, tentative ones.

Sources: J. & P. Coats Archives, Business Record Centre, Glasgow University.