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The Role of Immigrants in the 'Take-Offs' of Eastern European 'Manchesters.' A Comparative Case Studies of Three Cities: Lodz, Tampere, and Ivanovo

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Abstract:

In this paper, we try to identify the institutional offers for emigrants and evaluate the role of immigrants at the time of the industrial revolution in the nineteenth century history of three cities where the dynamic growth and the 'take-offs' depended largely on newcomers. In all cases, the industry was the main factor that led to the 'take-off' in terms of the number of inhabitants and also the creation of the bourgeoisie as a socio-economic class. In our paper we reveal key institutional and geographical factors that accelerated the unprecedent waves of immigrants (with different strengths in different cities) to these Eastern European 'Manchesters' and made their role central to urban economic development. Their activity was the result of advantageous institutional circumstances connected with changes in the borders, the appearance of governments, and new local management being strictly related to changes in customs policy or extraordinary international situations.

Keywords: Immigration, Ivanovo, Lodz, Tampere, urban economy, minorities

JEL: J15, J61, K37, N23.

Introduction

A growing amount of research in economic history points to the important role of immigrants in driving economic growth.[1] Immigration is a crucial driver of urban innovation. There is evidence which underlines the special role that highly skilled and educated immigrants played in contributing to economic growth.[2] Immigration remains the decisive factor in the emergence of the creative class.[3] Captains of industry often come from immigrant groups.[4] High-quality human capital is mobile in geographical, educational, and professional terms, and "highly educated persons who are already comfortably situated frequently migrate because they receive better offers elsewhere".[5] Bearing this in mind, authorities at both central and local levels of governance tend to create an institutional environment that is propitious for entrepreneurial migrants. Aware of the complexity and a lack of the consensus on the widely accepted definition of institutions, for the purposes of this study, we accept the definition of institutional environment understood as a set of fundamental political and social rights, as well as legal rules, as a base for the processes of the production, exchange, and distribution of goods.[6] We also

[1] J.P. Ferrie, 'Immigration in American Economic History', in: L.P. Cain, P.V. Fishback and P.W. Rhode (eds), *The Oxford Handbook of American Economic History* (Oxford 2018), vol. 1.; R. Abramitzky and L. Boustan, 'Immigration in American Economic History', *Journal of Economic Literature*, 55:4 (2017) 1311-1345.; Ch. Van Mol and H. de Valk, 'Migration and Immigrants in Europe: A Historical and Demographic Perspective', in: B. Garcés-Mascareñas and R. Penninx (eds), *Integration Processes and Policies in Europe* (London 2016) 31-55.; F. Fauri, (ed.), *The History of Migration in Europe: Perspectives from Economics, Politics and Sociology* (New York 2015).

[2] C. Smith-Jönsson, *The Effects of Immigration on Economic Growth – a Literature Study*, (Ostersund 2018).; V. Bove, V. and L. Elia, 'Why Mass Migrations is Good for Long-Term Economic Growth', *Harvard Business Review*, April 18.

[3] R. Florida, *The Rise of the Creative Class: And How It's Transforming Work, Leisure, Community and Everyday Life* (New York 2002).; R. Florida, *Cities and the Creative Class* (New York-London 2005).; E.L. Glaeser, *Triumph of the City* (New York 2011).

[4] T. Veblen, *The Industrial System and the Captains of Industry* (Oriole 1980).

[5] E. Lee, 'A Theory of Migration', *Demography* 3:1 (1966) 47-57.

[6] G.E. Hodgson, 'What are Institutions?', *Journal of Economic Issues* 40:1(2006), 1-25.; D.C. North, *Institutions, Institutional Change and Economic Performance* (Cambridge 1997).; O.E Williamson, 'Comparative Economic Organization: The Analysis of Discrete Structural Alternatives', *Administrative Science Quarterly*, 36:2 (1991) 269-296, 287.

follow the claim that institutions matter for economic development as much as traditional factor-endowments (physical and human capital, trade, or technology transfers).[7]

History of the cities can be the domain of historians, including economic historians, geographers, and specialists in urban studies. This could be a good field for analysis for institutional economists as well. Unfortunately, such a research is usually done in separation from each other. The institutional environment of economic activity is geographically diverse. These differences reveal themselves not only between countries but also between regions and cities. This opens the door to interdisciplinary research. There are many, most often unconnected disciplines (including economics, economic geography, history and urban studies) of research bringing questions on the role of immigrants in the development of the cities and the role of institutions incorporated the newcomers.[8] Most of them focus on emmigrants impact on institutional development.[9] We intend to check the reverse relationship. In order to achieve this, we have used sources from various disciplines to better understand mechanisms in the functioning of the urban economies in the past.

In this paper, we identify the institutional offers for emigrants and evaluate the role of immigrants at the time of the industrial revolution in the nineteenth century history of three cities where the dynamic growth and the 'take-offs' depended largely on newcomers. Nineteenth century has not been neglected in previous studies. Comparisons of the cities were made both within one[10] and more countries.[11] Our paper tries to combine both approaches because Lodz

[7] A. Rodríguez-Pose, 'Do Institutions Matter for Regional Development?' *Regional Studies* 47:7 (2013) 1034-1047.; D. Acemoglu, S. Johnson, and J. A. Robinson, 'Institutions as a Fundamental Cause of Long-run Growth', in: P. Aghion and S.N. Durlauf (eds), *Handbook of Economic Growth* (Amsterdam 2005) 385–472.
[8] A. Marshall, *Principles of Economics* (London 1920).; W. Alonso, *Location and Land Use* (Cambridge 1964).
[9] B. Jessop, 'Institutional Re(turns) and the Strategic–Relational Approach', *Environment and Planning A; Economy and Space* 33:7 (2001) 1213-1235.; A. Bashko, *International Migration and Development. Institutional Consequences of Global Mobility for Sending and Receiving Countries Between 1970 and 2010,* CMR Working Papers 111:169 (2018).; J. Glückler, J. Suddaby and R. Lenz, 'On the Spatiality of Institutions and Knowledge', in: J. Glückler, J. Suddaby and R. Lenz (eds), *Knowledge and Institutions* (Berlin 2018) 1-19.
[10] T. Brinkmann, 'Strangers in the City: Transmigration from Eastern Europe and its Impact on Berlin and Hamburg 1880-1914', *Journal of Migration History* 2:2 (2016) 223-246.; A. Kossert, 'Promised Land? Urban Myth and the Shaping of Modernity in Inudstrial Cities: Manchester and Lodz', in: Ch. Emden, C. Keen and D.R. Midgley (eds),

(today in Poland), Tampere (Finland) and Ivanovo (Russia) were part of the Russian Empire for almost the entire nineteenth century. They used to be called 'Manchesters' in the past due to the fact that their economic base was the cotton industry.[12] Although they had much in common in the economic and geographic termsas well as some legal arrangements which were applied to stimulate industrialization that were similar to the generic Manchester, they varied in terms of the institutions which had created offers for immigrants. This helped us to identify both the universal and place-specific patterns of economic development of these three cities. We close our comparative studies with the outbreak of the First World War, which interfered significantly in the international division of labor and old trade links.

We claim that the crucial factor in attracting immigrants to new places with industrial potential was the favorable institutional environment, established by newly enacted legislation. Our goal is to recognize the institutional reasons for the 'take-offs' of the investigated cities and to identify the role of the main waves of immigrants in this process. Additionally, we want to identify for whom (which ethnic and/or social group) the new rules were a real incentive to migrate. Thus the culture-related aspects, consistent with the interpretation of Cadge et al., will be revealed.[13]

We analyze political and economic institutions and the role of immigrants in three cities based on historical data collected from both unpublished primary and secondary sources including original statistics in four languages: German, Finnish, Polish and Russian. In addition,

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Imagining the City (Frankfurt am Main-New York 2006).; M. Prokopovych, 'Urban History of Overseas Migration in Habsburg Central Europe: Vienna and Budapest in the Late Nineteenth Century', *Journal of Migration History* 2:2 (2016) 330-351.; A. Zysiak, K. Śmiechowski, K. Piskała, W. Marzec, K. Kaźmierska K., J. Burski, *From Cotton and Smoke: Łódź - Industrial City and Discourses of Asynchronous Modernity 1897-1994* (Lodz 2018).

[11] P. T. van de Laar, 'Bremen, Liverpool, Marseille and Rotterdam: Port Cities, Migration and the Transformation of Urban Space in the Long Nineteenth Century', *Journal of Migration History* 2:2 (2016) 275-306.; A. Power, J. Plöger, A. Winkler, *Phoenix Cities. The Fall and Rise of Great Industrial Cities* (Bristol 2010).

[12] K. Kowalski, Matera and M.E. Sokołowicz, 'Cotton Matters A Recognition and Comparison of the Cottonopolises in Central-Eastern Europe during the Industrial Revolution', *Fibres and Textiles in Eastern Europe*, 6:132 (2018)16-23.

[13] W. Cadge, S. Curran, B. Levitt, 'The City as Context: Culture and Scale in New Immigrant Destinations', *Amérique Latine Histoire & Mémoire* 20 (2010).

we have reached for the latest published research confronting it with older findings of historians from different countries.

We have divided the paper into four parts. The first three parts cover the description of the situation in the particular cities. The last part is a comparative analysis that points to the decisive institutional factors for the flows of immigrants, resulting in the 'take-offs' and development of the cities which are the subject of our study.

Lodz as the Promised Land[14]

Lodz as an industrial center was built and developed almost entirely by immigrants. Their unique role in the development of Lodz was depicted by Dzionek-Kozłowska et al.[15] Special mention should go to two groups – the German and Jewish communities – as, at the time of the greatest industrial development of the city, the nineteenth century, the most creative entrepreneurs, investors, and administrative staff came from these 'minorities.' Immigrants gave Lodz its economic shape over the next century[16].

Lodz as a town was established in the fifteenth century, but until the beginning of the nineteenth century, it was a small provincial place without a regular market square, surrounded by thick forest. Traders usually avoided this place. Until 1793, the town lay in the western part of the Polish-Lithuanian Commonwealth, far from major trade routes and centers of power. The town's population was homogeneous with regard to religion and nation. At the time, it was

[14] *The Promised Land* is a novel written in 1899 by Polish Nobel Prize in Literature laureate Wladyslaw Reymont. The story is set in Lodz.

[15] J. Dzionek-Kozłowska, K. Kowalski, K. and R. Matera, 'The Effect of Geography and Institutions on Economic Development: The Case of Lodz', *The Journal of Interdisciplinary History* 48:4 (2018) 523-538.

[16] The Polish bibliography is quite rich regarding the role of the Germans (O. Flatt, *Opis miasta Łodzi pod względem historycznym, statystycznym i przemysłowym* (Warszawa 1853 J. Janczak, 'Ludność Łodzi Przemysłowej 1820-1914', *Acta Universitatis Lodziensis. Folia Historica*, 11 (1982) 1-254.; G. Missalowa, *Studia nad powstaniem Łódzkiego Okręgu Przemysłowego 1815-1870* (Łódź 1964), K.P.Woźniak, *Niemieckie osadnictwo rolne w Królestwie Polskim (1815-1918). Przyczynek do historii badań i historiografii w Polsce* (Łódź 1999) and the Jews (F. Friedman, *Dzieje Żydów w Łodzi od początku osadnictwa do r. 1863. Stosunki ludnościowe, życie gospodarcze, stosunki społeczne* (Łódź 1935); W. Puś, *Żydzi w Łodzi w latach zaborów 1793-1914* (Łódź 2003), but the analysis thus far had not been led from the level of the effectiveness of the institutional framework.

inhabited by fewer than 200 people, the majority of whom were Polish and with a small number of Jews (Friedman, 1935, p. 22-23).

As a result of the second partition of Poland (1793), the town was seized by the Kingdom of Prussia. After the annexation, the Prussian government even wanted to revert Lodz to a village, but the city status was ultimately maintained. However, the Prussian administration led to the secularization of most of the urban area (which before the partition had been owned by the Catholic church) and initiated several reforms to waken the town from its economic inertia. After the border changes in 1793, the first few German immigrants arrived in Lodz, but it was the appearance of the Jews which had a stronger effect on the population growth. As far as the new Prussian legislation is concerned, the Berlin government released the General Statute for Jews (*General-Juden Reglement für Sud und Neu-Ostpreussen*) in 1797, which announced that Jewish matters (except for religion) were under governmental jurisdiction The statute also stated that the number of Jewish members on Town Councils should be proportional to their number in the total population of the town. It was a real legislative revolution compared with the previous 'medieval' procedures. Another important decision of the Berlin government (1802) was to nullify the privilege of *non tolerandis Judaeis,* which earlier had practically meant the prohibition of Jewish settlements in towns. Although Lodz had never used this privilege, the gradual implementation of this rule in the whole area of former Poland governed by Prussia automatically gave an incentive to settle there.

Eventually, in 1806, Jews received permission to settle in all Prussian towns, which gave them an opportunity to initiate new trade relations and set up craftsmen's guilds. The lost war with France in 1806 stopped the implementation of the Prussian reforms, but the previous decisions had resulted in the gradual integration of Jews with the rest of the inhabitants of the towns. The effect of the Prussian policy was that Lodz's population doubled in a decade and a half. To a minor extent, that growth happened due to the migrants of German origin, but the main

cause was the influx of the Jewish population, which increased five-fold (they constituted more than 13 per cent of the population in 1808).[17]

During the Napoleonic Wars, the territory of Lodz became for a short time a part of the newly established Duchy of Warsaw. In the constitution of the Duchy of Warsaw (1807), serfdom and feudal restrictions were formally abolished. However, it did not automatically improve the internal mobility of the population from villages to towns. Most of the peasants remained economically dependent on their noblemen, and the towns did not provide any employment opportunities. Additionally, the general rules concerning the fall of feudalism did not include the Jewish inhabitants. In 1808, the government of the Duchy of Warsaw released a decree which suspended Jewish civil and political rights for the next ten years. The governmental policy was redirected to the displacement of Jews from villages (inhabited by one-third of Jews) to towns. However, the Jewish people were allowed to settle only in special districts of the towns .[18]

In 1815, the Congress of Vienna established a new political order in Europe. For Lodz, it meant a change of borders and acceding to the jurisdiction of Tsarist Russia. The establishment of the Kingdom of Poland (1815) as a part of Russia did not change the policy implemented by the previous governments towards the Jews, which is why a growing number of people arriving in Lodz from rural areas could be observed. In 1820, the Jewish inhabitants constituted more than a third of Lodz's population: 259 out of 767.[19]

To sum up, in a period of less than a quarter of a century (1793-1815), Lodz was governed by four different states with four different legislative frameworks. The conditions for migration were precarious. The borders were changeable. In a time of uncertainty, the new

[17] Friedman, *Dzieje Żydów*, 32-33.
[18] Puś, *Żydzi w Łodzi*, 13.
[19] Friedman, *Dzieje Żydów*, 32.

settlers could not predict the changes in economic policy or plan their own economic activity properly.

In the period after 1815, we have identified three main types of mobility of the inhabitants of the Kingdom of Poland and, in particular, migration directed to Lodz: 1. The permanent internal immigration from rural areas, and from small rural towns to industrial(-izing) towns/cities (this type of immigration included mainly Polish, but also to a minor extent German and Jewish citizens); 2. Immigration from Polish land ruled by Prussia and the Austrian Empire (it included mainly Poles but also Jews, Germans, Russians, and Czechs); 3. The periodic immigration from other countries, mainly in the 1820s, 1830s, and 1840s (primarily Germans, as well as some Dutch and Frenchmen). According to Missalowa, these different types of immigration were the fundamental reasons for the demographic growth of Lodz and other industrial cities in the Lodz region. [20] Birth rate played a much weaker role in the supply of the workforce.

The establishment of the new borders and new tariffs in 1815 also suddenly changed the geography of trade. Old markets were cut off, and trade links to thus far integrated regions started to be artificially isolated. The textile producers from Silesia and Greater Poland lost their old markets and business communication. In the Kingdom of Poland, there was still a great demand for clothes, but the supply of textile products in Russia was insufficient to meet the demand. In such circumstances, two institutional-level incentives were announced by the governments (central and municipal). The first one was in 1816, by the governor of the Kingdom of Poland, Józef Zajączek, who issued "Provisions for the Settlement of Useful Foreigners in the Country, such as Manufacturers, Craftsmen, and Farmers." The immigrants could freely organize themselves in the new craftsmen's associations, instead of the old guilds which controlled the

[20] Missalowa, *Studia nad powstaniem*, 84.

size of production and prices.[21] The second detailed regulation was published by the governor in a decision in 1820. The plan to establish new drapery towns was confirmed by the Administrative Council. The Head of the Commission of the Mazowieckie Voivodeship (the regional authority of the Kingdom of Poland), Rajmund Rembieliński, decided to focus on new greenfield industrial locations. Lodz then appeared on the list of towns that became institutionally attractive for the newcomers – qualified textile craftsmen. Formally, the agreement between the members of the government and the arriving settlers in the New City of Lodz was signed in 1821 in Zgierz (the neighboring town to the north of Lodz).

As a result of this agreement, the new homesteaders gained a perpetual lease on parcels of land for buildings and gardens. The immigrants could also count on public loans, and they were freed from paying rent for six years. Even after this period, they only had to pay a small charge. Additionally, the new incomers avoided several tax burdens. For example, they were obliged to pay only a consumption tax, without the necessity of paying customs on inventory and movables. In Lodz, wood – the construction and energy material – was given away for free, and the price of bricks was strictly regulated to stop the uncontrolled increase in the value of this good. Last but not least, settlers and their sons who had been born abroad were freed from military service. Also, children born in Lodz with craftsmen's skills could be freed from the army.[22] In return for all this assistance, the main requirement for the settlers was to construct a building within two years.

The new regulations went hand in hand with the good economic situation in the whole Kingdom of Poland, especially after the liberalization of the tariffs in 1822. The new legal solutions had to be promoted by the emissaries from the Kingdom of Poland and also by the first

[21] A. Rynkowska, *Działalność gospodarcza władz Królestwa Polskiego na terenie Łodzi przemysłowej w latach 1821-1831* (Łódź 1951) 23.; A. Sieroń, 'Przyczyny rozwoju gospodarczego dziewiętnastowiecznej Łodzi – zapomniana rola wolności gospodarczej', *Acta Universitatis Lodziensis. Folia Historica* 98 (2017) 71-84.
[22] Flatt, *Opis miasta*, 37.

craftsmen who arrived in the area close to Lodz. After studying letters and reading the opinions of the local mayors, the most inspiring incentive was the 'good news' spread by the friends and relatives of the first immigrants (Mühle, 1999, p. 67).[23] The information about the good conditions in the Lodz region quite quickly reached the towns in Greater Poland, Silesia, and Saxony. However, German entrepreneurs and clothworkers also came to Lodz from the South, i.e., Czechia and Moravia, from the North, i.e., Pomerania and Brandenburg, or even from the further West, i.e., the Rhineland and Styria. Between 1822 and 1830 alone, more than 1000 craft families of German origin arrived in Lodz. It meant that 10 per cent of all German immigrants in the Kingdom of Poland landed in Lodz and its surroundings (Różański 1948).[24] Within a decade, the German population was equal to the number of Polish inhabitants and outnumbered the Jewish group. According to most of the currently available data, the Germans were the majority (or close to the majority) of the population in the town from the late 1820s until the middle of the nineteenth century. According to the first historian of Lodz, Oskar Flatt, the German majority meant that Lodz was regarded as a German town.[25]

Various documents from the Lodz archives do not confirm such a strong German presence, however (Janczak 1982).[26] The original lists of the permanent population from the late 1830s point to the following numbers of three religious groups in Lodz: Roman Catholics

[23] R. Mühle, 'Emigracja z terenów regencji poczdamskiej do Królestwa Kongresowego w latach 1817-1819', in: W. Caban (ed.), *Niemieccy osadnicy w Królestwie Polskim 1815-1915* (Kielce 1999) 67. It is important to note that family-related and social motivations are considered to be important pull migration factors, even today (M.E. Sokołowicz, 'Student Cities or Cities of Graduates? The Case of Lodz and its Students Declared Preferences', *Population, Space and Place* 25: 2 (2019).; A. Favell, 'The New face of East-West Migration in Europe', *Journal of Ethnic and Migration Studies* 34:5 (2008) 701-716.; V. Baláž, A.M. Williams, 'Migration Decisions in the Face of Upheaval: An Experimental Approach', *Population, Space and Place*, 24:1 (2017).; R. Verwiebe, L. Wiesböck and R. Teitzer, 'New Forms of Intra-European Migration, Labour Market Dynamics and Social Inequality in Europe', *Migration Letters* 11:2 (2014) 125-136.

[24] These data were corrected by Gryzelda Missalowa, who claimed that 55,000 German immigrants arrived in the Duchy of Warsaw and Kingdom of Poland between 1810-1827. The data revealed by Polish historians were much lower than the German calculations. For example, Gustav Schmöller, in the second half of the nineteenth century, stated that 300,000 Germans reached Poland between 1818-1830. It is worth studying the Polish-German debate on that problem (Woźniak, *Niemieckie osadnictwo*, 38-39).

[25] Flatt, *Opis miasta*, 116.

[26] Janczak, *Ludność Łodzi*, 26-34.

(typical of Poles) – about 3500; Protestants (typical of Germans) – 3300; and Jews – more than 700. The total number of inhabitants in Lodz amounted to more than 7500 in 1838.[27] The data released by Polish demographer Julian Janczak showed a stable proportion between the ethnic group in the town. At the beginning of the second half of the nineteenth century, there were nearly eight thousand Catholics and eight thousand Protestants, but the number of registered German inhabitants was much lower. An alternative list of 1440 German families existed (including 5760 constant and 450 mobile inhabitants). It meant that Germans were close to 1/3 of the total Lodz population, Jews represented 13 per cent (the same as in 1808), while Poles with a few smaller nations made up 55 per cent.[28] To conclude, it is difficult to agree with the thesis that the number of Germans was very substantial for a long period of the history of Lodz. The minority became a majority in the 1820s and 1830s, but in the later decades, the number of Poles and Germans evened out[29]

Additionally, the German immigrants were not a cohesive social group. They differed in terms of welfare, religion (although most of them were Evangelicals), and even dialect. The majority of them were well-educated and had the professional and technical experience to develop their skills and to engage in industrial development. A few were also excellent managers, with business experience in their homelands. They were able to set up small weaving looms which soon turned into medium-sized manufactories and then into larger and larger factories. A few German industrialists not only established factories providing hundreds of people with employment, but they also took care of the education of their workers, built hospitals and Protestant churches, and established German schools and cultural and sports associations.

Turning to the most influential Germans in Lodz, it is necessary to start with the owner of the famous White Factory, the Saxonian Ludwig Geyer. In 1838, he opened the first steam-

[27] The State Archive in Lodz, *Księgi ludności stałej i niestałej*.
[28] Janczak, *Ludność Łodzi*, 119-120.
[29] E. Rosset, *Łódź w latach 1860-70. Zarys historyczno-statystyczny* (Łódź 1928) 5.

powered spinning mill in the Kingdom of Poland. Before, in 1828, he signed an individual, bilateral agreement with the Commission of Mazowieckie Voivodeship. Not only did he receive building parcels but also a license to bring cotton with lowered tariffs (he paid 2/5 of the standard tariff). He declared that he would open 20 looms and achieve cotton production in a total of 100 looms within ten years. From the end of the 1830s until the beginning of 1860s, Geyer, who was called 'the Father of Lodz,' 'the King of percale' and 'the First lodzermensch,' had a significant impact on the development of the city. At the beginning of the 1860s, he employed more than five hundred workers and specialists.[30]

However, within two decades, other German manufacturers had successfully started to compete with Geyer, for example, another Saxonian, Traugott Grohman and, in particular, Karl Scheibler, who arrived from the Rhineland. He was one of the most powerful manufacturers. His father was the owner of a cloth factory in Germany, and he had practiced earlier in Belgium[31], France, the Netherlands, Austria, and Scotland. Scheibler arrived in the Kingdom of Poland in 1848; thus he did not receive as much public support as the first immigrants. In 1855, he established the first fully mechanical spinning cotton mill. However, his cotton kingdom was the result of the outbreak of the American Civil War. He had managed to order an enormous amount of the raw material just before the American conflict started, while other manufacturers soon found that their suppliers had been cut off. Within thirty years, he had managed to amass probably the greatest wealth in the whole of the Kingdom of Poland. He invested not only in raw material supplies but also in new machines and technical innovations. Additionally, he was charitable with his money, establishing schools and hospitals, and donating to the building of churches.

[30] Rosset, *Łódź w latach*, 6.
[31] In the documents, Scheibler presented himself as a Belgian citizen.

To complete the list of the first manufacturers who came to Lodz or neighboring towns (Zgierz and Pabianice), it is necessary to mention the creative producers of cotton, Jakob Peters and Karl Moes (of German-Dutch origin), Leonard Fessler (the owner of the dyeworks), and the Saxonian Karl Gottlob Anstadt, who established a brewery in Lodz. Another group of famous entrepreneurs was born in Lodz or in the vicinity, and they were the successors of the first immigrants.

In the 1820s and 1830s, the authorities of the voivodeship and the town actively searched for and managed to attract enterprising settlers. In the 1840s and 1850s, a new generation of entrepreneurs, who proved to be skilled, educated, and efficient industrialists, was born in Lodz or in the Kingdom of Poland. Additionally, new settlers began to arrive, mainly because the city had been recognized as the perfect place to start or develop a business. Such an opinion was voiced because of the location, the geography, and the institutions of the city.

The regulations on the functioning of the New City of Lodz (1821) worked, on the one hand, like a strong magnet for the German settlers, but on the other hand, they were directed against the Jewish minority. One of the documents signed by the local authorities stated that no new Jewish person would be allowed to settle in the New City of Lodz or to buy a new property in this area. It was also indicated that no Jewish person would be allowed to have an inn or to produce or sell liquor there. Exemptions from this rule were given only to those Jews who had already started the above-mentioned activities.[32] This regulation was absolute discrimination in both economic and political terms. Despite this, however, after the implementation of the new law in 1825, affluent and well-educated members of the Jewish community were still able to buy property in the New City. Formally, Jews could still move to Lodz, but only to certain particular districts, excluding the new settlements.

[32] Flatt, *Opis miasta*, 38.

The lack of institutional incentives meant that there had not been many Jewish volunteers who had settled in the New City – the new industrial district of Lodz. Until 1848, there were only eight families living outside of the Jewish quarter. However, after this year, the threshold of wealth for Jews was lowered by the local authorities and, as a result, more decided to live outside their district. Some of them decided to move even without the necessary permission. In 1841, the Jewish quarter was enlarged for the first time, and in 1859 it was done again by the town municipality. In 1862, Tsar Alexander II published a decree conferring equal civil rights to all residents, regardless of their origin. It allowed members of the Jewish community to vote and to stand in elections to the local authorities and country government positions. Subsequent laws also abolished the extra taxes[33] and allowed Jews to enter new professions. After the legal changes in 1862, Jews became the most dynamic minority in Lodz.

Table 1. The population growth of Christians and Jews in Lodz. 1793-1863

Periods	Christian population		Jewish population	
	Total number (last year)	per cent growth	Total number (last year)	per cent growth
1793-1823	331	284	288	2618
1823-1850	13,044	2653	1722	698
1850-1863	14,740	205	3623	280

Source: Friedman, *Dzieje Żydów*, 33.

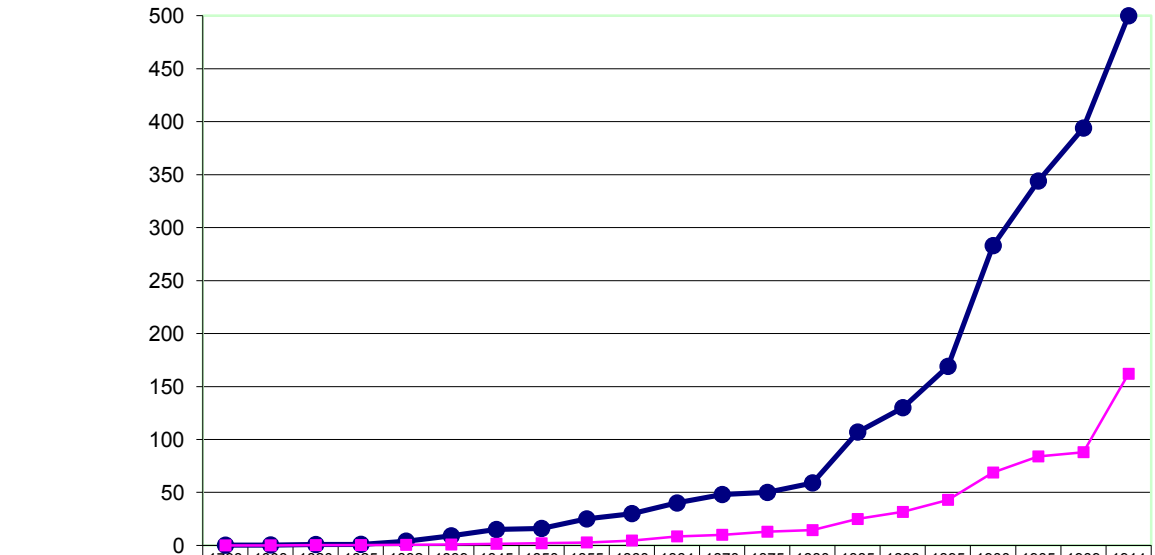
In Table 1, which presents the growth of the Christian and Jewish populations in Lodz, it is easy to recognize the link between the liberalization of the law with the growth of the Jewish population. Two waves of Jewish immigration are clearly visible before 1863. The first one was during the time of Prussian rule, the Duchy of Warsaw and the first years of the Kingdom of Poland (until the discriminative regulations of the Zgierz agreement were implemented), and the second one in the 1850s, as a result of the changes in the restrictive settlement law. However, the

[33] Before the 1860s, Jews had to pay many additional taxes: recruitment, alcoholic-beverage, property-lease, rental-agreement, transportation and kosher-meat.

real boom started in the 1860s and the subsequent decades after the introduction of the rights granted by Tsar Alexander II (see Figure 1).

Between 1820 and 1880, 90 per cent of Jewish immigrants arrived in Lodz from the other parts of the Kingdom of Poland. From the 1880s until the outbreak of the First World War, there was also a growing number of international Jewish immigrants. Within thirty years, about 40,000 Litvaks (Russian speaking Jews from today's southern Latvia, Lithuania, and northern Belarus) arrived in Lodz. 25 per cent of the incomers decided to settle there for the rest of their lives. The main reason for their arrival was the change in the Russian legislation. New restrictions in 1882 imposed barriers on settling in the Western Russian guberniyas (districts). Most of the Litvaks chose Warsaw and Lodz as the new places to stay. This group had an impact on expanding the Eastern market (in the Caucasus, Persia, and even China) for textile products from Lodz.

Figure 1. Lodz population growth and the share of Jewish inhabitants in 1793-1914 (in thousands)



	1793	1808	1820	1825	1832	1839	1845	1850	1855	1860	1864	1870	1875	1880	1885	1890	1895	1900	1905	1909	1914
Population of Lodz	0,2	0,4	0,8	1	4	9	15	16	25	30	40	48	50	59	107	130	169	283	344	394	500
Jewish population	0,01	0,06	0,26	0,3	0,5	0,8	1,5	2	2,8	4,6	8,5	10	12,9	14,4	24,9	31,6	43	68,8	84	88	162

Source: Own graph based on data from Friedman, *Dzieje Żydów*, 32-33; Janczak, *Ludność Łodzi*, 118-127; Puś, *Żydzi w Łodzi*, 26-27.

In Figure 1 the waves of the Jewish population influx in the 1860s and the 1880s are visible. The former occurred as a result of the Tsar's new law improving the situation of the

city's inhabitants. We can identify it as an internal factor of immigration. The latter was caused by the immigration of the Litvaks as a result of the change in Russian law worsening the situation of potential immigrants to the Western districts of Russia. Thus, from the perspective of the Kingdom of Poland, it should be regarded as an external factor. It shows that the regulations concerning the Jewish community, although not very beneficial in the Kingdom of Poland, were still more favorable than in the other parts of the Russian Empire.

As a result of the new rights implemented in 1862, not only German but also Jewish entrepreneurs started to invest in the textile industry, especially in cotton production. Still, in the middle of the 1860s, the textile companies belonged mostly to the Germans (60 per cent). At that time Jewish citizens owned about 20 per cent of the manufactories[34] Their looms and factories employed no more than 10 per cent of the employees in the textile industry, and the value of production did not exceed 10 per cent.[35] However, fifty years before the First World War, there was a revolution in the ethnic composition of ownership of the companies in Lodz. At the beginning of the twentieth century, almost 40 per cent of the textile industry was provided by Jews. If we include the whole industry, the proportions were as follows: 47 per cent – Jews, 44 per cent – Germans, 9 per cent – the rest.[36] Between 1869 and 1913, the number of Jewish manufacturers increased from 40 to 200, which meant that Jewish-registered companies grew to 52 per cent of the total. In the textile industry, the advantage was even higher. Jewish involvement in ownership grew to 56 per cent, and the share in production reached as much as 60 per cent.[37]

In the 1840s and 1850s, the only Jewish competitor to the German entrepreneurs in the textile industry was David Lande, who specialized in cotton production. However, the greatest

[34] S. Pytlas, *Łódzka burżuazja przemysłowa* (Łódź 1994) 43,52.
[35] Friedman, *Dzieje Żydów*, 78.
[36] S. Pytlas, 'Skład narodowościowy przemysłowców łódzkich do 1914 r.', in: W. Puś and S. Liszewski (eds), *Dzieje Żydów w Łodzi 1820-1944* (Łódź 1991) 55-78.
[37] Puś, *Żydzi w Łodzi*, 82,91.

example of Jewish business success was linked to Israel Poznański, who became the 'King of cotton' in the 1870s. His kingdom was comparable to that of Geyer and Scheibler[38]. Within a decade he had managed to increase the number of his mechanical workshops to nearly 1000, and he possessed his own cotton plantations in the Caucasus and Central Asia. Before the First World War, Poznański employed seven thousand people in his 24ha factory area.[39]

The correlation between institutional factors and the dynamic of the growth of the Jewish population is visible with the comparison of the total population growth of Lodz. At the beginning of the 1820s, Jews constituted 1/3 of the inhabitants of Lodz. Due to the Zgierz decree, there was a decrease in the dynamic growth of the Jewish population in the city, so that in the 1830s, 1840s, and 1850s, the number of Jews living in Lodz fluctuated between only 10 and 15 per cent. The liquidation of the Jewish quarter and the introduction of the new law by the Tsar in the 1860s resulted in a spectacular increase in the number of Jews as a share of the total population, from 20 per cent in the 1860s to 25 per cent in the next four decades and 30 per cent on the eve of the First World War.

Table 2. The national structure of Lodz's population in 1897 and 1914

Nationality (based on native language)	1897		1914	
	Thousands	Share	Thousands	Share
Polish	145.6	46.4	254.8	50.9
German	67.3	21.4	75.1	15.0
Jewish	92.4	29.4	162.4	32.5
Russian	7.4	2.4	7.0	1.4
Other	1.3	0.4	1.2	0.2
Total	314	100.0	500.5	100.0

Source: Janczak, *Ludność Łodzi*, 130-133.

The precise reasons for the explosion of Lodz's growth are still under debate. We should agree that the geography mattered.[40] But was also mattered was the significant scale of immigration. The German and Jewish immigrants (in different periods they were minorities, and

[38] At the end of the nineteenth century, the cotton kingdom of Poznanski was only smaller than Scheibler's.
[39] J. Kusiński, R. Bonisławski and M. Janik, *Księga fabryk Łodzi* (Łódź 2009) 200.
[40] J. Dzionek-Kozłowska, K. Kowalski and R. Matera, 'Geography Matters. Environmental Factors that Affected the "Take-Off" of Lodz', *Roczniki Dziejów Społecznych i Gospodarczych* 78 (2017) 223-248.

once even the majority) strongly pushed Lodz on the path of dynamic development. However, of course, the immigrants needed the right incentives from the governments and the local authorities to be encouraged, and later to convince their successors to stay longer with the capital they had accumulated. Lodz is sometimes known as the city of four cultures (adding Russians as well, although their economic role was marginal), but taking into consideration the economic aspects, German and Jewish nations had a stronger impact on the city's economic growth than the others.

We should emphasize that the German immigrants did not immigrate because of the dramatic situation in their homelands. Rather, they immigrated because they had anticipated that their economic situation would improve. They decided to immigrate because special guarantees to start new businesses had been offered by the Lodz authorities. By contrast, the case of the Jewish immigrants varied in different periods. Small numbers decided to move in the first two decades of the nineteenth century because some basic incentives were offered. More encouragement for them appeared in the 1850s and especially the 1860s. At that time, most of the immigrant Jews arrived from within the Kingdom of Poland, but the international Jewish immigration in the 1880s was a different case. The worsening situation in Russia was the primary incentive for Jews to come to Lodz from their homelands.

Paradoxically, the economic institutions of the Kingdom of Poland (inside the possessive Russian Empire) were more conducive to development than the mercantile legislation in the free Polish-Lithuanian Commonwealth. The inclusive economic institutions were most attractive to the immigrants, especially the more skilled and educated entrepreneurs. These economic institutions did not come from the political system, because Russia was based on absolute power. However, even the nondemocratic government sometimes gave way to political or social groups of interest who fought for their economic rights. The local authorities were a kind of agent

between the Tsar's representatives and the active groups of nations or associations of entrepreneurs, traders, and industrialists.

Tampere as Finnish Manchester with Scottish roots

Tampere (its Swedish name is Tammerfors), situated on an isthmus between lakes Pyhäjärvi and Näsijärv and connected with Tammerkoski Rapids with a fall of 18 meters, is the city where the first large-scale industry appeared in Finland. The rapids were the defining geographical feature of Tampere because of the water power and the waterways across the lakes; however, we claim that immigration was crucial in utilizing the geographical assets of the area.

The development of the area gradually accelerated after Swedish King Gustavus III traveled to Finland in 1775 and signed an order to found a market town on the western shore of the Tammerkoski Rapids. Four years later, the king signed the charter of Tampere, which was then a tiny village, with some flour mills and an annual fair for rural people. The king granted future inhabitants several special privileges to encourage economic activity in the area. The most important ones freed the town from guild regulations and lowered the taxes. In practice, the institution of the guild was prohibited in the town while the townspeople's agricultural activities were completely forbidden (Kostiainen, Sotarauta, 2002, p.9).[41] Formally, Tampere was a free town, which means that every man was free to move in and start an enterprise. The restrictions guided the incoming residents to make their livelihoods in trade, crafts, and later in industry.

The charter provided lots for 400 inhabitants, who also enjoyed 20 years of tax exemption. This provision made it necessary to trigger the process of immigration into the town. We may assume that immigration from outside Finland was considered, since the concessions included entire liberty of conscience in matters of religion. Freedom of worship was promised, with the town plan including a town square cornered with churches of four different religions. It

[41] J. Kostiainen and M. Sotarauta, *Finnish City Reinvented: Tampere's Path from Industrial to Knowledge Economy* (Massachusetts 2002) 9.

seems clear that through the freedom of entrepreneurship and religion, the crown sought to attract a skilled foreign population in order to bring the royal dreams of industrial development into that area. Thus, it may well be assumed that expectations for massive immigration were embedded in the DNA of Tampere.

The crown hoped to make Tampere a center of iron production. Iron ore was expected to be found in the lakes and then smelted in furnaces fueled by the charcoal available in the surrounding forests. This policy failed, however, due to the lack of resources. Other small-scale industrial activities were started soon after the town was founded, and a rag paper mill, dyeing house, brick factory, gun barrel factory, and leather fulling house were established. Despite the efforts undertaken by the king, the population growth lagged. According to the parish register, there were 463 residents in the town in 1800 (Lönnroth, 2008, p. 230).[42] During the Swedish rule, Tampere remained a small village. The only large businesses with a wider impact were a state distillery and the paper mill founded by Abraham Häggman.

Finland moved to Imperial Russia from the Kingdom of Sweden in 1809 becoming a Grand Duchy, but the with Swedish legislation staying in force. Tsar Alexander I reinforced the privileges of the city in 1821 (*Privilegium Tammerfors*). Free city rights were extended and clarified. Craftsmen and industrialists were again granted exemption from crown taxes and were released from the duty of providing accommodation for militaries. It was possible to export and import industrial raw materials without state customs duties. Despite the earlier failure, priority was given again to the iron and metal industry. Notwithstanding the use of these incentives, the development of the town was still retarded. The main reason lay in the lack of accumulated capital and entrepreneurs who could take advantage of the benefits. The path of the progress of Tampere began only when the Scots James and Margaret Finlayson moved to Tampere from

[42] H. Lönnroth, 'The Multilingual History of an Industrial Society. The Case of Tampere, Finland', in: A. Saxena and Å. Viberg (eds), *Multilingualism. Proceedings of the 23rd Scandinavian Conference of Linguistics*. *Acta Universitatis Upsaliensis* (Uppsala 2009) 230.

Saint Petersburg in 1820. It is not a coincidence the Finlaysons came from Great Britain. In the nineteenth century, it was still this country that successfully converted business ideas into capital and consumer goods. As 'the workshop of the world,' not only was it a center of capital accumulation, but also an extender of capital loans.[43]

The Finlaysons came to Russia around the turn of the century.[44] Their emigration was a deliberate violence of a British statue that prohibited the emigration of mechanics (until 1825). Similarly, the export of textile machines from Great Britain was not allowed until 1843. James Finlayson was employed as an engineer in the Alexandroff textile mills near Saint Petersburg, which had just been established by the Russian Government. In 1819, John Paterson, a Congregationalist minister, encouraged Finlayson to tour Finland to look for business opportunities. Finlayson indeed found the area attractive, and as soon as he returned to Saint Petersburg he applied to the Tsar to grant him a piece of land and other economic privileges to establish some facilities in the Tammer Rapids area. Finlayson's plan was to harness the power of the rapids with the aid of privileges and funds administered by the Tsar. There would be a foundry for manufacturing different types of machinery for the handling of cotton, wool, and linen, a manufacturing workshop, a refinery for processing hemp, linen, wool, and cotton, as well as "other useful factory and manufacturing plants."[45] In order to attract English experts, Finlayson also petitioned for non-economic privileges: freedom of worship, and exemption from some civil and military obligations for the workers that he intended to bring. Finlayson's expectations were huge but without him, the development of Tampere, located 100 km from the nearest port in Pori, would not have been feasible at all.[46]

[43] W.R. Mead, 'Britain in Scandinavia', *Geography* 54: 3 (1969) 271-283, 271.
[44] R.S. Selleck, 'Quaker Pioneers in Finnish Economic Development: James Finlayson and the Wheeler Family', *Quaker History* 51:1 (1962), 32-42.
[45] Kostiainen and Sotarauta, *Finnish City*, 10.
[46] P. Haapala, 'History of Tampere: The Very Long Road to Informational City', in: A. Kasvio and A.-V. Anttiroiko (eds), e-*City. Analyzing Efforts to Generate Local Dynamism in the City of Tampere* (Tampere 2005) 170.

The official charter of privileges was granted to Finlayson in 1820. It authorized him to found the first textile mill in Finland and entitled him to the land by the rapids and a license to hydro-power. The Finnish Senate passed the provisions with no major objections. The foreign manufacturers and workmen were exempted from paying Church taxes. It was pointed out, however, that religious dissenters were not allowed to proselytize. The Senate also questioned the right to make an affirmation instead of taking judicial oaths – the former being practiced by Quakers. The immigrants had the liberty not to host any soldiers in their own houses. They were also exempted from all military service. The investment began soon thereafter. As Peterson put it: "All and more than he asked was granted; and here works have been erected, which employ some hundreds of poor people, and being now entirely in the hands of pious men, who compose the partnership, are a great blessing to the country and to hundreds of poor industrious people."[47] The basic construction works were performed by local Finns, but the installation and working of machinery required trained staff. Upon acquiring customs privileges, British machinery (condensing engines, a gas plant) was delivered to Tampere and cotton was transported from Liverpool.

Although the size of the investment was spectacular in terms of the allocation of funds, the operations remained relatively small.[48] Finlayson built a foundry and a refinery for the hemp that were not highly profitable. He failed particularly in producing spinning machines, which were not in high demand in Finland or Russia. Within ten years of starting the business, the thread from Tampere mills was sold both in Finland and Russia, but only nine journeyman and apprentices had decided to move to Tampere by 1830. Attracting Brits, for whom privileges had been granted, proved difficult. Apart from business activities, the Finlaysons tried to build

[47] J. Paterson, *The Book for Every Land. Reminiscences of Labour and Adventure in the Work of Bible Circulation in the North of Europe and in Russia*, ed. W.L. Alexander, (London 1858), 324.
[48] Selleck, *Quaker Pioneers*, 37.

stronger links with the local community. In 1821, they opened an orphanage in which poor children were granted religious education, basic training in manual skills, and physical care.

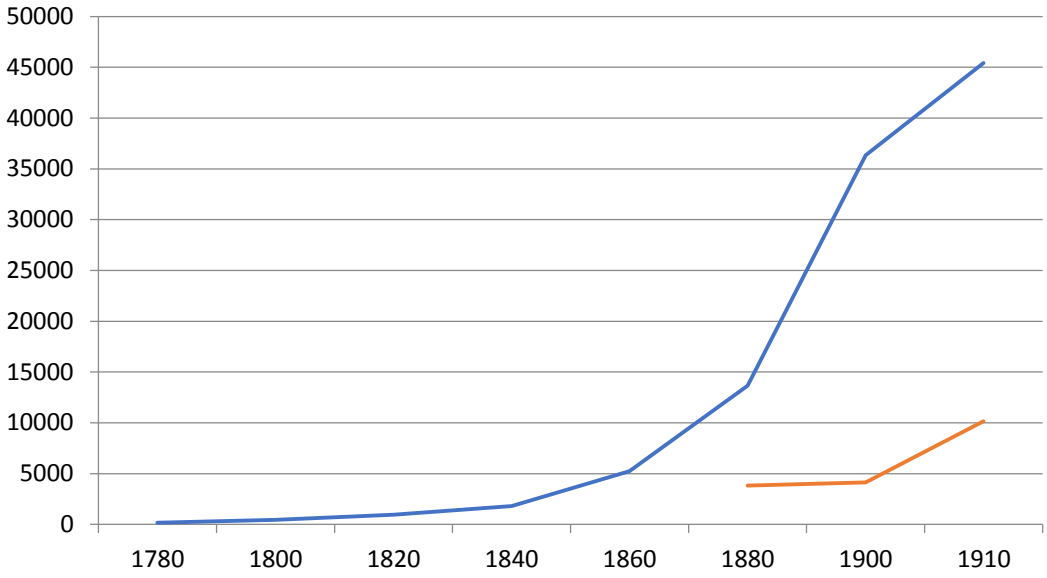
Finlayson proved to be quite a poor businessman, and his small business went bankrupt[49]. However, the seeds were sown, and the case of Finlayson's factories encouraged other entrepreneurs to seek opportunities for their businesses in Tampere. In 1836, Finlayson sold the business, including the priviliges of the company to two Baltic-German businessmen, Carl Samuel Nottbeck and Georg Adolf Rauch[50]. With the new ownership and management, the enterprise steadily expanded and finally yielded a satisfactory return. They built the first real factory in Finland, a cotton mill, starting with 500 workers in 1836. Finally, they succeeded in creating both the largest and the most profitable company in nineteenth-century Scandinavia. Finlayson & Company (the company held its old name partly due to the good reputation it had) employed more than 3000 workers at the end of the century, which speeded up the influx of new inhabitants to the city (Haapala, 1986; Trade and Industry of Finland, Helsingfors 1922, p. 343).

The business was again given credit by the state of Russia and some British investors. Machines for the new cotton mills were imported from Belgium and Germany while the raw material – cotton – was imported from the slave fields of the American South, via Great Britain. Products found their market mainly in Saint Petersburg. Finnish-produced goods were protected from Western competition (Russia imposed tariffs of 70 per cent on Western products in many cases).

[49] The machine shop went bankrupt first as there were not enough markets for the machines. After experimenting with the manufacture of woolen cloth, it was changed to a cotton spinning mill in 1828. See more: A. Hynynen, *Urban Fallowing in Regional Development - Case Tampere* (unknown publisher 2006) 23.; F. Singleton, *A Short History of Finland* (Cambridge 2010) 83.

[50] Uhde soon joined the business becoming the director of the factory.

Figure 2: The number of inhabitants 1780-1910 *versus* number of employed in manufacturing in Tampere



Source: V. Rasila, *Tampereen historia II* (Tampere 1984) 205**;** Tilastokeskus 1890, 1910.

The increasing industrialization again made it necessary to hire foreign experts, mainly from Great Britain, Germany, and Sweden. The new owners paid more significance to the incentives offered to foreigners – an area that Finlayson had ignored. From now on, foreign experts were promised more than ten times the salary compared to Finnish masters. In addition, they were provided with apartments in the city.[51]

The migration of both the skilled and unskilled workforce, chiefly from Great Britain, accelerated the diffusion of techniques and ideas. It is important to note that the transfer of technology was not restricted to one company or even the town. William R. Mead reported that "Finlayson's mill became a center of attraction and of diffusion in its own right. As its younger engineers matured, they cast eyes elsewhere to establish their own plants."[52] In the 1860s, half of the population of Tampere worked for Finlayson. In the 1870s, 40 per cent of the working population of Finland who worked in factories lived in Tampere and 25 per cent worked in

[51] M. Rapo, *Maahanmuuttajien Tampere, Selvitys maahanmuuton ja maahanmuuttajatyön vaiheista Tampereella* (Tampere 2016) 8.
[52] W.R. Mead, *An Experience of Finland* (London 1993) 281.

Finlayson.[53] At the same time in Finland, over 4000 were employed in cotton factories and a further thousand were engaged in the woollen and linen industries.[54] At the beginning of the 1900s, there were over 3000 employees in the mill itself, and it was the largest industrial enterprise in the Nordic countries[55] By 1900, the number of factory workers in Tampere exceeded 10,000, most of whom worked in textiles, metal works, and paper mills.[56] Although Finlayson was by far the major enterprise in Tampere, it had some notable rivals[57]. It competed with a paper mill led by the German-born Frenckell family. The mill in Tampere was the first one in Finland to introduce machinery (earlier the cotton had been worked by hand). The impact of foreigners is even stronger here since the modernization and development of facilities was to the credit of the manager of the mill, Thomas Clayhills, whose family had roots in Tallinn[58].

As we have shown, the industrialization of Tampere depended on foreign businessmen – in terms of inflow of capital and know-how.[59] The workers were Finnish, but the engineers and skilled workers, such as foremen, who ran the various departments of the factory, came from Germany and Great Britain. Another characteristic feature of Tampere was the huge share of Swedish-speaking officials in the factories. This applies to numerous enterprises in Tampere: Tampereen Verkatehdas broadcloth factory, Tako mechanical pulpwood factory, the Flax and Iron Industry of Tampere Stock Company Tampella and Suomen Trikoo tricot factory, to name but a few. Individuals with high social status and the majority of the bourgeoisie of the town also had a command of Swedish. It is important to distinguish the number of Swedish-speaking Finns not being able to speak the Finnish language fluently who came to Tampere from the other parts

[53] Rasila, *Tampereen historia*, 27.
[54] Singleton, *A Short History*, 83.
[55] Hynynen, *Urban Fallowing*, 24.
[56] P. Haapala, 'Tampere – A History of Industrial Society' in: M. Hinnerichsen (ed.), *Reusing the Industrial Past by the Tammerkoski Rapids* (Tampere 2011) 9-19, 13.
[57] The influence of Finlayson was manifested in various ways. The Nottbeck family had a part in setting up the Bank of Finland and opening a telegraph line to Helsinki. As a result of multinational cooperation in Finlayson's weaving hall, the first electronic lighting system in the Nordic countries was lit in 1882.
[58] *Trade and Industry of Finland* (Helsingfors 1922) 257.
[59] K. Koskinen, 'Tampere as a Translation Space', *Translation Studies*, 7:2 (2014) 186-202, 188.

of Finland and the Swedish born Swedes. They were both members of the upper class which often considered Finnish to be a language only fit for peasants and servants, but the numbers in statistics vary.[60]

Table 3: Population structure of minorities by place of birth in Tampere in 1890.

Country	Number
Sweden	109
Russia	47
Germany	38
England	17
Poland	10
Baltic countries	17
Norway	6
Other (incl. Saint Petersburg)	43
Total	287

Source: *Tilastokeskus 1890*, 101.

The diverse nationalities lived harmoniously, although some social differences could be observed. The Germans were mostly well educated, top management professionals who integrated with the people of Tampere through cultural and other events. They also excelled in trade and culture while the Englishmen stayed away from the city outside their job. The Russians were a very diverse group, with several merchants among them. They were small traders and other private practitioners. The number of Russians in the city grew rapidly from the beginning of the twentieth century. In 1910, Russian citizens passed the Swedes as the largest group in the city. At the same time, the number of Englishmen and Germans dropped fast; however, the rise in Finnish industrial skills and education levels reduced the need for English expertise.[61]

Despite the massive growth in population from the 1850s, the share of minorities in the total population of the city did not increase. The fraction of foreigners in the total number of Tampere inhabitants was still below 2 per cent and lagged behind the enormous demographic development of the city. The growth in the population of Tampere was the result of the internal

[60] Lönnroth, *The Multilingual History*, 231-232.
[61] Rapo, *Maahanmuuttajien Tampere*, 14.

migration of unskilled workforce from nearby villages. Finland was a rural area, and employment in industry was seen as a path to life improvement and social advancement.

Table 4: Immigrants in Tampere 1880-1910 (share of the total population)

Year	Share in the city population (per cent)
1880	1.56
1890	1.08
1900	1.05
1910	1.08
1920	0.67

Source: Rapo, *Maahanmuuttajien Tampere*, 11.

The roads of three very different men triggered the development of Tampere. A Scottish missionary called Paterson, who had information on the potential of the rapids, the Scottish engineer and entrepreneur, Finlayson, who had the know-how to exploit the rapids, and the Russian emperor Alexander I, who scrapped both legal and financial controls[62]. This intersection of the institutional background with the impact of environmental and strong personal factors marks the path of development of Tampere.

Ivanovo and the role of mobile capitalistic peasants

From medieval times until the turn of the eightteenth and nineteenth centuries, Ivanovo-Voznesensk was a small village. Its rapid growth was due to the textile industry development of two adjacent territorial units located along opposite banks of the Uvod River – the southern Ivanovo and the northern Voznesensk. It was not only the type of industry but also the industrialization itself that was untypical for this part of the world. The urbanization through industrialization in Ivanovo-Voznesensk was unique for Russian cities, and thus, migration patterns were also different than in Western Europe.

[62] Pertti Haapala extended this argument: "The original owner of the factory was a Scot moved to Russia, the new owners were Russian-German, money came from Russia and England, government bonds were taken from Germany and France, the machines were from Belgium and Germany, technicians from England, supervisors from Sweden, accountant from Germany, raw material imported from America with great effort and grain workers from Russia. The finished products were sold to St. Petersburg. Factory owners' children studied in Switzerland and worked in international positions" P. Haapala, 'Tampere maailmanhistoriassa',in: M. Lindi, K. Antila and A. Liuttunen (Eds), *Tammerkoski ja sen kaupunki* (Tampere 2011) 61-62.

Ivanovo's path to the textile industry started in the second half of the eighteenth century. At the time, the active role of rich peasants was a key development driver. Formally dependent on the gentry, they accumulated capital by trading in materials and fabrics. These 'capitalistic peasants,' as they were called, opened the first small textile handcraft manufactures. However, despite this economic specialization, the lack of technological expertise and machinery prevented them from gaining significant economies of scale.

The rapid industrial growth in the city accelerated in the nineteenth century. A key role was played by craftsmen who decided to migrate from the Vladimir Province (including Ivanovo) to Saint Petersburg. The latter was a territory where Russian administration allowed the settlement of entrepreneurs from abroad (to industrialize this part of the country). At the same time, they established the prohibition of textile imports from England. This launched the on-the-spot production of textiles, mainly in the suburbs of Saint Petersburg.[63] The craftsmen employed in these factories carried the latest technological know-how to the interior, especially to Ivanovo and Moscow. The first person mentioned to realize this strategy was Osip Sokov, who had journeyed to Schlisselburg near Saint Petersburg as far back as the late 1780s, to work in the foreign cotton factory firm of Lehman. There, he learned the secret process of high-quality dying. These secrets were adopted widely by Sokov in Ivanovo, and soon, other craftsmen followed.[64]

This internal migration of Russian 'capitalistic peasants' from Ivanovo to Saint Petersburg and back was the first move to establish a group of textile producers in the region. The other migration had an institutional reason. The river Uvod was, in fact, the frontier between two jurisdictions. Before 1861, Ivanovo was still a village in terms of its legal and social

[63] S. Smith-Peter, *Imagining Russian Regions. Subnational Identity and Civil Society in Nineteenth-Century Russia* (Leiden-Boston 2017) 44-45.
[64] P. Garelin, *Gorod Ivanovo-Voznesenski* (Shuia 1884) 140-148.

position. It was inhabited by serfs who belonged to Count Sheremetev's family[65]. Only the richest serfs who were the owners of industrial workshops were able to buy their freedom from Sheremetev.[66] Among them were Ivan Grachev, the first person who gained enough wealth to achieve his freedom in 1795, and Iakov Garelin, one of the leaders who established Voznesenskii Posad as a self-governing legal entity on the other bank of the river. Paradoxically, the latter came to own the entire peasant village and all its inhabitants (*Spaskoe*), although he did not buy himself out of bondage until 1828.[67] Garelin was also among the first wave of local peasants to work in the Schlisselburg factory near St. Petersburg (of the English manufacturers Chamberlain and Cuzzins), where he learned and appropriated secret new techniques for cotton printing.[68]

Having no possibility to significantly improve their social position in Ivanovo, people decided to do it by migrating… to the other bank of the river which was governed by the state, not the gentry. In other words, the only way to 'freely' develop the industry was to establish a new town there. Thus, the merchants, who were formally still serfs, created their own town in the 1850s – Voznesenskii Posad. "As in Britain, where the 1832 Reform Act granted representation to towns and cities that had become major centers due to the Industrial Revolution, the *posad*

[65] W. Blackwell, *The Beginnings of Russian Industrialization, 1800-1860* (Princeton 1958) 205. As Susan Smith-Peter notes, "(i)n Ivanovo, religion rather than rich soil determined the development of the town." It was the center of the so-called Old Belief, which rejected the church reforms in Russia 1666-1667. Only a small number Old Belief merchants were involved in the Ivanovo and Vladimir Province public affairs. This also effectively prevented systemic social and economic changes in Ivanovo, as there was no chance for serfs in Ivanovo to change their fate (Smith-Peter, *Imagining Russian*, 48).

[66] Their official name was factories (*fabrikas*) but in reality it referred to any place where production took place, including artisans' workshops. In 1742, the first 'real' factory – the Buturlin linen factory – grew into several buildings that could accommodate larger looms than peasants' huts would allow. A second factory was established in 1748 by I.I. Grachev (Smith-Peter, *Imagining Russian*, 51). The handicraft production was organized around the linen technology. The thread was created from flax and woven mainly by women at home. Weaving took place in slightly larger buildings called *svetelki*, operated by agents on commission (the weavers paid a fee to the agent). The next step – bleaching near the water – was also performed by women on rafts or in small rented spaces along the Uvod's ravines). Factories (*fabrikas*) were used for printing and dyeing by the men who had specialized knowledge in chemistry as well as physical skills. However, due to the difficult working conditions, most printers did not reach the age of 35. The culture of textile production was popularized in Ivanovo-Voznesensk in the eighteenth century when the first serfs returned from the Saint Petersburg factories. However, even at that time, production was based on muscle power more than modern machinery. See: Экземплярский П.М. [Ekzempliarskii P.M.]. *Город Иваново в прошлом и настоящем* [The City of Ivanovo in the Past and Present] (Ivanovo 1945) 85.

[67] H. Rosovsky, 'The Serf Entrepreneur in Russia', *Explorations in Entrepreneurial History* 6 (1954) 207-229, 217-219.

[68] Blackwell, *The Beginnings*, 207.

allowed the merchants to govern themselves, although of course without any parliamentary superstructure. As in Britain, including the Manchester to which Ivanovo was compared at the time, the *posad* became a focus of civic pride, with a creation of a library, municipal buildings, and other public spaces".[69]

Voznesenskii Posad developed faster than neighboring Ivanovo. By 1857, it had a population of 3,630, along with 205 stone houses and 402 factories, producing up to 450,000 items of muslin, chintz, and shawls ("pre-cotton era"). As far as Ivanovo is concerned, from the time of Ivan the Terrible, it had focused on artisanal production, including linen (as flax grew well in the relatively low fertile land around the village).[70] These differences remained until the abolition of serfdom in the Russian Empire in 1861, when Ivanovo also came under state jurisdiction. We claim that although the textile culture grew in the city endogenously, the significant qualitative leap in technology and social structure was thanks to mobile people ready to migrate. The industrialization of Ivanovo-Voznesensk was not launched by skilled and rich foreigners, as was the case in Lodz and Tampere. However, the promptness of local entrepreneurial people to migrate temporarily to get expertise was an important success factor.

Factories with complex machines started to appear in the city only in the middle of the nineteenth century, and only people who came back from working in Saint Petersburg 800 km away were able to operate them. As is the case of every industrializing city, there were, of course, other internal and external factors that affected the industrial growth of Ivanovo-Voznesensk.[71] Among the first, we can point out the dense river network, local handicraft traditions (*kastar*), and the poor agriculture in the surrounding area which forced people to earn

[69] Smith-Peter, *Imagining Russian*, 58-59.
[70] Smith-Peter, *Imagining Russian*, 50.
[71] K.E. Baldin and A.M. Semenenko, *Ivanovo: Istoriia I sovremennost* (Ivanovo 1996) 13.

their livehood in a different sector.[72] The literature also mentions the continental blockade of the Napoleonic period, the mass market for cheap clothes in the Russian empire, the burning of Moscow in 1812, which completely destroyed its industry, and the high protective tariffs introduced by Tsar Nicolas I in the second quarter of the nineteenth century.[73] However, the migratory tendencies of the local entrepreneurial population (both to Saint Petersburg and back, as well from Ivanovo to Voznesenskii Posad) played a very important role. Interestingly, it happened with the permission of the local aristocracy, i.e., the benevolent policy of the Sheremetev family towards their wealth-producing serfs. Moreover, while the factory owners paid their duty (*obrok*) to the Sheremetevs, the factory workers often made similar payments to their employers. All these transactions were accepted by Sheremetev as long as he received a payment for such a deal. This relationship is called *capitalistic feudalism*.[74]

The number of Ivanovo-Voznesensk inhabitants doubled between 1795 and 1857, exceeding 10,000 within the next ten years. Such rapid urbanization led to Ivanovo being given city rights in 1871. At the time, there were almost 21,000 inhabitants. At the end of the nineteenth century, according to the census of 1897, there were close to 55,000, and in the first year of the First World War, the population exceeded 140,000 people (Ekzempliarskii, 1945, p. 16).

As far as dating the 'take-off' is concerned, it happened when cotton started to replace linen in the late eighteenth century, after the implementation of new production technologies. The first steam engine was introduced to a factory by Petr and Nikon Garelin in 1832. The first mechanized cotton-spinning factory was built by Garelin between 1847 and 1850[75]. Factory

[72] S. M. Vorderer, 'Migration Patterns, Occupational Strategies, and Work Experiences in a Large Textile Town: The Case of Ivanovo-Voznesensk', *The Carl Beck Papers in Russian & East European Studies* 1403 (2009) 1-39, 1.
[73] Blackwell, *The Beginnings*, 116.
[74] Smith-Peter, *Imagining Russian*, 56.
[75] We should note, however, that despite the technological advancement of the industry, its level was far behind Western European standards. Susan Vorderer claims the textile industry in Ivanovo-Voznesensk was probably more

owners and agents bought cotton most often from England or the large markets in Russia.[76] William Blackwell reports that in the second half of the nineteenth century, about 1.8 tons of Manchester thread was purchased yearly from England. A much smaller amount of Russian thread was purchased at the State Aleksandrovsk Cotton Spinning Factory in Saint Petersburg. It was transported through the canal systems of the Volga River and carted in overland for the last 30 miles (the railroad for this final and costly link was built only at the end of the nineteenth century). Printed cotton was sent mainly to Moscow, Nizhny Novgorod, and the major fairs in Ukraine.[77]

In the following years, the development of Ivanovo-Voznesensk was also powered by internal migration. Foreign citizens in the city were almost absent. Interestingly, for the whole of the nineteenth century, it was mainly the male migrants who provided the city's workforce. It changed only at the turn of the nineteenth and twentieth centuries, half a century after the city's 'take-off.' It took a long time for the transformation of industrial production through the introduction of more advanced machines and management methods to attract more women to the city.[78]

Ivanovo was a city attractive mainly to the neighboring rural immigrants. Additionally, the migration flows to Ivanovo-Voznesensk were dominated by the young working population, while the older population, as well as children, dominated in urban and suburban areas. This migration took a circular form. As Vorderer discovered, the migration patterns depicted in memoirs show possibly that the "population moved from village to city, then back to the village, and once again to the city".[79] In line with previous studies, we suggest that the main reason for this circulation was the extremely low wages paid to the workforce. Even at the time of the

primitive in comparison with other parts of Europe and was more labor than technology intensive (Vorderer, 1999, p. 6).

[76] Smith-Peter, *Imagining Russian*, 52-53.

[77] Blackwell, *The Beginnings*, 117.

[78] Vorderer, *Migration Patterns*, 6.

[79] Vorderer, *Migration Patterns*, 6.

textile industry's prosperity, their level was too small to ensure savings in times of recession. It led to the peasants-workers phenomenon, as people decided to maintain ties with their home villages. They were treated as an anchor and security in times of crises that often happened in the textile sector, as well as insurance for old age.[80] In consequence, the male working population did not break ties with their villages permanently, seeing it as a security strategy.

Thus, the industrial character of the city did not attract citizens other than poor peasants seeking higher salaries. It also had consequences on the low-quality of the urban structure and public spaces. "In the simplest terms, this was an ugly city".[81] "Instead of enormous buildings – small, wooden, one-storey huts, unpaved side streets, very few people during daylight, occasional two-story buildings, and high white church bell towers".[82] On the eve of the First World War, when there were 150,000 inhabitants, there were no water pipes, no sewage systems, and the Uvod river was extremely poisoned with acids and arsenic. It was a kind of a 'dual city', with small areas of decent structures, some municipal services, and amenities alongside clearly distinguishable areas of desperate conditions.[83]

In 1897, 73 per cent of migrants were from the Vladimir Province, and 20 per cent were from the nearby Kostroma Province. Outmigration was also visible, but mainly back to the neighboring areas.[84] In consequence, in comparison with other Russian cities, in Ivanovo-Voznesensk we can observe an underrepresentation of both the nobility and urban bourgeoisie (*meschanstvo*), and at the same time a large share of the peasantry. The city also had a ten times smaller proportion of foreigners in comparison with the average for European Russian cities (Table 5).

[80] D.R. Brower, 'Urban Revolution in the Late Russian Empire', in: M.F. Hamm (ed.), *The City in Late Imperial Russia* (Bloomington1986) 340-341.
[81] Vorderer, *Migration Patterns*, 1.
[82] V. Dadonov, *Russkii Manchester* [Russian Manchester]. *Ruskie Bogatstvo*, (1900, December 12).
[83] Brower, *Urban Revolution*, 340-341.
[84] Vorderer, *Migration Patterns*, 15-16.

Table 5. Population structure of Ivanovo-Voznesensk in comparison with other Russian cities in 1897

Social groups	Cities of European Russia	Vladimir cities (except Ivanovo-Voznesensk)	Ivanovo-Voznesensk
Total	16,828,900	136,410	54,208
In per cent:			
Nobility	6.2	5.4	1.1
Clergy	1.0	2.9	0.6
Honored Citizenry	1.1	2.8	1.6
Merchantry	1.3	2.1	1.0
Meschanstvo	44.3	34.6	26.8
Peasantry	38.8	50.9	68.2
Other	5.8	1.1	0.6
Foreigners	1.5	0.1	0.1

Source: Vorderer, *Migration Patterns*, 28.

The crucial element which affected migration to Ivanovo-Voznesensk was undoubtedly wages.[85] However, for the province Ivanovo belonged to administratively in the second half of nineteenth century, 95.6 per cent of women and 94.2 per cent of men earned considerably less than the recognized minimums, according to Russian Empire statistics[86]. People migrated to Ivanovo due to the economic decline of agriculture in the region and the increase in the rural population, and they were attracted at the same time by the economic incentives of the urbanizing city and new prospects offered by urban life. However, with the exception of the minor class of factory owners, it was not exchanging 'worse for better' but rather 'bad for less bad'.[87]

Summary – a comparison

Table 6 summarizes the main differences and similarities between the characteristic features of immigration in the described locations. Undoubtedly, in all three cities, the geography and environmental factors were convenient for cotton processing. The climate, but especially access to water, was advantageous as well.

The geography of these cities was crucial, but it was the institutional factors that pushed forward their growth, affecting technological progress as well. Previous research also identified the important role of the entrepreneurs and politicians who engaged in the economic

[85] Vorderer, *Migration Patterns*, 21.
[86] After: Otsenochno-ekonomicheskoe Otdelenie Vladimirksoi Gubernskoi Zemskoi Upravy. Materialy dlia Otsenki Zemel' Vladimirskoi Gubernii, 1908, p. 390.
[87] Vorderer, *Migration Patterns*, 22-23.

development of the cities (Kowalski & Matera & Sokołowicz, 2018).[88] In our analysis we revealed additionally the migratory-related aspects and followed all the waves of immigrants (with different strengths in different cities) who descended on the Eastern European 'Manchesters'. Their activity was the result of advantageous institutional circumstances connected with changes in the borders, the appearance of a new government, and new local management. These institutional factors were strictly related to changes in customs policy or extraordinary international situations (on the one hand, the American Civil War, which halted the imports of cotton from the US, and on the other, new markets in deep Russia and the Far East appeared).

Table 6: Similarities and differences in the economic development and immigration features of three Eastern European 'Manchesters' in the nineteenth century.

	Lodz	Tampere	Ivanovo
Population (in thousand): End of the eighteenth century	<0.4	<0.4	4
Population in 1870	48	7	20
Population in 1910	450	45	140
1st 'take off'	1820s	1820s	1870s
2nd 'take off'	1870s	1870s	1900s
Internal immigration	High	Medium	High
External immigration	High	Low	None
Origin of captains of industry (skilled workforce)	Germans, Jewish	British, Germans	Russian
Other origin of immigrants	Russian, Czechs	Swedes, Russian	None
Non-human dependent factors favorable for immigration	Good geographical location (in the Kingdom of Poland and in Europe)	Negligible	Border of state and church jurisdiction (for internal migration)
Market economy-related factors favorable for immigration	Demand for wool and cotton, advanced production technology, better economic situation than in rural areas	Demand for cotton, advanced production technology	Demand for cotton, better economic situation than in rural areas
Governmental offers for immigration	Favorable tariffs, abolition of serfdom, ban on discrimination of minorities	Legal and financial support from Tsar	Abolition of serfdom
Local authorities' offers for immigration	Agreements with arriving entrepreneurs	Agreements with arriving entrepreneurs	Negligible

Source: Authors' own elaboration.

[88] Kowalski et al., *Cotton Matters*. 16-23.

In Lodz we observed the highest impact of immigration on the industrial growth and the 'take-offs'. In this case, two kinds of immigration mattered: external high skilled Germans and the masses from rural Poland as well as Jews. There was also a strong correlation between institutional offers and immigrant flows, i.e., the cases of Jewish immigration (during Prussian rule until the beginning of the nineteenth century, and as a result of the Tsar's decree in the 1860s). Additionally, one should underline the very high impact of the policy of the Kingdom of Poland's governments and the authorities of Lodz in the 1820s. The waves of immigration caused the birth of a new model of entrepreneurs in Lodz, the creation of new factories, and the economics of multiculturalism. We may argue that the immigrants' political choices were strictly correlated with institutional factors and supported by environmental aspects and cultural elements. It was visible that, during the time of inclusive legislation, the Germans were the most active economic agents, but after the removal of the extractive institutions in the 1860s by the Russian government, the impact of the Jewish minorities was as big as (and sometimes bigger than) the Germans and other ethnic groups.

In Tampere, in quantitative terms, immigration was mainly national in nature with a negligible share of foreigners (which indicates some similarities between Tampere and Ivanovo). However, those few foreigners had a huge impact on the history of the city. The personal factor (Finlayson, Nottbeck, and Rauch) made a big mark on the development of Tampere as they were equipped with the capital and knowledge to boost the textile industry. As in Lodz, the inflow of inhabitants was not spontaneous but rather the effect of the deliberate protectionist policy of Russia aimed at creating a new industrial center. The incentives used to attract craftsmen from Germany (Lodz) and England (Tampere), for instance, tax discounts and exemption from military service, were quite similar, which shows that the Tsarist policy of industrializing the empire had signs of universality. On the other hand, the case of Tampere is different from Lodz. Those who came to Tampere from abroad were Christians of denominations that did not diverge

much from the Lutheran majority while the development of Lodz was heavily influenced by the Jews, the mass inflow of Lutheran Germans and, to a lesser degree, Orthodox Russians[89].

In Ivanovo, unlike the case of the other Eastern European 'Manchesters', immigrants from outside the Russian empire did not play a key role in the city's 'take-off'. Instead, it was the power of the domestic migrants from the surrounding rural areas who worked in the factories as well as local entrepreneurs migrating within the Russian empire for business purposes and seeking technological and organizational know-how. The migration of local people to Saint Petersburg for industrial compteneces was a way to simultaneously improve their social or even political position. We assume in the case of the entrepreneurial citizens of Ivanovo-Voznesensk (the 'capitalistic peasants') that their geographical mobility, in fact, led to their social promotion. Also, in the case of the workers, their employment in the industrial sector gave them a chance to improve their economic position. However, in contrast to the other analyzed cities, it still did not guarantee a minimum level of social safety (geographical mobility did not convert into economic stabilization and sometimes migrating 'back to the countryside' was a survival strategy during the crisis in the textile sector). Finally, the industrialization of Ivanovo was more labor intensive than capital or technology intensive, which was not typical of the other 'Manchesters'. Here, muscle power was the most important factor – young men dominated over women in the industry for the whole of the nineteenth century.

We also identified some similarities among the analyzed locations. Firstly, in all cases, the industry was the main factor that led to the 'take-off' in terms of the number of inhabitants and also the creation of the bourgeoisie as a socio-economic class. Secondly, in all the analyzed cases, technology and know-how (although not directly in Ivanovo) were imported from United Kingdom as the first mover in the development of the textile industry. Furthermore, in all Eastern European 'Manchesters', institutional factors significantly reinforced the geographical

[89] Only 76 people out of Tampere's total population of 20,483 were Orthodox in 1890 (*Vakiluvun-tilasto 1890*, 126).

factors of the development of the industry. Last but not least, we should underline that the rapid industrialization of Lodz, Tampere, and Ivanovo led actually to the creation of new cities, dominated significantly by one type of industry. It had consequences for their structure – there was no strong bourgeoisie in these places, and their social structure was polarized – with a very small number of well-off situated capitalists and masses of the working class. This undoubtedly led to social tensions in all three cities that greatly affected their twentieth-century development.

Finally, we should repeat and strengthen the opinion that institutions mattered greatly in the development of all the Eastern European 'Manchesters' and they mattered in the immigrants' decisions. We assert that it is worth widening the research to different cities compared with the original Cottonopolis from various parts of nineteenth-century Europe (like Chemnitz and Elberfeld in Germany, or Lyon, Lille, and Roubaix in France) or around the world. Geographical, institutional and technological tools could be very useful to check the reasons for growth and to analyze the behaviors and role of immigrants.

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