### UDC 911.3 MIGRATION OF RUSSIAN LEGAL COMPANIES IN 2016–2023

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The migration of Russian commercial legal companies in 2016–23 is described and analyzed. Distributions by migration count and distance are estimated and visualized, the relationship between company size and migration decision is statistically tested, net migration rate by region is mapped, and top migration paths are listed. It is found that migrations are rare, mostly short-distance (10–50 km). Bigger companies tend to relocate more often. Moscow has probably lost small and inefficient businesses but gained larger and more profitable ones.

*Keywords:* company migration; small and medium-sized businesses; legal companies; legal service; service geography; data analysis; open data; Federal Tax Service.

# МИГРАЦИЯ РОССИЙСКИХ ЮРИДИЧЕСКИХ КОМПАНИЙ В 2016–2023 гг.

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Описана и проанализирована миграция российских коммерческих юридических компаний в 2016-23 годах. Оценены и визуализированы распределения компаний по количеству и расстоянию миграций, статистически проверена связь между размером компании и решением о миграции, составлена карта чистого коэффициента миграции компаний по регионам, перечислены основные пути их миграции. Установлено, что миграции компаний происходят редко и, в основном, на короткие расстояния (10-50 км). Крупные компании переезжают чаще. Москва, вероятно, потеряла малые и неэффективные предприятия, но приобрела более крупные и прибыльные.

*Ключевые слова:* миграция компаний; малый и средний бизнес; юридические компании; юридические услуги; география услуг; анализ данных; открытые данные; Федеральная налоговая служба.

Migration of companies (business relocation) is an important phenomenon of economy and geography. Its first studies date back to the middle of the 20th century, starting from G. McLaughlin and S. Robock's book *Why Industry Moves South* that has described the migration of enterprises from the North of the US and linked it to cheaper labor and weaker activity of labor unions [1]. Various aspects of company

migration have been studied, including factors (reasons) [2], directions (places) [3], and taxation effects [4].

In Russia, there are few papers about the migration of companies. Existing works focus on relocation as an instrument of tax optimization [5, 6] and do not pay much attention to the geographical overview and spatial aspects of the phenomenon. So, a spatial analysis of business relocation in Russia is needed. This study describes and visualizes the migration of Russian commercial legal companies in 2016–23. The choice of a particular area of economy, that is, legal service, is subjective.

*Data.* A geo-referenced dataset of Russian small and medium-sized businesses (SMBs) with a main activity code equal to 69.10 (activity in the area of law) was generated from the open dumps of SMB registry13 with an open source Python CLI application *ru-smb-companies*14 developed by the author of this paper. The dataset covers the period from August 2016 to November 2023. According to [7], by August 2016 in Russia, there were 47000 commercial legal companies, and the dataset contains about 34000 companies with the same date. Some legal companies are missing, e. g. larger ones that exceed the limit on the revenue or number of employees for SMBs, but 3/4 are present, so the dataset looks reliable and relevant.

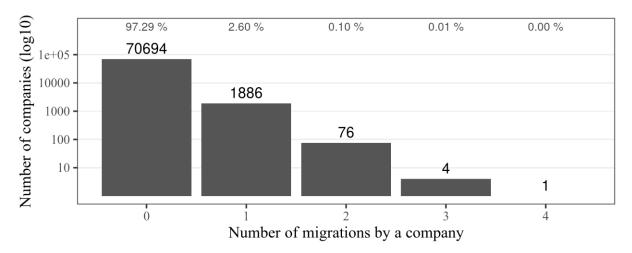
*Methods.* Company migration here is seen as a change in the address of registration, like in [6]. This definition is narrow and does not account for other ways of relocation (e. g. mergers or reorganization). Also, it is formal, because the change of nominal address does not necessarily reflect the change of actual place of doing business. However, it looks like the best choice for the data available. Descriptive statistics, statistical tests, data visualization, and mapping are used. Technically, the analysis was performed with R programming language (including additional packages). The source code for the analysis is stored in a public repository<sup>15</sup>.

A distribution of companies by the number of migrations is shown in Fig. 1. Almost all the companies (97%) in 2016–23 have not migrated. About 2.5% of companies have changed the location exactly once, and more frequent migrations are extremely rare. The distribution is almost log10-linear. A relationship between the migration decision and the size of the company is depicted in Fig. 2. Migration among small firms is more frequent in comparison to microbusinesses: according to Fisher's exact test, p < 0.001, and the odds ratio is approximately 1 to 4. A distribution of migration distance is shown in Fig. 3. The majority of businesses move to small distance (10–50 km), but there is a significant group of long-migrating firms (the distance is about 1000 km).

<sup>13</sup> https://www.nalog.gov.ru/opendata/7707329152-rsmp/

<sup>14</sup> https://github.com/PavelSyomin/russian-smb-companies

<sup>15</sup> https://github.com/PavelSyomin/ru-smb-companies-papers/tree/main/bel-geo-congress-2024



*Fig. 1.* The distribution of companies by the number of migrations. Y axis is log10-scaled. The counts are shown above the bars, and percentages are below the top border

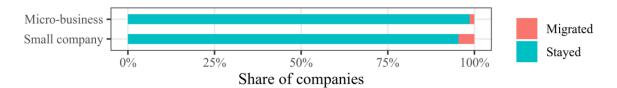


Fig. 2. Migration decision depending on company's size (category)

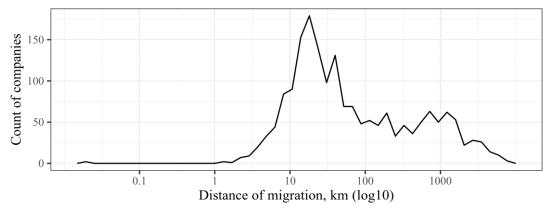


Fig. 3. Distribution of migration distance

*Net migration rate by region* is shown on map (see *Fig. 4*). Most of the regions have a net migration rate close to zero. However, there are some regions with substantial growth (Moscow, St. Petersburg, Krasnodar, Rostov, Novosibirsk oblast, Perm krai) or decline (Moscow as a city) in the number of registered legal companies. The absolute counts are small (<100) compared to the quantity of registered companies.

*The most popular migration paths* (by the count of migrated companies) with summed revenue and employee count are listed in the *table*. The first two paths

represent the relocation from the two largest cities of Russia to the surrounding regions. The net change in the number of businesses is relatively small. An increase in the number of registered businesses is not necessarily associated with the increase in income or labor force, and vice versa. A positive flow of companies with a negative flow of revenue or labor probably means that arriving businesses are larger and more profitable than those leaving.

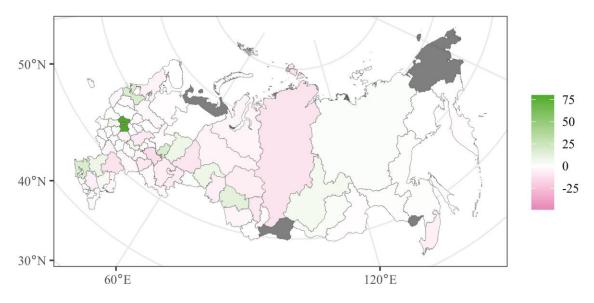


Fig. 4. Net migration rate of legal companies by regions

Top 10 pat	he of inter ro	gional migration	n of Dussian logal	companies in 2016–2023
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Path	Count	Revenue, M rub	Employees
$Moscow \rightarrow Moscow Oblast$	73	-167	-13
Saint Petersburg $\rightarrow$ Leningrad oblast	17	39	22
Moscow → Udmurtia	9	439	68
Chelyabinsk Oblast $\rightarrow$ Moscow	7	91	41
Kemerovo Oblast → Novosibirsk Oblast	7	3	4
Krasnoyarsk Krai → Krasnodar Krai	7	2	2
$Tatarstan \rightarrow Moscow$	7	-1	0
Volgograd Oblast $\rightarrow$ Moscow	5	-10	7
Stavropol Krai $\rightarrow$ Moscow	4	827	3
Sverdlovsk Oblast $\rightarrow$ Moscow	4	-156	-22

*Conclusion*. Migration of legal companies in Russia is a rare phenomenon: only about 2.5 % of all businesses in this activity area have changed their nominal location in 2016–23. Small companies, in comparison to micro-businesses, are more likely to relocate: the probability is 4 times higher. Short-distance (10– 50 km) migrations are more common than long-distance (~1000 km) ones. Moscow and St. Petersburg regions are at the top by the net migration rate estimated by the count of relocated businesses, while Moscow has lost the highest number of companies. However, it looks like that while losing small and inefficient companies, Moscow attracts more profitable businesses.

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