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The economic and social networks of business leaders: Immigrant businessmen in the nineteenth century Finnish economy

Introduction

The research project *The Economic and Social Networks of Business Leaders in the Nineteenth Century Finland* is motivated by the realisation that economic and social networks in the nineteenth century Finnish business life were closely interlocked with European business life. Since the end of the Russo-Swedish War (1808–1809) Finland, then the autonomous Grand Duchy of the Russian Empire, developed rich business contacts to merchant houses in London, Amsterdam, Copenhagen, Stockholm, St Petersburg and in various other ports. The radical shrinking of distance, which began in the nineteenth century, transformed Finnish business from mercantile to industrial capitalism and the world in which firms and entrepreneurs operated.

This paper highlights the importance of entrepreneurs and firms, rather than markets and technologies, in analysing Finnish business history. The object of the paper is to analyse and disentangle different genres of business leaders represented by different nationalities actively participating business life in Finland in order to formulate comparative generalisations of their impact, significance and contributions for Finnish and European nineteenth century business life. To achieve this research object, we have gathered company level data as well as biographical data on individual entrepreneurs represented by different nationalities, cultures and ethnic backgrounds active in Finland after 1809 to test the drivers of entrepreneurial success and failure. At centre of our analysis are 30 major industrial enterprises and merchant houses which illustrate the outlook of mill industry in Finland in 1844, 1860/2 and 1890/1 (See appendix, table 2a–c). In this paper we will analyse in more detail the early period of Finnish industrialisation (up until 1860), which is often termed as a period of individual business culture.

There were several factors which encouraged the individual business culture up until the mid-nineteenth century. First, until the introduction of first Company law in 1864, restricted access to the joint stock company form facilitated the individual business culture. During the period 1809–1854, only four industrial enterprises active in Finland can be characterised by their separate legal existence and the sharing of ownership between shareholders, whose liability is limited (Schybergson 1964, 21. Of these four companies Vantaa [Wanda] ironworks and Turku [Åbo] textile mill [Littois klädesfabrik] can be found from the list of 30 biggest [by employment] industrial enterprises in Finland in 1844. Refer to table 2a, appendix) Second, the poorly-developed state of capital markets also made it more advisable to rely on internal sources for the investment requirements. Finally, the role of cultural factors cannot be ruled out. In the early nineteenth century, it was still commonly believed that it was individuals responsibility to pull him/herself up ‘by the bootstraps’ and exploit the opportunities available rather

than to rely on others or the state for help (the self-help philosophy). (For further information refer, for example, to Alho 1949, 10; Hjerppe & Jalava 2006, 35)

Aforementioned object of the paper falls into three interlocking research goals which form the framework for specific research themes discussed:

A. The goal is to gain knowledge and understanding of the economic and social networks of the Finnish business leaders nationally and internationally: How business leaders created their economic and social networks in Finland and how they managed to network with European business partners?

B. The goal is to gain insights into the different genres of business leaders in Finland represented by different nationalities by analysing their business culture and import: How immigrant and minority business leaders created their connections to Finnish business life? How their business cultures can be characterised?

C. The goal is to elucidate the impact of social networks (family relations, political connections etc.) **on creating and altering business connections.** In the early period of industrialisation economic activity was heavily dominated by family business. Most early business leaders learnt their jobs through practical training, and they were often brought into the firm because of their family or religious connections.¹

In this paper we will analyse and discuss our company level data in order to formulate comparative generalisations on various business ventures active in Finland c. 1809–1914. Furthermore, we will present two case studies, one on community of Russian merchants and industrial entrepreneurs and another on the birth of Finnish cotton textile industry in order to exemplify our research themes and methodology.

The example of the emergence of the community of Russian merchants and industrial entrepreneurs in Finland, for one, illustrates how a large, and relatively tight and culturally coherent group of businessmen with common language and religion operated and established networks. The example of the birth of the Finnish cotton textile industry reveals that the level of individual creativity in the early business ventures in Finland was a matter of importance. It highlights the personal contribution of some of the immigrant business leaders active in Finland as well as access to capital and other resources necessary in mill industry (e.g. waterpower) in explaining success of the early cotton textile business ventures.

National cultural factors and values, including religious values, have been regarded as relevant determinants in explaining business behaviour ever since Weber (1904) famously argued that certain types of Protestantism favoured rational pursuit of economic gain. Weber and others following him have also paid attention to ways which religion could serve to introduce secular values and promote rational practices. For instance, the overrepresentation of Protestant Dissenters such as Quakers or Huguenots among the successful entrepreneurs has been explained by their access to mutual systems of support which provided access to information and capital. (On Quakers refer, for example, to Kirby 1993) This

¹ In discussing family business, it is crucial to bear in mind that it is a cultural related concept understanding of

national culture approach has been criticised of being too rigidly functionalist and thus ignorant for the dynamic nature of entrepreneurial activity (Jones & Wadhvani 2008). In explaining immigrant business ventures, many works have emphasised differences in education, access to capital and other more traditional resources. These works argue that immigrants' greater entrepreneurial initiative did not reflect their cultural background as much as environment. (Refer, for example, to Godley 2001) The question remains whether immigrant and minority activity should be seen as a means of preserving an existing culture, or as the source of cultural change and transformation. (Lipartito 2008) It will be argued, however, that entrepreneurs should not be conceptualised purely as products of their national cultural environment. There are many examples of historical settings in which entrepreneurs have flourished outside or against prevailing national social norms. The impact of national culture on entrepreneurship can be tested historically. In the Grand Duchy of Finland for instance Russian, Jew and the Tatar merchants created their own national cultural groups with distinct culture and values (e.g. religion, language).

Historians have sought to ground the study of how culture and nationality affect entrepreneurship by examining how specific social structures and relationships shape the entrepreneurial culture. For instance, it can be assumed that ethnicity, race, gender, family, or class may have provided specialised access to entrepreneurial opportunities and resources. Ethnic group affiliation and identity can be critical for explaining for instance the role of diasporic links. (Refer, for example, to McCabe & Harlaftis & Minoglou 2005; See also Minoglou & Louri 1997)²

The outlook of Finnish nineteenth century mill industry

A number of economic characteristics of the early industry flowed directly from the economic and social conditions of the Grand Duchy of Finland. (For further details refer, for example, to Alho 1968, 19–54) These include 1) location of the mills, 2) raw material, 3) skilled labour and 4) capital. First, in general terms it can be said that up until 1913, Finnish business was still confined to a narrow range of industries (it mainly consisted of textile mills, saw mills and ironworks. Mechanised and streamlined textile industry (e.g. Finlayson & Co., Littoinen [Littois], Jokioinen [Jockis], Antskog, Forssa, Vaasa [Vasa], Barker & Co.) was the biggest branch (by employment) in Finland up until 1890 but it was quickly overturned by wood, woodworking and furniture industry. The weight of vat mills (e.g. Tampere paper mill) was reasonably modest in Finland. The chemical methods of preparing wood pulp were introduced in the 1870s after which paper industry increased its importance in Finnish mill industry. However, compared to textile and wood industry or even food, beverage and tobacco industry the overall weight of paper industry was still rather modest. Extractive and metal industry employed some 20 per cent of the workforce in Finnish mill industry throughout the period. Finnish iron foundries and works formed the main core of metal industry up until the turn of the century. Shipyards (e.g. Turku Old Shipyard, Paul Wahl & Co.) and engineering works (e.g. Fiskars, Eriksson & Cowie, Pori, Crichton) formed another important part of metal industry. Other industries included for example glass industry (e.g. Rokkala, Leistikö & Jäppilä, Grönvik, Olhava, Berga, Nuutajärvi) which was important branch of industry in the early period of industrialisation but started to lose ground in the close of the nineteenth century. By comparing the reference years 1844, 1860/2 and 1890/1 we can determinate that the outlook of mill

² Modern cultural theory (e.g. Burke 2004) offers another way to rethink the relationship between business and culture. It emphasises that culture is not a separate system alongside economics or politics but constitutes the social order as a whole.

industry evolved rapidly: early companies were forced to modernise their production or to shut down (*e.g.* glass industry) and new companies were quick to emerge.³

The second element that dominated the outlook of Finnish nineteenth century mill industry is that it located in particular regions. Before the introduction of steam engines the availability of waterpower defined the location. Clean water was needed both for power and as a raw material (*e.g.* vat mills) in manufacture. The industry grew up in river valleys where quick streams and clean water were available. The mills had to be situated along rivers where a fall in level could be exploited by building dams, channels and waterwheels. The growth of the mill industry during the early nineteenth century could not have been achieved in Finland without the existing waterpower resources. After the introduction of steam engine, wood replaced water for power supply. With the steam manufacture could be carried on regularly throughout the year. The steam engine was introduced in Finnish mill industry first in 1844. (Alho 1968, 42) However, steam engined sawmills were allowed only after 1857. Ahvenainen 1984, 203–209). The second important determinant of location was availability of raw material. For example the old textile mills drew up in river valleys, but the more modern ones such as in 1859 founded Vaasa (Vasa in Swedish) spinning mill were built on coastal locations so that the raw materials did not have to be transshipped far from ocean-going vessels. Older mills were obliged to modernise their production or shut down because of their remote location from raw materials and means of transport, canals, railways and ports.

A third economic characteristic which flowed directly from technique was the presence of specialised labour in the productive process. It was not possible to found for example a vat mill or an ironworks solely on the basis of semi-skilled or unskilled labour since the new production technology demanded skilful engineers and mechanics. Mechanisation allowed the manufacturers to be free from the power of traditional guilds and skilled craftsmen. This persuaded them to mechanise the industry even further. As a consequence, output rose, the productivity of mills increased, prices fell and the industry was rewarded with substantial profits. However, it should be noted that up until 1913 the number of people (skilled and unskilled) working in Finnish mill industry was small. Agriculture and domestic manufacturing employment remained extremely important.

Finally, a mill industry required a substantial amount of capital. The poorly-developed state of capital markets made it more advisable to rely on internal sources for the investment requirements. This led to the creation of ‘web of credit’, a network which included merchants, industrialists, banks and acceptance houses. It should be noted however that branches of industry with strategic importance (*e.g.* ironworks) were to some extent government funded. Cotton textile industry is another example of a branch of industry which received direct government funding. (On the significance of government funding refer to Laine 1950, 261–274; Kuusterä 1989, 190–207)

In this paper we have supplemented these four economic factors with nationality which forms another central aspect of our study. Table 2 indicates nationality of the founder as well as entrepreneur (active in the reference years 1844, 1860/2, 1890/1). We have verified issues of nationality from various primary and printed sources. The criteria used in defining nationality are legal status, religion and cultural background and especially language which was used as a criterion already in the nineteenth century

³ Besides these branches of industry the importance of merchant houses (*e.g.* Hackman, Borgström, Wasenius) should not be underestimated. However, in this paper we have only discussed merchant houses as far as they were engaged in mill industry.

census records. Finland, an autonomous Grand Duchy within the Russian Empire since 1809, had its own political institutions (the Imperial Senate of Finland), its own (Lutheran) church, army, its own legislation (Swedish) and gold-based currency (since 1863), and an ascending bourgeoisie who felt greater affinity with the Western countries, especially Sweden, than with Russia and its authoritarian tradition. (Jussila 1999) By the turn of the century, the Russian Empire was increasingly being transformed into a multinational state. Together with its chief national group, the Great Russians, there were Ukrainians, Belorussians, Poles, Lithuanians, Latvians, Estonians, Finns and other Finnic Peoples, Germans, Jews, Romanians among other nationalities. Language was the criterion used in defining nationality; *i.e.* all those who reported their mother tongue to be Russian were classified as Russians to the census records. The attitude towards national minorities shifted throughout the centuries. Before the reform era of Peter the Great religion played a central role. The aim was to convert the non-Christian subjects to the Orthodox religion. With the ‘secularisation’ of the monarchy in the nineteenth century these religious interests were superseded by political and economic ones. (Refer, for example, to Polvinen 1995, 17ff)

Russian business leaders in the early nineteenth century Finland

Russian entrepreneurs and their investments played an important role in the economic development of the nineteenth century Finland. They owned a substantial share especially in the extractive and metal industry as seen in the Table 2 (Table 2a–c, appendix). The Russian ownership of the early mill industry was dominated by the Russian landed aristocracy. More precisely, 12 out of 30 companies in 1844 were engaged in the iron and copper industry (11 ironworks and a copper mine and works) and three of them were established or owned by a member of the Russian landed aristocracy.⁴ Furthermore, Rokkala Glass Factory was owned by the Russian government (Table 2a).⁵ These four companies, together with several smaller industrial facilities, located in the south-east of Finland, in the region called Old Finland⁶, which was annexed to Russia in the early eighteenth century.

The proximity of St Petersburg markets and the increasing need of iron guaranteed the success of the iron industry in Eastern Finland. (*e.g.* Mikkola 1984, 216, 218–227; Hämynen 1997, 76–79) The raw materials (wood and lake and bog ores) obtained from Eastern Finland had a major economic importance in the iron industry since the mid-nineteenth century. Raw materials together with new technological innovations such as for example puddling method boosted the economy and increased investments to the region. (Laine 1950, 366–367) This development can be verified from the Table 2b: ironworks using lake and bog ore emerged in the list of top 30 companies in 1860/62 (Table 2b; numbers 6, 8, 15, and 26). For example Nikolai Putilov, a Russian businessman, who was active in iron manufacturing business, owned three ironworks in Finland, Huutokoski, Haapakoski and Oravi (Table 2b, number 15) which produced iron for his own factories (later known as Kirov Factory) near St Petersburg. (Laine 1950, 368–369; Salokorpi 1999, 131–132) Putilov is a notable example of a Russian businessman who had good relations and networks with the Russian political elite. These networks

⁴ These companies were St. Anna's ironworks, Aleksandras's Pitkäranta copper mine and works, and Sumpula ironworks.

⁵ The glass factories located in Eastern Finland aimed their production at St Petersburg markets where their goods were allowed to enter duty-free up until 1859, see *e.g.* Mikkola 1984, 215, 233-234.

⁶ Due to the period of Russian dominance this area had its own characteristics that differed from the rest of the Grand Duchy (*e.g.* serfdom and significant Russian population).

eased his access to capital and government loans and guaranteed him orders from the government. (Laine 1948, 715; Mikkola 1984, 220–223)

It should be noted, however, that Finnish businessmen also invested heavily in the iron industry during the nineteenth century. These investments were encouraged by the support of the Imperial Senate of Finland whose aim was to develop iron industry exploiting Finnish raw materials. (Laine 1950, 77–94) Traditionally the Finnish iron industry, which had used iron ore or pig iron imported from Sweden, had been controlled by the Swedish born nobility. The situation changed by the mid-nineteenth century when new type of entrepreneurs such as Nils Ludvig Arppe, a prominent sawmill owner, purchased ironworks (Table 2a–b). (Kuisma 2006, 208–210)

Russian businessmen controlled the extractive and metal industry in the reference years 1844, 1860/62 and still in 1890/91 (Table 2a–c).⁷ In addition, they also engaged in the sawmill industry in Eastern Finland. Merchant houses such as the Gromoffs (Table 2a, number 5) and the Tichanoffs (Table 2b, number 12) can be mentioned. Furthermore, the Sinebrychhoff Brewery in Helsinki (27th and in Table 2b and 26th in Table 2c) was founded and owned by a Russian immigrant merchant family. (Pullinen 2002)

There were several Russian merchant families and families engaged in industries (e.g. the Gratschoffs, the Koroleffs, the Uschakoffs) who made their fortune in Finland in the first part of the nineteenth century. Some of them had modest backgrounds or had even been serfs in Russia. (Castren 1954, 245–246; Perälä 1970, 69–70) Some of them such as the Sinebrychoffs and the Kiseleffs were prominent industrial entrepreneurs in Finland. Unlike the most of the Russian merchants these families assimilated culturally with the local Swedish speaking business elite already in the early nineteenth century. (Pullinen 2002; Kurkimies 2002; Yrjänä 2009b) However, majority of the Russians in Finland continued to practise their own customs, speak their own language and worship their own religion. To conclude, these examples demonstrate that Russian businessmen with modest backgrounds had possibility of considerable rise in social and economic hierarchy in Finland.

Immigrant business leaders in Finnish cotton textile industry, c. 1820–1860

The first effects of the Industrial Revolution in Finland were felt in the cotton textile industry which was born c. 1820–1860. Cotton has been regarded as the quintessential growth industry of the early stages of the Industrial Revolution. Cotton combined qualities that were attractive to both consumers and producers compared to its main competitors, linen and wool. Thanks to the technical innovations and mechanisation, cotton yarn, thread and textiles became mass market products. No wonder, then, that cotton grew at a rate never before witnessed in textiles. (Mokyr 1990, 100–103) This case study attempts to gain insights into immigrant business leaders active in cotton textile industry in Finland by analysing their business culture and import. The analysis covers the early years (up until 1860) of Finnish cotton textile industry. In the 1860s textile industry and cotton textile industry in particular suffered badly from increase in raw material prices (caused by the American Civil War) which ultimately altered the outlook of the textile industry in Finland. (Kuusterä 1989, 200)

⁷ E. Meyer & Co, the former Pitkäranta Company, which was owned by Russians, was in the 3rd place in 1890/91.

The overall importance of textile industry, especially cotton textile industry in Finland can be verified by analysing Tables 1 and 2. Textile industry was the biggest (by employment) branch of industry in Finland up until 1890. The importance of Finlayson & Co., the biggest industrial enterprise in Finland until the outbreak of the First World War, Forssa mill (3rd) and Barker & Co. (23rd) is discussed in detail in the following analysis. (Table 2b)

James Finlayson (1772–1852) is known as one of the most important of many Britons who helped to establish the textile industry in Finland. Today, the brand *Finlayson* is well known from its good quality home textile goods. (*ODNB*, Vol. XIX, 617–618) Finlayson was born in 1772 in the parish of Penicuik, near Edinburgh, but little is told from his early life in Scotland. He was an engineer by profession and worked as a mechanic in the world famous Glasgow machine manufactories. The reasons behind Finlayson's decision to immigrate to Eastern Europe are largely unknown but very broadly it can be said that there were many lucrative opportunities in Eastern Europe for British engineers who agreed to work there. Finlayson's first appearance outside Scotland was at the Government Ironworks (Kolpino workshops), near St Petersburg in Russia, where he worked as a master mechanist. According to British sources, Finlayson worked some twenty years in the Russian capital, building up textile industry there, and became acquainted with Tsar Alexander I through their mutual interest in Quakerism.

Finlayson's personal relation to the Tsar, Quakers in Russia and John Paterson, a Scottish born missionary of the British and Foreign Bible Society (founded in 1804) in Finland and Russia (1812–1826) (*ODNB*, Vol. XLVIII, 21) may have influenced Finlayson's to set up workshops in Tampere (Tammerfors in Swedish), in the newly founded Grand Duchy of Finland. Whatever may be the truth, with the help of a considerable loan from the government and with the help of waterpower in the Tammerkoski rapids, Finlayson's factory was duly constructed there in 1820. The original idea was to manufacture machinery for textile industry but in 1823 this attempt floundered by virtue of lack of good quality raw materials, professional workforce and customers. After this false start, the government granted to Finlayson a new loan to manufacture linen and wool goods but (Voionmaa 1929, 154–167) this enterprise proved unprofitable. In 1828 Finlayson began to manufacture cotton yarn. It proved to be successful enterprise as Finlayson benefited from a rising demand of cotton goods in St Petersburg and to lesser extent in Tallinn and Riga. Thus the year 1828 signified the birth of modern cotton textile industry in Finland. However, in terms of production and employees the numbers were insignificant compared to cotton textile industry in the whole of Russia where some 47 000 thousand people worked in cotton textile industry already in 1825. (Joustela 1963, 205; Voionmaa 1929, 167–169)

The success behind Finlayson's enterprise is easy to explain. The most senior Russian authorities issued a degree granting special economic privileges for Finlayson. These included incentives such as for example, the government loan, free land for factory buildings, free access to the waterpower and the repeal of customs and excise duties concerning production of cotton yarn and cotton goods to the St Petersburg markets. (Lindfors 1938, 44–59) Import of foreign made cotton goods were heavily taxed in Russia whereas raw materials and machinery were allowed to enter tariff-free to Tampere which was declared as a free city in 1821. (Joustela 1963, 206, 208–209) Furthermore, Finlayson obtained certain other privileges from the Tsar for any British employed by him: liberty to worship according to their accustomed practices and freedom from military service. For those who were Quakers he obtained in addition exemption from payment of any war taxes or church dues and the right to make an affirmation in place of an oath. (Scott 1964, 80; Voionmaa 1929, 145–146) Thus was born the new Company of Finlayson & Co., which was one of the most important business ventures in Finland up until the

outbreak of the First World War and is still in existence. Finlayson's own personal contribution to the development of textile industry in Tampere lasted less than 20 years but he made a significant contribution in creation of Tampere as a major industrial city in Finland, known as 'Finland's Manchester'.

In 1835 Finlayson & Co. hired as a master mechanic an Englishman called John Barker (1791–1854),⁸ who started to modernise the factory according to British standards. Under Barker's supervision (1835–1843), Finlayson & Co. progressed with some rapidity. (Voionmaa 1929, 172ff) A new epoch in Finnish textile industry started in 1843 when the Imperial Senate of Finland granted Barker a permission to manufacture cotton yarn in Turku (Åbo in Swedish). In the early 1840s Turku was together with Tampere the most rapidly grown industrial city in Finland. The major branches included textile industry (*e.g.* Littois klädesfabrik), ironworks (*e.g.* Eriksson & Cowie) and shipyards (Table 2a, appendix). The city was badly burned in the Great Fire of 1827, after which the government started to grant economic privileges to support industry in Turku. Barker's factory started to manufacture cotton in 1845. Barker's business rationality reflected his British background: the first machines were designed by Barker himself but machinery and also workforce was imported from Britain. Together with Finlayson, Barker belonged to the pioneering cotton textile manufacturers in Finland. John Barker died in 1854. He had no children who could inherit his business, though the company carried his name well into the 20th century. (Juvelius 1933, 13ff)

Together with Finlayson and Barker, one of the most interesting characters among immigrant cotton textile manufacturers in Finland was Axel Wilhelm Wahren (1814–1885), who was born to a Jewish merchant family in Stockholm, Sweden. Wahren's family was active in Swedish textile industry but Wahren himself made his fortune in Finland. Wahren's first appearance in Finland was in Jokioinen (Jockis in Swedish), some 80 km northeast from Turku, where he rented a wool manufactory in 1838 and started to modernise the manufactory according to Swedish standards. Compared to Finlayson, Barker and other Britons who helped to establish cotton textile industry in Finland, Swedish manufacturers had significant advantages on their side. (*e.g.* Swedish legislation and Swedish language)

In 1847 Wahren managed to negotiate a loan from the Imperial Senate of Finland to set up a cotton spinning mill to Forssa, near Jokioinen. Wahren's access to capital can be explained with the interests of political elite who continued to encourage business ventures in cotton textile industry regardless of Finlayson's early difficulties. As Finlayson and Barker before him, Wahren realised the mass market possibilities in cotton textile industry. Although Finlayson & Co. benefited from the status of Tampere as a free city, there seemed to be markets for another cotton mill in Finland. The start of Forssa mill was difficult due to the Baltic Campaign during the Crimean War but the situation improved in 1859 when the duties concerning import of Finnish made cotton goods to St Petersburg markets were reduced even further. (For further information refer to Kaukovalta 1934)

The stories behind Tampere (Finlayson), Turku (Barker) and Forssa (Wahren) mills have similar characteristics. Their business rationality was similar: they all benefited from government loans (especially Finlayson) or other incentives and their production were aimed at St Petersburg markets. Social networks with political elite were established and used in business negotiations. They all were depended on British technical innovations and know-how: machines and their maintenance were

⁸ KB, Online edn., <http://artikkelihaku.kansallisbiografia.fi/artikkeli/5783/>

typically bought from Britain. Skilled labour was also foreign (British, Swedish, German) born. Also the raw materials were usually purchased from Britain. Furthermore, the businessmen themselves shared some common characteristics. They all had technical education: Finlayson and Barker were engineers by profession, Wahren was specialised in dyeing. They all were first generation immigrants, whose knowledge on Finnish language, culture or people was somewhat limited: Barker and Wahren received Finnish nationality, Finlayson kept his British nationality. All three manufacturers managed to set up successful enterprises which continued to carry their names long after their death but their own contribution to the development of the business was however limited.

Concluding remarks

The research project *The Economic and Social Networks of Business Leaders in the Nineteenth Century Finland* is designed to cover different genres of business leaders who have made their contributions in the nineteenth century Finland. Its international significance lies in wide-scale analysis and potentiality for far-reaching comparative generalisation. The research is also nationally important in that it provides an opportunity to put Finnish economic history in wide perspective and compare its status with that of selected other European countries and with the global economic developments in general.

In more general terms, the present research project can be defined as follows. As Wilson (1995) has maintained it evolves from the realisation that the main aim of business history is to study and explain the behaviour of firms and entrepreneurs over long periods of time, and to place the conclusions in a broader framework composed of markets and institutions in which that behaviour occurs. Business history can also provide a forceful insight into the evolution of capitalism.

What is currently known from the existing literature and what can be determined from the data collected so far is that the impact of immigrant and minority business ventures in Finland, especially in the early stage of industrialisation, was considerable. There are multiple, potentially forceful explanatory reasons behind this development. The formation of the autonomous Grand Duchy of Finland in 1809 opened up a new dynamic era during which Finnish business was transformed from mercantile to industrial capitalism. Finland benefitted from its new status within the Empire: new markets were opened up (St Petersburg markets in particular were important) and new opportunities were created for the Finnish mill industry, which was controlled to the large extent by immigrant businessmen. The emergence and impact of immigrant businessmen and merchants especially from Russia (the Great Russians but also other nationalities within the Empire) but also from Sweden can be verified at multiple levels as the given examples illustrate. In explaining the success of immigrant business ventures, differences in education, access to capital and other more traditional resources should not be underestimated. However, immigrants' greater entrepreneurial initiative did not always reflect their cultural background as much as environment. In the future the project will provide extensive knowledge (generalisations, conclusions and comparative analysis) on the role of immigrant, especially Russian business ventures in Finland. In Russia the politically dominant landed elite dominated business ventures, but in Finland the old Swedish legislation created opportunities from merchants with more modest backgrounds.

Once we get beyond the level of individual's creativity and start to examine some of the social factors, the economic and social conditions and the role of networks in the birth of the Finnish mill industry, matters become considerably more complex. The impact of the environment, physical and cultural, on

the amount of entrepreneurial creativity in a given society is a matter of much controversy. This thematic is something we will consider in detail in our future research.

In order to answer these complex matters, the business history view to the subject matter will be supplemented with political and social history viewpoints. The project is of particular significance with regard to Finnish social and economic history and questions of national identity and self-understanding. For its part, this project will contribute to not only academic, but also political and social discussions of today, dealing with complexities of nationality in the nineteenth century, identity politics, cultural interaction all of which are hot topics of today. (Refer, for example, to Forsander 2001, 28–38; Trux 2000)

References

- Ahtokari, Reijo, *Suomen lasiteollisuus 1681–1981, Lasikeraaminen teollisuusliitto*, Helsinki 1981.
- Ahvenainen, Jorma, *Suomen sahateollisuuden historia*, WSOY, Porvoo, Helsinki, Juva 1984.
- Alho, K.O., *Suomen uudenaikaisen teollisuuden synty ja kehitys 1860–1914*, Suomen Pankin taloustieteellisen tutkimuslaitoksen julkaisuja, Sarja B: 11, Akateeminen kirjakauppa (distrib.), Helsinki 1949.
- Alho, Keijo, *Teollistumisen alkuvaiheita Suomessa*, Otava, Helsinki 1968.
- Annala, Vilho, *Suomen lasiteollisuus 1681–1931, 1 osa, Ruotsin vallan aika 1681–1809*, Otava, Helsinki 1931.
- Annala, Vilho, *Suomen lasiteollisuus vuodesta 1681 nykyaikaan, 2 osa: 1–2*, Suomen lasiteollisuusliitto, Helsinki 1948.
- Burke, Peter, *What is Cultural History?*, Polity Press, Cambridge 2004.
- Castren, Matti J., 'Helsingin koti- ja ulkomaankauppiaat vv. 1809–1853'. In *Entisaikain Helsinki V. Kauppioiden ja merenkulkijain Helsinki*. Helsinki, 1954.
- Colli, Anrea & Rose, Mary, 'Family Business'. In *The Oxford Handbook of Business History*, eds. Geoffrey Jones & Jonathan Zeitlin, OUP, Oxford, New York 2008.
- Denoon, Brian D., 'Finlayson, James (1772–1852)'. In *Oxford Dictionary of National Biography* (hereafter cited as *ODNB*), ed. H. C. G. Matthew & al., Vol. XIX, OUP 2004.
- Engman, Max, 'Borgare och skenborgare i Finland och ryssland under första hälften av 1800-talet', *Historisk Tidskrift för Finland*, 2/1978.
- Forsander, Annika, 'Kenelle ovet aukeavat? Maahanmuuttajat ja työllistymisen ehdot', *Työpoliittinen Aikakauskirja* 12 (2001) 2, 28–38.
- Godley, Andrew, *Jewish Immigrant Entrepreneurship in New York and London*, Palgrave, Basingstoke 2001.
- Hakala, Marjaana, 'Helsingin venäläiset kauppiaat ja muut elinkeinonharjoittajat vuosina 1809–1840'. In Svante Konstantin Kulhberg (ed.) *Venäläiset kauppiaat Helsingin historiassa*. Helsinki 2002.
- Halila, Aimo, 'Suomen kansanedustuksen vaiheet 1850-luvun puoliväliin, II Porvoon valtiopäivät ja autonomian aika'. In *Suomen kansanedustuslaitoksen historia I*, Olavi Salermo et. al. (eds.), Valtioneuvoston kirjapaino, Helsinki 1956.

- Herranen, Timo, 'John Barker (1771–1854)'. In *Kansallisbiografia* [*The National Biography of Finland*, hereafter cited as *KB*], Online edn., 20.10.2002.
[<http://artikkelihaku.kansallisbiografia.fi/artikkeli/5783/>]
- Hjerppe, Riitta & Jalava, Jukka, 'Economic Growth and Structural Change: A Century and a Half of Catching-up'. In *The Road to Prosperity. An Economic History of Finland*, eds. Ojala, Jari & Eloranta, Jari & Jalava, Jukka, Helsinki, Suomalaisen Kirjallisuuden Seura 2006.
- Hjerppe, Riitta, *Suurimmat yritykset Suomen taloudessa 1844–1975* [*Biggest Companies in Finnish Economy 1844–1975*], Societas scientiarum Fennica, Helsinki 1979.
- Hyvönen, Heikki, *Suotniemi. Suomen ensimmäinen fajanssitehdas*, Heinolan kaupunginmuseon julkaisu nro 2, Heinola, Heinolan kaupunginmuseo 1993.
- Humanistica 9. Joensuun yliopiston humanistinen tiedekunta, Joensuu 1997.
- Hämynen, Tapio, 'Venäläinen pääoma leventää leipää'. In *Itä-Suomi ja Pietari. Kirjoituksia toimeentulosta suurkaupungin vaikutuspiiristä*, ed. Kimmo Katajala, Studia Carelica Humanistica 9. Joensuun yliopiston humanistinen tiedekunta, Joensuu 1997.
- Jones, Geoffrey & Wadhvani, R. Daniel, 'Entrepreneurship'. In *The Oxford Handbook of Business History*, eds. Geoffrey Jones & Jonathan Zeitlin, OUP, Oxford, New York 2008.
- Joustela, Kauko E., *Suomen Venäjän-kauppa autonomian ajan alkupuoliskolla vv. 1809–1865*, Historiallisia Tutkimuksia LXII, Suomen Historiallinen Seura, Helsinki 1963.
- Jussila, Osmo, 'Finland as a Grand Duchy, 1809–1917'. In *From the Grand Duchy to a Modern State. A political History of Finland since 1809*, eds. Osmo Jussila, Seppo Hentilä and Jukka Nevakivi, Hurst & Company, London 1999.
- Juvelius, Einar W., *John Barkerin Puuvillatehdas 1843–1933*, John Barkerin Osakeyhtiö 1933.
- Kalleinen, Kristiina, Venäläinen Suomi. In *Maa, seutu, kulmakunta. Näkökulmia aluehistorialliseen tutkimukseen*, ed. Maria Lähteenmäki, Historiallinen Arkisto 129, Suomalaisen Kirjallisuuden Seura, Helsinki 2009.
- Kaukovalta, K. V., *Forssan puuvillatehtaan historia*, Karisto, Hämeenlinna 1934.
- Knorring, Nils von, *Från Crichton till Åbovarven. Anteckningar om Åbovarvens historia*, Schildt, Esbo 1995.
- Kuisma, Markku, *Metsäteollisuuden maa: Suomi, metsät ja kansainvälinen järjestelmä 1620–1920*, Osa 1, 2. revised ed., Suomalaisen Kirjallisuuden Seura, Helsinki 2006.
- Kulvik, Barbro & Siltavuori, Antti, *Fiskars 1649–360 vuotta Suomen teollisuuden historiaa*. Fiskars Oyj Abp, Pohja 2009.
- Kurkimies, Igor, 'Kauppiasliikemiesten F. P. Kiseleffin ja F. F. Kiseleffin – isän ja pojan – merkittävä osuus Helsingin talouselämän kasvuun 1800-luvulla'. In *Venäläiset kauppiaat Helsingin historiassa*, ed. Svante Konstantin Kulhberg, Helsingin venäläinen kauppiasyhdistys, Helsinki 2002.
- Kuusterä, Antti, *Valtion sijoitustoiminta pääomamarkkinoiden murroksessa 1859–1913*, Hist. Tutk. 149, Suomen Historiallinen Seura, Helsinki 1989.
- Laine, Eevert, *Suomen vuoritoimi 1809–1884. Yleisesitys, osa I*. Hist. Tutk. 31: 1, Suomen Historiallinen Seura, Helsinki 1950.
- Laine, Eevert, *Suomen vuoritoimi 1809–1884. Ruukit, osa II*, Hist. Tutk. 31: 2, Suomen Historiallinen Seura, Helsinki 1948.
- Laine, Eevert, *Suomen vuoritoimi 1809–1884. Harkkohytit, kaivokset, konepajat, osa III*. Hist. Tutk. 31: 3, Suomen Historiallinen Seura, Helsinki 1952.

- Laitinen, A. A. A., *Impilahden pitäjän ja seurakuntain historia*, Sortavalan kirjakauppa (distrib.), Sortavala, 1938.
- Leitzinger, Antero, *Ulkomaalaiset Suomessa 1812–1972*, Helsinki, East-West Books 2008.
- Lindfors, Gustav V., *Finlaysonin tehtaas Tampereella, 1820–1907*, Tilgmann, Helsinki 1938.
- Lipartito, Kenneth, 'Business Culture'. In *The Oxford Handbook of Business History*, Geoffrey Jones & Jonathan Zeitlin (eds.), OUP, Oxford, New York 2008.
- McCabe, Ina Baghdiantz & Harlaftis, Gelina & Minoglou, Ioanna Pepelasis (eds), *Diaspora Entrepreneurial Networks: Four Centuries of History*, Berg, Oxford 2005.
- Meinander, Nils, *Vesisahan tarina*, Otava, Helsinki 1945.
- Minoglou, Ioanna Pepelasis & Louri, Helen, Diaspora Entrepreneurial Networks in the Black Sea and Greece, 1870–1917, *Journal of European Economic History*, 26 (1997) 1: 69–104.
- Mikkola, Jukka, 'Venäjältä tulleet teollisuudenharjoittajat Suomessa 1808–1880'. In *Venäläiset Suomessa 1809–1917*, ed. Pauli Kurkinen, HArk. 83, Suomen Historiallinen Seura, Helsinki 1984.
- Mokyr, Joel, *The Lever of Riches. Technological Creativity and Economic Progress*, OUP, New York and Oxford 1990.
- Nordström, Gunvor & Nordström, W. E. (translated from Swedish by Tuure Liski), *Pohjan pitäjän historia: 1700-luvun jälkimmäiset vuosikymmenet ja 1800-luku, Osa 3, 1700-luvun jälkimmäiset vuosikymmenet ja 1800-luku*, Pohjan kunta, Pohja 1966.
- Perälä, Seppo. Helsingin venäläissyntyinen kauppiaskunta vuosina 1809–79. In *Entisaikain Helsinki VIII*. Helsinki 1970.
- Polvinen, Tuomo, *Imperial Borderland*, Hurst, London 1995.
- Pullinen, Arja, 'Sinebrychoffit – marketentistä kauppiassuvuksi'. In *Venäläiset kauppiat Helsingin historiassa*, ed. Svante Konstantin Kulhberg, Helsingin venäläinen kauppiasyhdistys, Helsinki 2002.
- Salokorpi, Asko, *Suomen rautaruukit*. Otava, Helsinki 1999.
- Schybergson, Per, *Aktiebolaksformen genombrott i Finland: utvecklingen före 1895 års lag*, Finska vetenskaps-societetets, Helsingfors 1964.
- Scott, Richenda C., *Quakers in Russia*, Michael Joseph, London 1964.
- Tigerstedt, Örnulf, *Kauppuhuone Hackman: erään vanhan Wiipurin kauppiassuvun vaiheet 1790–1879*. Osa 1. Otava, Helsinki 1940.
- Tigerstedt, Örnulf, *Kauppuhuone Hackman: erään vanhan Wiipurin kauppiassuvun vaiheet 1790–1879*. Osa 2. Otava, Helsinki 1952.
- Trux, Marja-Liisa (ed.), *Aukeavat ovet – kulttuurien moninaisuus Suomen elinkeinoelämässä*, WSOY, Helsinki 2000.
- Yrjänä, Jouni, 'Kauppaneuvos Feodor Kiseleff 1772–1847'. In *Suomen talouselämän vaikuttajat*, Online edn., 5.9.2009 [http://www.kansallisbiografia.fi/talousvaikuttajat/?iid=61] 2009.
- Voionmaa, Väinö, *Tampereen kaupungin historia II: Venäjän vallan esipuoliskon aika*, Tampereen työväen kirjapaino, Tampere 1929.
- Waris, Heikki, 'Helsinkiläisyhteiskunta'. In *Helsingin kaupungin historia. Osa III: 2. Ajanjakso 1809–1875*, ed. Hornborg & al., Helsingin kaupunki, Helsinki 1951.
- Wilson, John F., *British business history, 1720–1994*, Manchester University Press, Manchester and New York 1995.

Appendices

Table 1. Employment in industry and handicraft production by industry branch, 1845–1913

Year	Food, beverage and tobacco	Textile, shoes and clothing	Wood, woodworking and furniture	Paper	Extractive and metal	Other industries	Total	With >5 employees								
employees / percentage																
1845	1100	5 %	9900	50 %	2400	12 %	200	1 %	4000	20 %	2500	12 %	20100	100 %	5900	29 %
1860	2500	8 %	13000	41 %	3000	9 %	400	1 %	8100	26 %	4 800	15 %	31800	100 %	14400	46 %
1890	8600	13 %	17300	27 %	12700	20 %	3100	5 %	12700	19 %	10 400	16 %	64800	100 %	43100	66 %
1913	17400	11 %	28600	19 %	40300	27 %	12400	8 %	28000	18 %	25 900	17 %	152600	100 %	117800	77 %

Source: Riitta Hjerpe, *Suurimmat yritykset Suomen taloudessa 1844–1975* [Biggest Companies in Finnish Economy 1844–1975] (Helsinki, 1979), p. 163.

Table 2a. Thirty biggest industrial companies by employment in the Grand Duchy of Finland with nationality of founders and current entrepreneurs in 1844, 1860/62 and 1890/91.

Rank	Company	Branch ^a	Period	Employment	Founder's nationality ^b	Entrepreneur's nationality ^c
1844						
1.	Finlayson & Co	2	1820-	526	SCT	SCT & DEU
2.	Fiskars Iron Works	5	1649-	313	NLD	FIN
3.	Rokkala Glass Factory	6	1788-1920	223	FIN	RUS
4.	Littoinen Textile Mill	2	1836-	133	FIN	FIN
5.	Saint Anna's Iron Works	5	1809-1905	129	RUS	RUS
6.	Jokioinen Textile Mill	2	1797-1863	120	SWE	SWE
7.	Billnäs, Fagervik & Skogby Iron Works	5	1641/46/82- /1902/04	114	DEU	FIN
8.	Vantaa Iron Works	5	1836-1880	97	FIN	FIN
9.	Tampere Paper Mill	4	1783-1929	93	FIN	FIN
10.	Turku Old Shipyard	5	1741-	76	ENG	FIN
11.	Kellokoski, Oravainen & Kimmo Iron Works; Orisberg Mine	5	1795/03/03/1676-1963/1866/1891/	73	FIN	SWE
12.	Taalintehdas & Björkboda Iron Works	5	1686/1732- /1842	72	BEL	FIN
13.	Teijo, Vihiniemi & Kirjakkala Iron Works	5	1684/1690/1686- /1865/1908	59	FIN	FIN
14.	Suotniemi Faience Factory	6	1841-1892	58	FIN	FIN
15.	Borgström Tobacco Factory	1	1834-1928	56	FIN	FIN
16.	G.O. Wasenius Tobacco & Card Factory	1	1840-1926	54	FIN	FIN
17.	Antskog Textile Mill	2	1839-1959	50	FIN	SWE
18.	Ericsson & Cowie Works	5	1842-	43	SWE & SCT	SWE & SCT
19.	Sillböle Bruksbolag	5	1744-1866	42	FIN	FIN
20.	Mustio Iron Works	5	1624-	40	FIN	FIN
21.	Jokioinen & Högfors Iron Works	5	1822-	39	FIN	FIN
22.	Kauttua & Leineperi Iron Works	5	1771-1902	37	FIN	FIN
23.	Leistilä & Jäppilä Glass Factories	6	1801/02-1846/65	36	DEU	DEU
24.	Granfors & Jungsund Paper Mills; Grönvik Glass Factory, Granfors Faience Factory	4 & 6	1840/78/12/23-1874/78/1907/1873	35	FIN	FIN
25.	Olhava Glass Factory	6	1782-1885	35	FIN	FIN
26.	Aleksandra's Pitkäräntä Mine & Works	5	1814-	32	RUS	DEU
27.	Puhos, Utra, Kuurna & Wärtsilä Sawmills; N.L. Arppe	3	1783/80/30/35-	32	FIN	FIN
28.	Sumpula Iron Works	5	1827-1882	30	RUS	RUS
29.	Berga Glass Factory	6	1796-1883	28	FIN	FIN
30.	Hackman & Co	3 & 6	1790-	28	DEU	DEU
Employees in thirty biggest industrial companies:				2703		
Employees in companies founded or run by foreigners:				1865 (69 %)		
				Foreign founder:	12	
				Foreign entrepreneur:	11	

^a1=food, beverage & tobacco; 2=textile, shoe & clothing; 3=wood & furniture; 4=paper; 5=extractive & metal; 6=other. ^bcNationality of company founders and entrepreneurs. Companies with foreign entrepreneur or founder are bolded. FIN stands for persons with at least two generations of ancestors in Finland. Other labels denote first or second generation immigrants. Swedish founders are considered foreign from 1809. DEU denotes in most cases ethnic Germans from St. Petersburg or Baltic Germans. In the multiethnic Russian Empire nationalities were used in official documents. Source: Hjerpppe 1979, p. 164-169; Kansallisbiografia and Suomen talouselämän vaikuttajat, <http://www.kansallisbiografia.fi/>; Ahtokari 1981; Annala 1931, 1948; Hyvönen 1993; Juvelius 1933; Kaukovalta 1934; Knorring 1995; Laine 1948, 1950, 1952; Laitinen 1938; Lindfors 1938; Nordström 1966; Salokorpi 1999; Tigerstedt 1940, 1952.

Table 2b. Thirty biggest industrial companies by employment in the Grand Duchy of Finland with nationality of founders and current entrepreneurs in 1844, 1860/62 and 1890/91.

Rank	Company	Branch ^a	Period	Employment	Founder's nationality ^b	Entrepreneur's nationality ^c
1860/62						
1.	Finlayson & Co #1	2	1820-	1319	SCT	DEU
2.	Pitkäranta Company #23	5	1814-	981	RUS	RUS
3.	Tammerfors Linne- och Jernmanufaktur Ab	2 & 5	1843-	627	FIN	FIN
4.	Forssa Company	2	1847-	611	SWE	FIN
5.	Fiskars Iron Works #2	5	1649-	592	NLD	FIN
6.	Varkaus, Petäjälkoski & Jyrkkälkoski Iron Works; Sawmills & Engineerin Works; Paul Wahl & Co	3 & 5	1814/31/38-	392	FIN	FIN
7.	Pori Match Factory	6	1850-1987	252	SWE	SWE
8.	Wärtsilä, Puhos, Läskelä & Möhkö Sawmills; Wärtsilä & Möhkö Iron Works; N.L. Arppe #27	3 & 5		208	FIN	FIN
9.	Kerma, Läsköski, Liuna & Savikoski Sawmills; Rosenius & Seseman	3	1796/1840/1835/1841-1885	185	FIN	FIN
10.	Taalintehdas Iron Works #12	5	1686-	168	BEL	FIN
11.	Vaasa Cotton Factory	2	1857-	168	FIN	FIN
12.	Enonkoski, Säynetkoski & Utra Sawmills	3	1778, 1821, 1780	142	RUS	RUS
13.	Åbo Jernmanufaktur Bolag	5	1855-	141	BEL	FIN
14.	Hackman Co #30	3 & 6	1790-	135	DEU	FIN
15.	Huutokoski & Haapakoski Iron Works	5	1858/41-1877/-	135	FIN	RUS
16.	Nuutajärvi Glass Factory	6	1793-	133	FIN	FIN
17.	Tampere Paper & Wallpaper Mill	4	1842-1929	131	FIN	FIN
18.	Turku Old Shipyard #10	5	1741-	117	ENG	FIN
19.	Turku Tricot Factory	2	1859-	116	FIN	FIN
20.	Högfors Works, Jokioinen Iron Works & Brewery; Kulonsuonmäki & Rautniemi Mines; J. Brehmer #21	1 & 5	1822-	115	FIN	FIN
21.	Kirjola-Havi Soap & Candle Factory & Brewery	1 & 6	1829-	113	FIN	FIN
22.	Billnäs, Fagervik & Skogby Iron Works #7	5	1641/46/82- /1902/04	112	DEU	FIN
23.	John Barker & Co	2	1843-	104	ENG	FIN
24.	Tampere Textile Mill #6	2	1859-	103	SWE	SWE
25.	Pori Engineering Works	5	1858-	98	FIN	FIN
26.	Saint Anna's Iron Works #5	5	1809-1905	92	RUS	RUS
27.	Sinebrychoff Brewery	1	1819-	92	RUS	RUS
28.	Tervakoski Paper Factory	4	1818-	90	FIN	FIN
29.	Björkboda & Sunnanå Iron Works	5	1732-1842	77	FIN	FIN
30.	Oravainen & Kimo Iron Works; Orisberg Mine #11	5	1703/03/1676-1866/1891/	74	FIN	SWE
Employees in thirty biggest industrial companies:				7560		
Employees in companies founded or run by foreigners:				5170 (68.4 %)		
				Foreign founder:	15	
				Foreign entrepreneur:	9	

^a1=food, beverage & tobacco; 2=textile, shoe & clothing; 3=wood & furniture; 4=paper; 5=extractive & metal; 6=other. ^bcNationality of company founders and entrepreneurs. Companies with foreign entrepreneur or founder are bolded. FIN stands for persons with at least two generations of ancestors in Finland. Other labels denote first or second generation immigrants. Swedish founders are considered foreign from 1809. DEU denotes in most cases ethnic Germans from St. Petersburg or Baltic Germans. In the multiethnic Russian Empire nationalities were used in official documents. Source: Hjerpppe 1979, p. 164-169; Kansallisbiografia and Suomen talouselämän vaikuttajat, <http://www.kansallisbiografia.fi/>; Ahtokari 1981; Annala 1931, 1948; Hyvönen 1993; Juvelius 1933; Kaukovalta 1934; Knorrng 1995; Laine 1948, 1950, 1952; Laitinen 1938; Lindfors 1938; Nordström 1966; Salokorpi 1999; Tigerstedt 1940, 1952.

Table 2c. Thirty biggest industrial companies by employment in the Grand Duchy of Finland with nationality of founders and current entrepreneurs in 1844, 1860/62 and 1890/91.

Rank	Company	Branch ^a	Period	Employment	Founder's nationality ^b	Entrepreneur's nationality ^c
1890/91						
1.	Finlayson & Co #1	2	1820–	2143	SCT	DEU
2.	Tammerfors Linne- och Jernmanufaktur Ab #3	2 & 5	1843–	1604	FIN	FIN
3.	E. Meyer & Co #2	5	1814–	1362	RUS	RUS
4.	Forssa Company #3	2	1847–	1290	SWE	FIN
5.	Varkaus, Petäjäkoski & Jyrkkäkoski Iron Works; Sawmills & Engineerin Works; Paul Wahl & Co #6	3 & 5	1814/31/38–	894	FIN	FIN
6.	A. Ahlström	3 & 5	1851–	844	FIN	FIN
7.	Vaasa Cotton Factory #11	2	1857–	784	FIN	FIN
8.	W:m Crichton & Co	5	1842–	671	SWE & SCT	SCT
9.	W. Rosenlew & Co	3 & 4	1853–	667	FIN	FIN
10.	Brothers Aström Leather Factory	6	1863–1960s	590	FIN	FIN
11.	Kymmene AB	3 & 4	1872–	461	FIN	FIN
12.	N.L. Arppe's heirs #8	3 & 5		453	FIN	FIN
13.	Haapakoski & Oravi Iron Works #15	5	1841–	446	FIN	FIN
14.	Hackman & Co #14	3 & 6	1790–	441	DEU	FIN
15.	P. C. Rettig & Co	1	1845–	386	SWE	SWE
16.	Fiskars Iron Works #5	5	1649–	360	NLD	FIN
17.	Helsinki Shipyard	5	1856–	327	FIN	FIN
18.	Pori Engineering Works #25	5	1858–	316	FIN	FIN
19.	W. Gutzeit & Co	4	1872–	313	NOR	NOR
20.	Tampere Paper Mill #17	4	1842–1929	302	FIN	FIN
21.	Tervakoski Company #28	4	1818–	301	FIN	FIN
22.	Reposaari Steam Sawmill Company	4	1872–1974	293	SWE & FIN	SWE & FIN
23.	Arabia Company	6	1873–	286	SWE	SWE
24.	Dalsbruk Company #10	5	1686–	285	BEL	FIN
25.	VR State's Railways Engineering Works	5	1861–	280	FIN	FIN
26.	Sinebrychoff Brewery #27	1	1819–	278	RUS	RUS
27.	Borgström Tobacco Factory	1	1834–1928	277	FIN	FIN
28.	William Ruth, Karhula Factories	3 & 6	1880–	274	FIN	FIN
29.	Granit Company	5	1886–1995	268	FIN	FIN
30.	Walkiakoski Paper Mill Company	4	1871–	250	FIN	FIN
Employees in thirty biggest industrial companies:				17446		
Employees in companies founded or run by foreigners:				8108 (14.1 %)		
				Foreign founder:	12	
				Foreign entrepreneur:	8	

^a1=food, beverage & tobacco; 2=textile, shoe & clothing; 3=wood & furniture; 4=paper; 5=extractive & metal; 6=other. ^{bc}Nationality of company founders and entrepreneurs. Companies with foreign entrepreneur or founder are bolded. FIN stands for persons with at least two generations of ancestors in Finland. Other labels denote first or second generation immigrants. Swedish founders are considered foreign from 1809. DEU denotes in most cases ethnic Germans from St. Petersburg or Baltic Germans. In the multiethnic Russian Empire nationalities were used in official documents. Source: Hjerpppe 1979, p. 164–169; Kansallisbiografia and Suomen talouselämän vaikuttajat, <http://www.kansallisbiografia.fi/>; Ahtokari 1981; Annala 1931, 1948; Hyvönen 1993; Juvelius 1933; Kaukovalta 1934; Knorring 1995; Laine 1948, 1950, 1952; Laitinen 1938; Lindfors 1938; Nordström 1966; Salokorpi 1999; Tigerstedt 1940, 1952.