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Russian Real Estate Purchases in Finland, 1990-2016

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RUSSIAN REAL ESTATE PURCHASES IN FINLAND, 1990 - 2016

BY

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This dissertation is approved as a creditable and independent investigation by a

candidate for the Master of Science in Geography degree and is acceptable for meeting

the dissertation requirements for this degree. Acceptance of this does not imply that the

conclusions reached by the candidate are necessarily the conclusions of the major

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ABSTRACT

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Foreign real estate ownership has been a frequent topic in the Finnish public discourse in the 2010s. Real estate purchases by Russian citizens have received lots of negative attention. In this thesis, the spatial distribution of real estate bought by Russians was studied. Purchases between January 1990 and August 2016 were mapped and analyzed using Getis-Ord Gi* hot spot analysis. The home addresses of the buyers were also geocoded to find out where the majority of buyers live, and geodetic distances to their properties were calculated. Buildings on these properties were analyzed to examine motives for the purchases.

Chapter 1: Introduction

The phenomena of Russian real estate purchases in Finland emerged in the 2000s and has since received a lot of attention in the media and public discussion. However, there has been very little research on the topic. The issue was frequently visited by the media, but there was a lack of research on these purchases. The digitalization of the Finnish real estate system enabled the collection of data for this thesis.

Finland and Russia are neighboring countries that share a 1,300 km border. Finland was part of the Russian Empire from 1809 until 1917 when it declared independence. During the Second World War, Finland and Russia fought in 1939-1940 and subsequently in 1941-1944. The peace treaties for these wars were hard-pressed on Finland. Amongst the conditions was the requirement to cede approximately one-tenth of Finland's land area to Russia. Finland had to displace a large portion of its population from these ceded areas. These events were followed by the Cold War which had Finland balancing between the Soviet Union and the Western world. Sometimes called Finlandization, Finland had to pay regard to the will of the Soviet Union and was unable to commit to extended cooperation with the Western states. When the Soviet Union dissolved in 1991, Finland could finally join the European Union which it did in 1995. Along with Sweden, Finland chose to keep its 'non-aligned' defense policy and has not applied for membership in the North Atlantic Treaty Organization (NATO).

The newly established Russian Federation was seen as a rising democracy during its early years, and there were many attempts to increase inter-governmental collaboration between Finland and Russia. The geopolitical situation in Europe has

changed after Vladimir Putin's second term as the president of Russia. The Russo-Georgian war in 2008 and the Ukrainian crisis in 2014, combined with Russia's accelerated military spending have raised concern in many European countries, including Finland. Russia is an important trade partner to the western world, and it is in the best interest of the trading partners to maintain healthy relations. However, there are various difficulties in collaborating with Russia because of the opposition of the EU and the U.S. towards Russia's actions in the 2014 Ukrainian crisis, the economic sanctions introduced in 2014, and the war in Syria in which Russia is heavily involved.

Foreign real estate purchases are a controversial topic. In many countries transactions to foreign buyers are restricted or prohibited altogether. These transactions were also restricted in Finland before 2000, but the restrictions were lifted that year following Finland's membership in the European Union (Laki ulkomailla asuvien ja ulkomaisten yhteisöjen kiinteistönhankintojen valvonnasta annetun lain kumoamisesta 1299/1999). In the current political situation, foreign real estate purchases have raised concern in Finland. Negative portrayals of Russian real estate purchases have prevailed in the Finnish media in recent years. Certain purchases in Finland have gained much attention, because of their location near military installations, waterways, and critical infrastructure, such as power transmission lines (Malin 2015, MTV 2010). Another issue is Russian-owned neglected properties in centrally located places, which often are empty buildings that have not been properly maintained. The media debate has raised demands in Finland to restrict property purchases from non-EU citizens.

Data were acquired from the Finnish real estate information system maintained by the National Land Survey of Finland. These data have not been previously used for

academic research. The data were extracted by using a custom application script that returned real estate transactions to Russian citizens between January 1990 and August 2016, and current real estate owned by Russians. Parcel data and building information were also extracted for these real estate.

This research is important because it will clarify the spatial and temporal extent, distribution and patterns of the phenomena. The results can be used in the public discussion and evaluation of Russian real estate transactions in Finland.

Research Objective and Questions

This thesis investigates real estate purchases by Russian individuals in Finland, beginning in January 1990 until August 2016, to observe the spatial and temporal patterns of these transactions in order to better understand the extent, distribution and motivations of these purchases.

- What are the spatial patterns of Russian real estate ownership in Finland at the national scale, and what can be concluded about the changes of these patterns over time?
  - What effect did Russian economic growth and the following Great Recession have on these purchases?
  - Has the location where these properties were bought shifted over time?

- Where do Russian real estate buyers reside in Russia, and is there a systematic spatial relationship between the location of the property they bought in Finland and the location of their home in Russia?

- What are the motivations behind why Russians made these purchases, based on the attributes of the purchased properties?

The hypothesis is that most properties are intended to be used as second homes or investment properties, and that Russians buy real estate in accessible locations from their primary residence, (i.e., generally close to the Finland-Russia border), and that the changes in the patterns are reflections of the Russian economy.

Chapter 2: Literature Review

Russian Second-Home Ownership in Finland

In 2013, Russian citizens directly owned some 4,000 real properties in Finland (Tutkimus- ja Analysointikeskus TAK Oy 2013, 24). In addition to this number, Russians also own real estate through companies established in Finland. Unlimited real estate purchases by foreign citizens were allowed in Finland beginning in 2000, so the phenomenon of large-scale real estate ownership by Russians is fairly recent (Lipkina 2013, 300; Tutkimus- ja Analysointikeskus TAK Oy 2013, 23; Pitkänen 2011, 52). According to Lipkina (2013, 300), most of the real estate directly owned by Russian citizens was bought as second homes.

The motives for buying a second home in Finland are partly the same for both the native Finns and the Russians. However, there are some distinguishable factors that influence the Russians to buy real estate in Finland instead of their home country. Lipkina (2013, 306) wrote that for Russians who bought second homes in Finland, the country of location was a determining factor in the purchase. Finland was preferred over Russia because of less congestion, desirable dwellings, a culture that regards privacy, and an attractive natural landscape. Ownership of real estate in Finland provides a better level of security, both in the stability of the asset itself and in lower criminal activity. In Russia, it is not possible for many to buy a *dacha* (Russian second home) with a private lake shore because of high prices and regulation. Russians also favor the behavior of the Finnish people, clean environment, and stability that they experience in the country (Lipkina 2013, 309-312).

Distance Theories

Second-home locations can be classified according to the expected length of stay at the location as "day-trip", "weekend", and "vacation" zones (Kauppila 2010, 166). Distance or time of travel to the second home, length of stay and the frequency of visits are intertwined. In the day trip zone, travel time to the location is short and allows a short length of stay at a time (one day), and frequency of visits can be high. Conversely, in the vacation zone, distance and length of stay are longer and the location is visited infrequently (Kauppila 2010, 166).

According to Lipkina (2013, 311), Russians are only interested in buying second homes that are located less than 150 km away from the Finnish border, and the total distance to the second home from the place of permanent residence is less important. The distances from the major Russian cities of Saint Petersburg, Petrozavodsk, and Moscow to the Finnish border are 170km, 260 km, and 900 km, respectively. A one-way trip to the border from these cities can be made by a car in a day or less. Using Kauppila's (2010, 166) "driving kilometers" to locate the different zones, Petrozavodsk and Saint Petersburg would fall into the weekend zone and Moscow into the vacation zone. Personal car travel is the primary method of transportation for Russians who own real estate away from a major Finnish city with an international airport – taking a ferry or plane to Helsinki and then driving to a remote location would be more expensive, time consuming and not as comfortable in most cases. The ability to travel easily by car to the location favors Finland over many other countries (Lipkina 2013, 311). In addition, foreigners do not have special interests in a particular place because of the lack of "childhood or family ties in Finland" (Lipkina 2010, 309). Therefore, a property located

significantly farther than 150 km away from the border and purchased by a Russian citizen is not intended to be used as a second home. It would require a special reason to buy a property farther away than the threshold distance.

Attitudes Towards the Russian Buyers

Pitkänen (2011, 44) studied how Finnish society responded to foreign second home ownership from 1990 to 2008, and noticed predominantly negative attitudes towards Russian real estate buyers since 2005. The Finns were concerned that the Russians will claim their homeland by buying the best lakeshore properties (Pitkänen 2011, 52). Negative narratives have been prevailing in the Finnish media discourse of Russian real estate ownership in recent years. A significant factor in the intensification of the media debate is the recently increased confrontation between "the West" and Russia. The effects of Russia's new, more aggressive rhetoric, increased military spending, and the 2008 Russo-Georgian war and the 2014 Ukrainian conflict can be clearly seen in the public discourse.

Distribution of Russian Recreational Properties

Hannonen et al. (2016) studied the distribution of Russian recreational property purchases between 2003 and 2012 in South Savo region. The data were obtained from the National Land Survey of Finland property purchase price register, and did not include the foreign buyer home addresses. The authors performed kernel density estimation for the property locations to identify spatial clusters and used the bivariate K function to analyze the spatial distribution. The limitation of the study was that it was only performed in one

region and the authors did not have data for comparable transactions by Finnish citizens. They found out that the majority of the purchased properties were on a lakeshore, which is in line with the negative association of the Finns about the Russians purchasing the finest properties. The authors also found out that the Russian purchases were concentrated in similar waterfront areas near each other on the eastern side of the study area. They suggested that better accessibility and the actions of realtors may explain some of this gravitation. At the time of the transaction, the majority of the purchased properties did not have any buildings on them. The authors also suggest that the Russians were mostly interested in buying real estate located close to essential services, for example grocery stores.

Russian Purchases in the Finnish Media and Public Discourse

MTV3 (2010) reported that Russian-controlled companies have bought tracts of land near military locations. The properties have remained largely undeveloped, but some large platforms and warehouses have been built. In 2015 similar issues were made public when Iltalehti reported that Russians had bought four former border guard stations that were put on auction by the state (Malin 2015). They also discovered that a Russian controlled company has systematically acquired coast and island properties in Turku archipelago that border a waterway leading to the harbors of Turku and Naantali. According to unnamed military sources, the land acquisitions are strategic and make it possible for someone to observe and block the important waterway if needed. The same company also bought two former military vessels previously used by the Finnish navy. The newspaper did not get any comments from the company for these accusations nor

had any answers to why it had not started the travel business it had planned (Malin 2015). The president of Finland, Sauli Niinistö, commented on the article that caught his attention and said that he will "ask around" (Waris 2015). The company raises suspicion, because it has been buying new land, despite its operating losses.

Ilta-Sanomat published an article in September 2014 about neglected Russian-acquired properties in eastern Finland. A member of the Finnish parliament interviewed in the article suspected that these transactions might be related to money laundering, because these properties were not used in housing or business. Another problem is that sometimes these houses are sitting unused and abandoned in a prominent location of a town. Many times, the owner of the property cannot be reached, and in these situations, it is impossible to collect unpaid taxes and utility bills (Honkamaa 2014).

Another issue that bothers the Finns is that while Russians are allowed to own land in Finland without restrictions, the citizens of Finland are not granted the same right in Russia (Tutkimus- ja Analysointikeskus TAK Oy 2013, 57). Many Finns would like to have the possibility to own property in the territories ceded to Russia from Finland after the WWII, but Russia has applied restrictions for foreign land ownership in these border areas. Several Finnish politicians commented in a survey that it is not fair that the rights to own property are not mutual (Tutkimus- ja Analysointikeskus TAK Oy 2013, 53-55).

Russians are willing to pay higher prices for the properties in Finland, thus raising the real estate prices in certain areas. This is beneficial for the sellers of the real estate who can get a higher price for their property, but it also makes it financially harder for the Finns to purchase property in their own country.

Russian Economic Development 1990-2016

In the early 1990s, most resources in the Russian Federation were controlled by the state and a handful of people allegiant to the government. The parliament and prominent businessmen were compliant to the president who in turn awarded them financial privileges, and the legal system was undeveloped. This ensured that the citizens could not trust that their assets were safe from state and juridical operations (Movchan 2017, 5).

The country was in financial crisis during the 1990s due to low oil prices, inefficient taxation, and capital flight. In the beginning of the 2000s the oil market gradually started to thrive which brought increased tax gains for the state and prosperity for the public. However, this newly obtained affluence led to abandoning the process of reforming the administration. The government retrieved ownership in the oil industry from the entrepreneurs by locking up disobeying oil magnate Khodorkovsky and acquiring his company Yukos in 2003. Other economic sectors were hurt in expense of the oil industry by these government actions. In 2008, 70 percent of the state proceeds came from international oil and gas trade. The government tried to discipline money flows, which resulted in the loss of potential investments. The country has displaced 4.5 million emigrants and 1 trillion U.S. dollars capital since 1991 (Movchan 2017, 7-9).

In 2014 oil prices started to drop and that affected the economy. The GDP measured in U.S. dollars dropped 40% between 2013 and late 2016. The ruble was devalued against the dollar which was helpful for Russia's economy in decreasing foreign imports and enabling more competitive prices for export items. However, the devaluation

of the ruble also made foreign purchases much more expensive for the holders of the

Russian currency (Movchan 2017, 11-13).

     According to Movchan (2017), the effects of the economic sanctions placed after

the Ukrainian situation in 2014 are relatively low. The Russian government had

accumulated reserves during the growth period, which it utilized to balance the

government budget deficit after the economic downturn of 2014. The future of the

Russian economy depends on hydrocarbon export proceeds in the near future and in the

longer term on the success of the economic reforms.

Capital Flight from Russia

     Russia has experienced abrupt changes and uncertainty in its economy and

political system after the dissolution of the Soviet Union. Because of the perceived

insecurity of keeping assets within the Russian economy, many are eager to move their

assets out of the country. Russian companies have a practice of hedging their fortune in

other countries to reduce their dependency of the effects of the vulnerable Russian

national economy and shifts in the political administration toward companies (Abalkin

1999, 427).

     Capital flight from Russia "does not represent normal decisions of profit

maximizing individuals", and therefore, is not considered "traditional investment abroad"

(Abalkin 1999, 424). In terms of Russian law, the various practices used to transfer the

funds can be either legal or illegal (Bulatov 2001, 180).

Chapter 3: Methods

Datasets

The data that were used in this research were acquired from the National Land Survey of Finland (NLS). The research utilizes several different datasets: real estate transactions to Russian citizens (Transactions Dataset), Russian owned real estate in the JAKO GIS database (Ownership Dataset), parcel data from NLS's JAKO GIS database (Parcel Data), RHR building data (Building Data) and the official statistics about foreign real estate transactions provided by NLS (NLS Statistics). All of the datasets, except the NLS Statistics, were directly extracted using custom application scripts executed within the NLS JAKO geographic information system. The application script performs a loop function in the selected database and, if conditions are met, writes the particular record from the database in the output file. Therefore, all records in the database that meet the conditions are included in the output data, which were extracted on August 4, 2016.

The data have information about real estate purchases by Russian individuals. It is a common practice for foreigners to buy real estate through a company registered in Finland, but it was not possible to include these purchases because the database has no information about the citizenship of the owners of each company. Also, apartment units, row houses and some detached houses are not included in the data, because ownership of a single housing units are distributed as shares in the housing company that are securities instead of real estate in the Finnish system.

Definitions for Datasets

The Finnish Real Estate Register consists of *cadastral units* that are differentiated by the *cadastral unit id*. Ownership and transaction information is recorded for each cadastral unit. A cadastral unit's location is derived from its parcels, and a single cadastral unit may contain more than one parcel. Each parcel has a point that is usually located near or inside the parcel boundary polygon. This point is used in the analysis to define the location of each parcel.

In addition to cadastral unit parcels, *unseparated parcels* are included in the data. These are parcels to be subdivided but not yet separated from the parent cadastral unit to form a new cadastral unit. In practice, unseparated parcels are usually created when part of an existing real property is purchased. The actual subdivision to form a new cadastral unit is completed several months after the transaction. That is a very common way to buy land for a new construction project. The unseparated parcels do not have a parcel id, but they have an *unseparated parcel id*.

Transactions Dataset. The NLS real estate transactions database contains records of completed real estate transactions. An internal database was used instead of an official register because there was access only to this system. The database is used internally in the bureau's JAKO geographic information system to facilitate public administration. Therefore, it is important to note that not all transactions that actually happened can be found in the database and there may be some errors and inadequate data. The data used for this research includes all records from the real estate transactions database that meet the following conditions: transaction year 1990 or later; not received as a gift, inheritance, or as the current owner; and, the receiving person is a Russian citizen. The resulting dataset contains transactions of cadastral units and unseparated parcels between January 1, 1990, and August 4, 2016.

Ownership Dataset. The Russian-owned real estate dataset was extracted from the NLS JAKO GIS database. There was no access to the official real estate ownership database. Therefore, like the real estate transactions database, the real estate ownership data are only an internal database used by the NLS. It is not the official database for storing real estate ownership records and does not have complete ownership information. This data source is useful to complement the transactions dataset.

Parcel Data. Records were extracted from NLS parcel database that match the property id for the transactions and Russian-owned real estate records. This is an official database that has complete data. Finnish cadastral units may have one or more parcels. Because the cadastral unit itself does not have a location, the location is derived from the cadastral unit's parcels. The location for the parcel is determined from the coordinates of a point, originally used to locate the parcel's id annotation in the NLS JAKO system, placed near or inside the parcel. The locations for unseparated parcels were also extracted from the system if available.

Building Data. The NLS JAKO geographic information system has a connection to the building information database called Building and Dwelling Register (RHR). This is an official database that is updated regularly. The database has detailed information of buildings and is managed in collaboration by the Population Register Centre, municipal building supervision authorities, and Local Register Offices (Population Register Centre, 2017). Building data were extracted for the parcel dataset to include necessary information about buildings on these parcels.

NLS Statistics. Official statistics of foreign real estate purchases were provided in Excel format by Taisto Toppinen, Register Chief at the National Land Survey of Finland. The statistics contain the number of foreign real estate transactions by citizenship for each year.

GIS Procedure

Importing Data to GIS

The application scripts generated outputs in the form of a text file. The text files were then opened in Excel and saved as spreadsheet files. There were three separate spreadsheet files for each of the two datasets, (i) transactions and (ii) ownership. One contains parcel data and has the coordinates for each parcel id, the second has the records for the cadastral units, and the third file contains the building records from the Building and Dwelling database for each parcel.

The feature classes for each dataset were created using parcel point locations that were imported into ArcGIS from the spreadsheets via the 'Add XY Data' function. Data were then joined to these parcel points using the parcel id as the key field. A Combined Feature Class was also created by combining the features from the Transactions and Ownership datasets
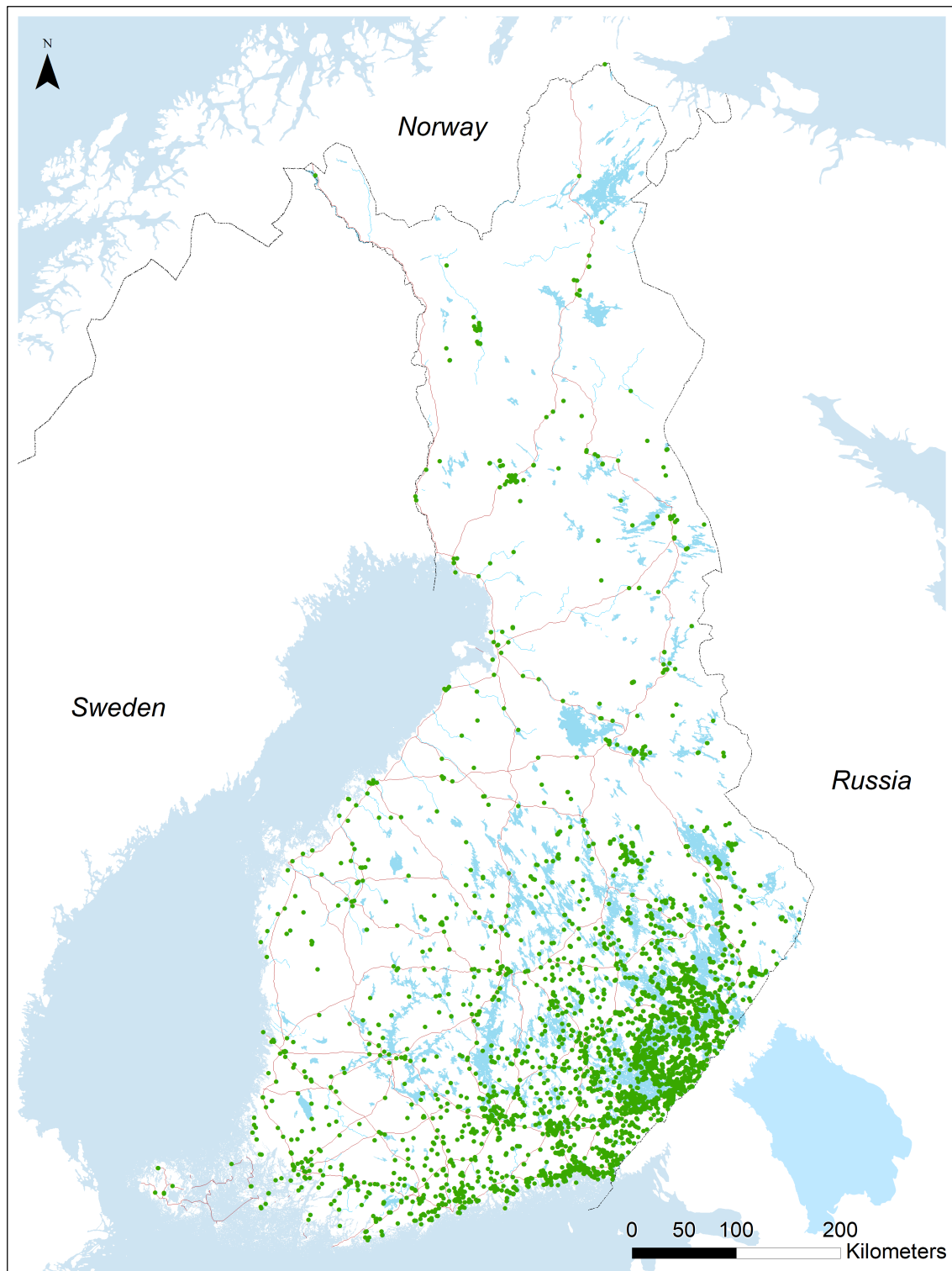
Figure 3.1. The Combined Feature Class containing all parcels in the data that have been owned by Russian citizens.

Preparing the feature classes

Each dataset required some preparation to be converted into a feature class. The data needs to be in a feature class format in order to perform spatial analysis in ArcGIS. The steps that were taken are described below.

Transactions Dataset. A table, containing 5,661 records, was joined to its parcel feature class using parcel id as the key field. The parcel feature class contains both parcels and unseparated parcels. A distinction has been made between the recipients that have an address in Finland and those that have reported only a foreign address, which is useful for the analysis to separate Russians living outside of Finland.

Ownership Dataset. A table containing 2,501 records was joined to its parcels feature class to spatial reference the ownership records. Because the Registry dataset has fewer records than the Transactions dataset, the best use for the Ownership Dataset would be combining it with the Transactions Dataset to complement it, because it is known that the Transactions Dataset does not contain every transaction.

The Ownership Dataset has a binary field for the information if there are any Finnish owners for each cadastral unit. A transaction may have multiple recipients. If a transaction had one or more Finnish recipients, these transactions were excluded from the analysis, even when there were also foreign recipients in the same transaction. These transactions were omitted, because in these cases the foreign recipient is usually married to a Finnish spouse. As with the Transactions Dataset, there is also a distinction between a Finnish and a foreign address.

Combined Feature Class. The Combined Feature Class (Figure 3.1) was created by selecting the points from the Ownership Dataset that did not exist in the Transactions Dataset (1,717 records) and then merging these unique records to the Transactions Feature Class (5,661 records). Those records that have a Finnish co-owner were eliminated from the Ownership Dataset, and in the end of the process the Combined Feature Class had 6,458 records.

Building Data. The records from the Building and Dwelling Register were joined with the Combined Feature Class using parcel id as the key field to see how many parcels had a building on them.

Data Evaluation

The Transactions Dataset contains 5,661 transactions from January 1, 1990 to August 8, 2016. The official statistics from NLS show 5,535 transactions between 1991-2016 (Table 3.1). The combined dataset has 6,458 records, and it adds real estate owned by Russians from the ownership dataset that are not included in the transactions dataset. It should be noted that in the final dataset the records are parcels, and since each cadastral unit may have more than one parcel, it is expected there will be slightly more records than actual transactions.

The number of transactions in the dataset are mostly accord with the official statistics, but it was expected that a significant number of the actual transactions were missing.

Year	Other Nordic countries	Other EU countries	Russia	Other countries
1991	28	5		3
1992	38	6		9
1993	35	27		9
1994	49	26	5	11
1995	59	23	7	6
1996	52	32	10	13
1997	50	37	12	15
1998	75	35	7	11
1999	73	50	26	19
2000	78	42	20	15
2001	129	103	49	34
2002	101	101	49	45
2003	129	132	67	31
2004	109	136	107	56
2005	144	158	183	60
2006	109	193	335	75
2007	156	255	698	84
2008	99	245	907	101
2009	135	198	500	72
2010	102	226	494	110
2011	78	256	573	134
2012	101	301	509	117
2013	65	194	387	89
2014	72	220	288	71
2015	72	302	147	103
2016	73	345	155	152
Total	**2211**	**3648**	**5535**	**1445**

Table 3.1. Number of real estate transactions to foreigners in Finland.

Hot Spot Analysis

Hot Spot Analysis is a method to find statistically significant clustering. This method is useful in the analysis to provide statistical significance associated with the presence of clusters in the spatial distribution across the study area. The Optimized Hot Spot Analysis tool in ArcGIS was used in this research project. The tool projected a

hexagon net over the study area, and aggregated the incident points inside each cell to get a value for the cell. The tool then used the Getis-Ord Gi* method to determine hot and cold areas (ArcGIS 10.5 Help).

A hot spot is a cell with statistically significant high value, and a cold spot is a cell with statistically significant low value in relation to the whole study area. The Getis-Ord Gi* considers the values of each cell and its adjoining cells to determine if a cell is a statistically significant hot spot (ArcGIS 10.5 Help).

Specifying a bounding polygon where incidents are possible enables the tool's algorithm to project a "fishnet" with an optimized cell size over the study area. For this a feature class of Finland borders was created, bounding the area where Finnish real estate can exist. A hexagon polygon net was then projected over the research area and incidents were aggregated inside each polygon. The parcel point feature classes were used as input features.

For 99% confidence, a z-score of more than 2.58 or less than -2.58 is required for a particular cell to be deemed as a hot or cold spot, respectively. For a 95% confidence, the z-scores need to be more than 1.96 or less than -1.96. All other cells are labeled as having clustering that is not significant.

Buyer Home Address Analysis

The transactions dataset also contained the foreign home addresses of the buyers. These addresses were geocoded using the ArcGIS 10.5 geocoding tool based on postal code and city. Each record also has the location of the purchased property. A geodetic line from each foreign home address to the corresponding location of the purchased

parcel was then drawn using the ArcGIS XY to Line tool. The line feature class was then mapped.

The length of the line features were analyzed in IBM-SPSS to determine the frequency of certain line length intervals, mean length, and standard deviation. In total, there were 3,787 lines in the feature class. This number is smaller than the 6,458 records in the Combined Feature Class, because many of the home address could not be geocoded.

Spatio-Temporal Centroid

The Spatio-Temporal Centroid analysis calculates a centroid for a group of points. For the analysis, the transactions dataset was first divided into groups in order to map the centroid for each year of the data. Mean center was used, which is "the average x- and y-coordinate of all the features" of the point feature class (ArcGis 10.5 Help).

The tool used in the analysis is the ST Centroid tool by Fabio Veronesi that he shared in his blog post "Spatio-Temporal Point Pattern Analysis in ArcGIS with R" (Veronesi 2016). The tool simplifies the analysis by having all the required steps integrated in it. The tool was used to classify the transactions dataset by year of transaction and to calculate the centroid for each year of transactions.

Chapter 4: Results

In this section, results from the analysis performed with the methods and datasets described in Chapter 3 are presented.

Russian Buyers with Finnish and Foreign Addresses

The results show that whether the owner has a home address in Finland or not is a major factor in where the real estate is located. If the Russian owner only has a foreign home address, the real estate is in most cases located near the eastern border (Figure 4.1). On the contrary, real estate owned by those with a home address in Finland is more evenly distributed throughout the country (Figure 4.2).

The real estate bought by a Russian citizen with a foreign home address is usually located near the eastern border of Finland because of better accessibility by car from northwestern Russia. One can reason that much of this demand for easily accessible real estate from Russia may come from recreational purposes. According to Lipkina (2013), the Russians are only interested in purchasing real estate less than 150 km away from the eastern border of Finland. While most of the real estate in this map is within that area, there is some deviation from this assumed distribution.
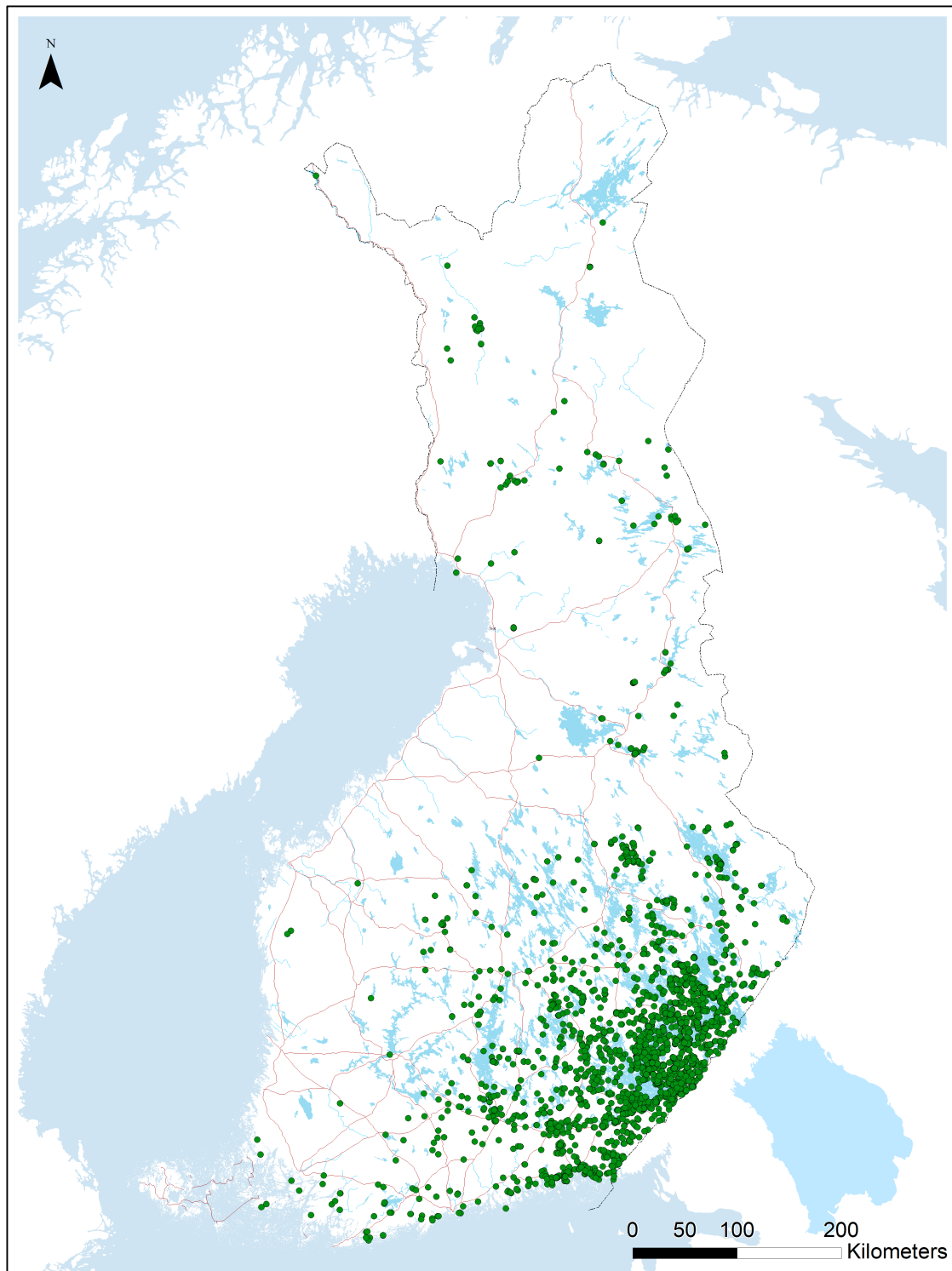
Figure 4.1. Properties that have been owned by Russian citizens. Owner has a foreign home address. Combined dataset, 4,728 parcels.
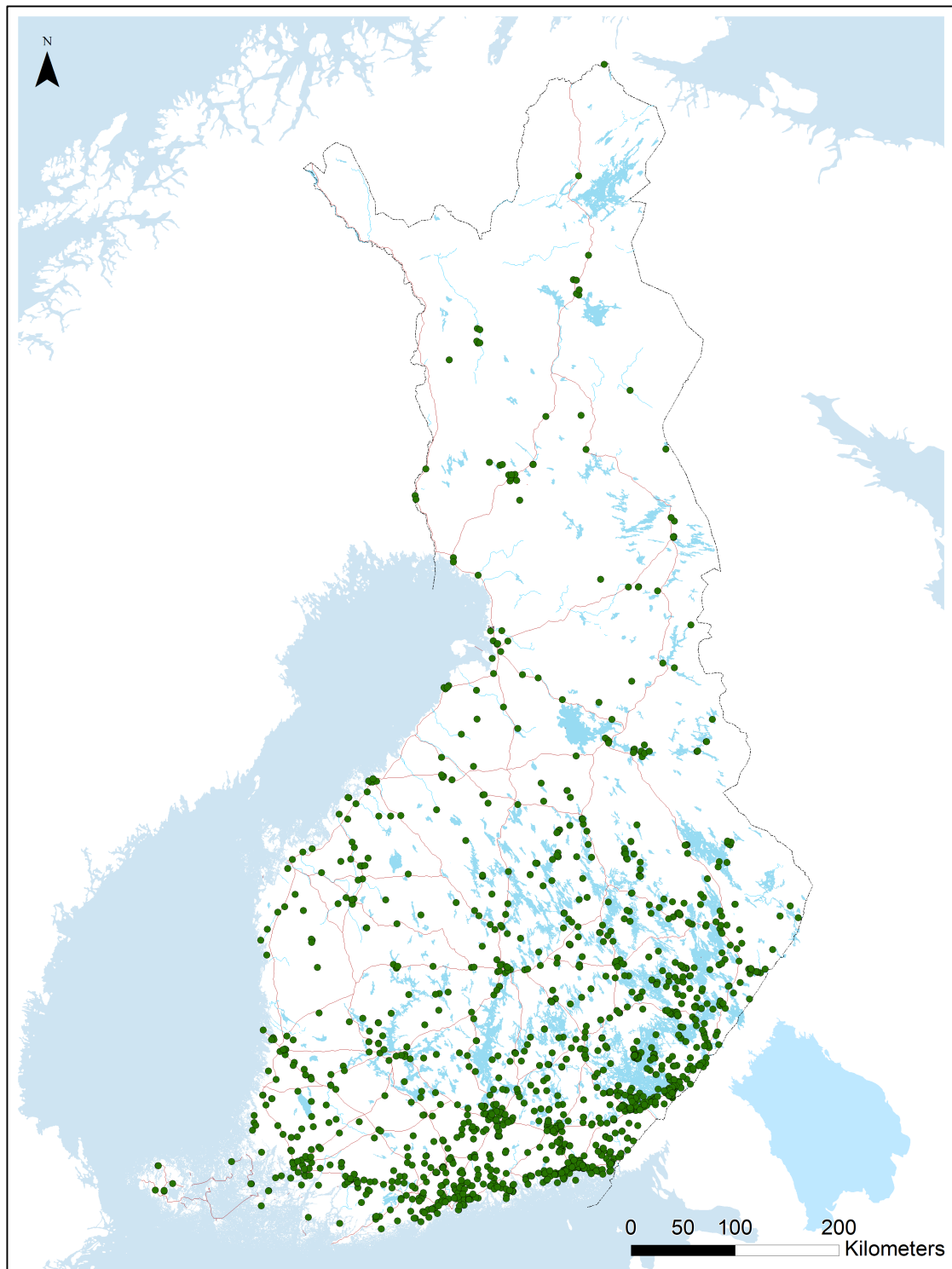
Figure 4.2. Properties that have been owned by Russian citizens. Owner has home address in Finland. Combined dataset, 1,730 parcels.

Lipkina (2013) presumed that the Russians travel to their second homes in Finland by a car. By looking at these maps, some of the locations are better accessible by air travel. This is especially true for ski resorts in northern Finland. One would need to travel first to Helsinki by car, train, plane or cruise ship and then take a short flight from Helsinki-Vantaa Airport to one of these northern destinations. Resorts Ylläs and Levi are located near Kittilä airfield. The resort Ounasvaara is located in the city of Rovaniemi which has an airport. The resort Ruka is accessible from Kuusamo airfield. The resort Vuokatti can be accessed from the nearby city Kajaani by plane and train. Properties located on Finland's southern coast may also be accessible from Saint Petersburg by recreational boats.

There are many Russian citizens living in Finland, and it can be assumed that many of them also hold real estate. It seems that for them, accessibility from northwestern Russia by car is not a priority, as it is for those living outside of Finland. In the data, the Russian citizens with a foreign address are a larger group (4,728) than those with a Finnish home address (1,730). It should be noted here that the Combined Feature Class is used, and real estate with a Finnish co-owner are excluded from the Ownership Dataset.
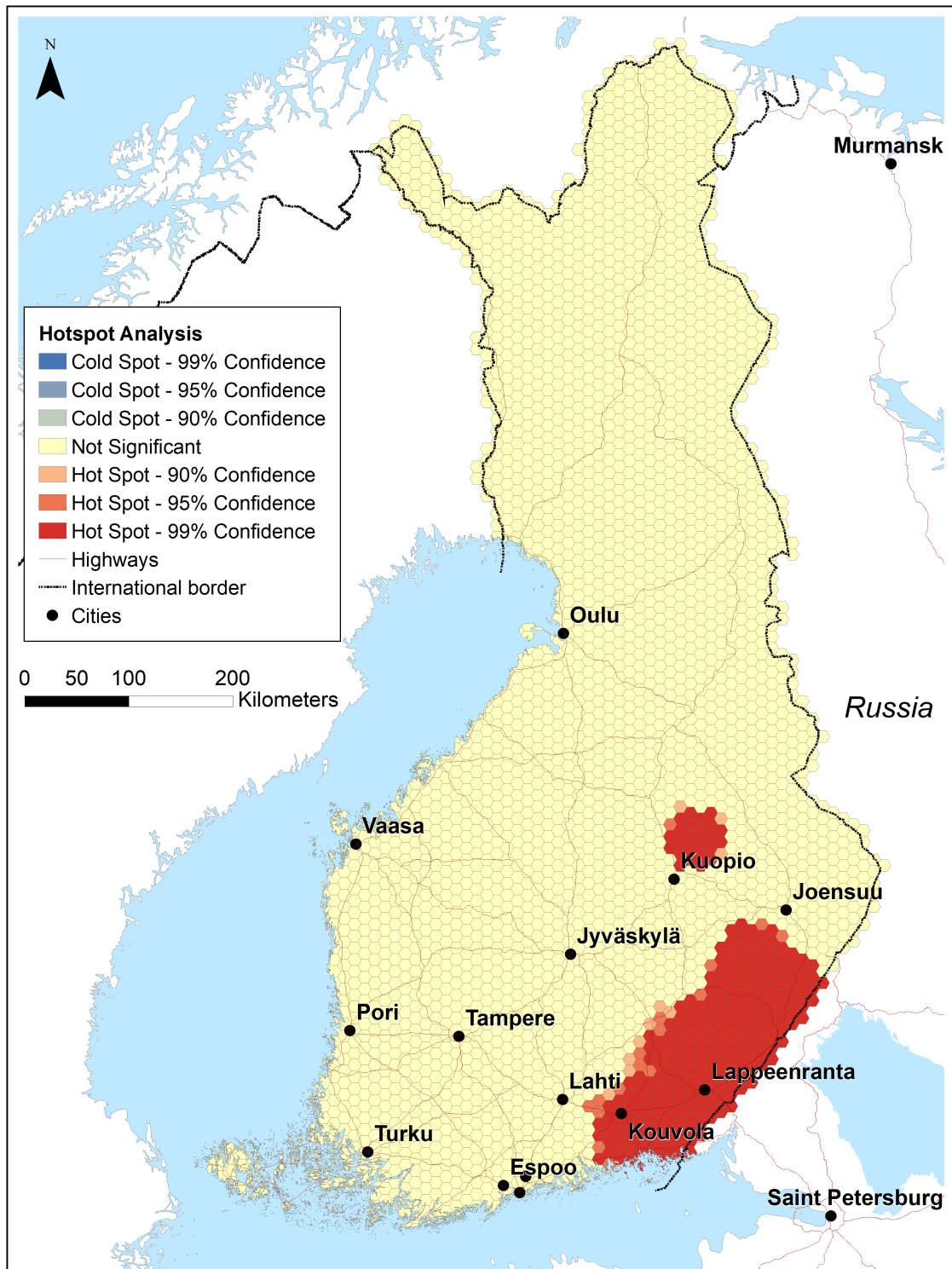
Figure 4.3. Hot Spot analysis.

Hot Spot Analysis Results

The hot spot analysis found two hot spot clusters with 99% confidence (Figure 4.3). No cold spots were found in the analysis, and aside from the two hot spot areas, clustering is not significant in any other parts of the country. Hot spot is an area with statistically significant clustering, and a cold spot is an area with statistically significant low clustering, in relation to the whole study area. The results confirm that the Russians are mostly interested in properties accessible by car from the surroundings of Saint Petersburg.

The bigger hot spot (Figure 4.4) is around 300 km long and 100 km wide, located in the vicinity of the lake system Saimaa in the regions of Kymenlaakso, Southern Savonia, South Karelia and North Karelia. In addition to good accessibility, the area is also known for its beautiful and clean nature where many Finns own recreational properties. There are also a couple mid-sized cities inside the cluster: Kotka, Kouvola, Lappeeranta, Imatra, and Savonlinna. It is interesting that this cluster resembles the shape of a rectangle. It partially confirms Lipkina's (2013) notion that the Russians are mainly interested in properties less than 150 km from the border.

The smaller hot spot (Figure 4.5) is circular, centered around the town of Nilsiä, and has a radius of 25 km. The existence of this cluster was unpredicted in the hypothesis because it is farther away from the border. There is a holiday resort Tahko near Nilsiä, which is the probable cause for this cluster. The driving distance to Nilsiä is 200 km from the Niirala border station, so it is outside of the Lipkina's (2013) 150 km range. There is regular service from Helsinki to Siilinjärvi airport, located near Kuopio, 50 km away from Nilsiä, and there is also a train station in Kuopio.

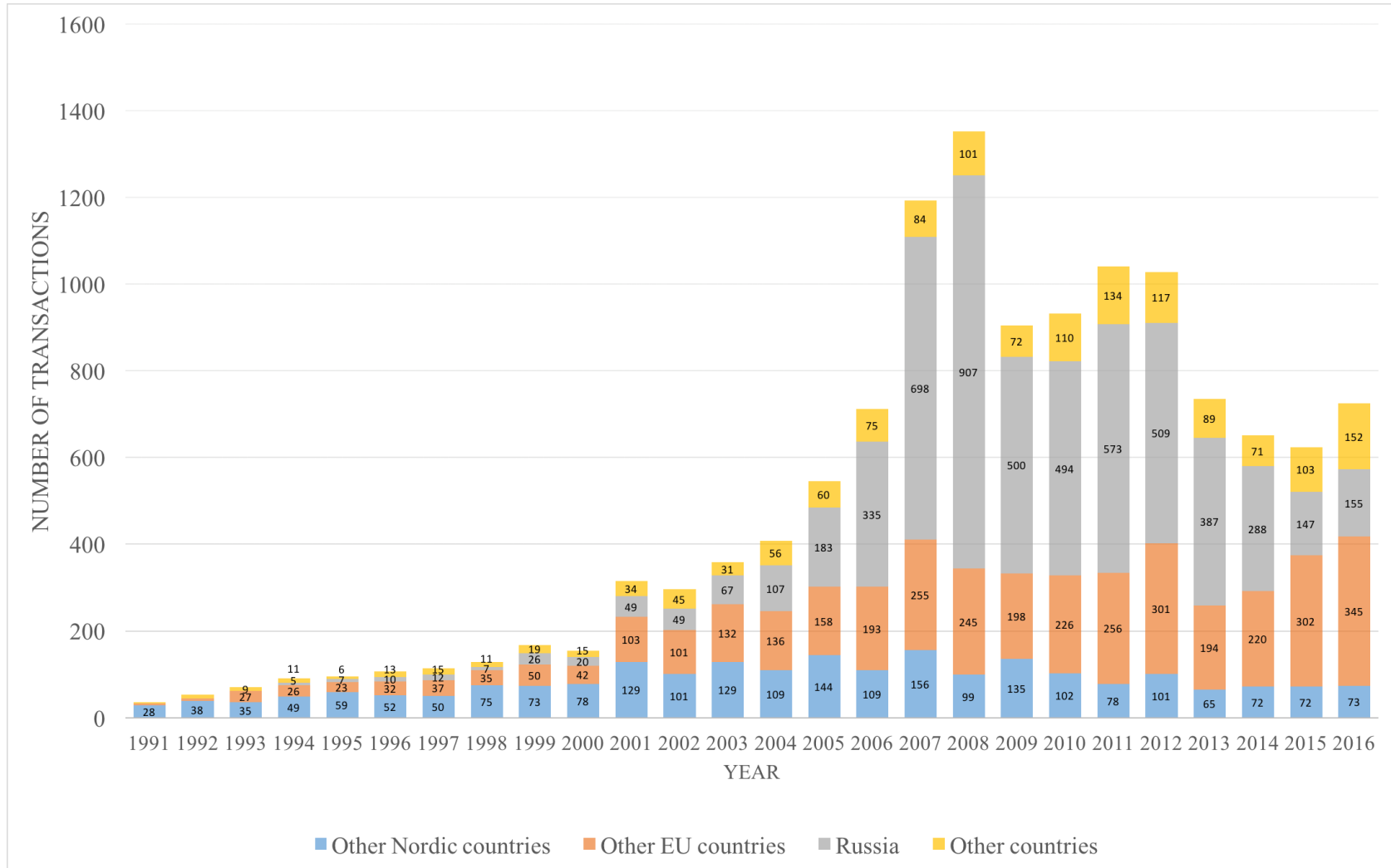Figure 4.4. The bigger cluster next to the border in southeastern Finland.

Figure 4.5. The smaller cluster centered around Nilsiä.

Figure 4.6. Real estate transactions to foreign citizens 1991-2016.

Transaction Date Analysis Results

The number of foreign real estate transactions was low in the 1990s (Figure 4.6). The law allowing foreigners to purchase real estate without restrictions came effective in 2000 and contributed to a larger number of purchases by foreigners. The number of Russian purchases grew fast after 2003, and reached an all-time high of 907 transactions in 2008. After this record year the number of transactions remained around 500 per year until 2012, when the transactions started to decline, decreasing to 147 in 2015 and 155 in 2016.

When looking at the graphs about the Russian economy, some correlation is suggested between the number of real estate transactions and Russia's GDP (Figure 4.7) and average monthly salary (Figure 4.8). Both of the graphs are in dollars, given the devaluation of the ruble that started in 2014 (Figure 4.9). Real Estate transactions in Finland are denominated in euros. The exchange rate between ruble and euro affects the cost of the real estate purchase to the Russians.
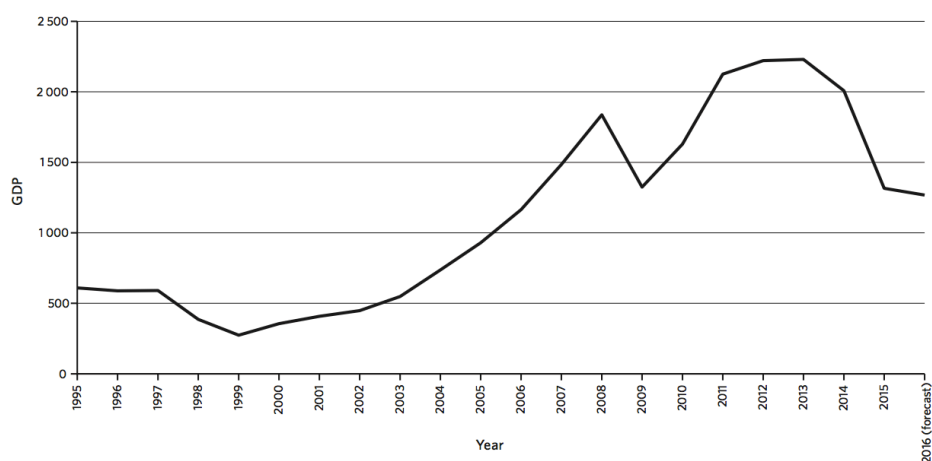

Figure 4.7. Russia's GDP in Billions of Real 2013 U.S. Dollars. (Source: Movchan 2017)
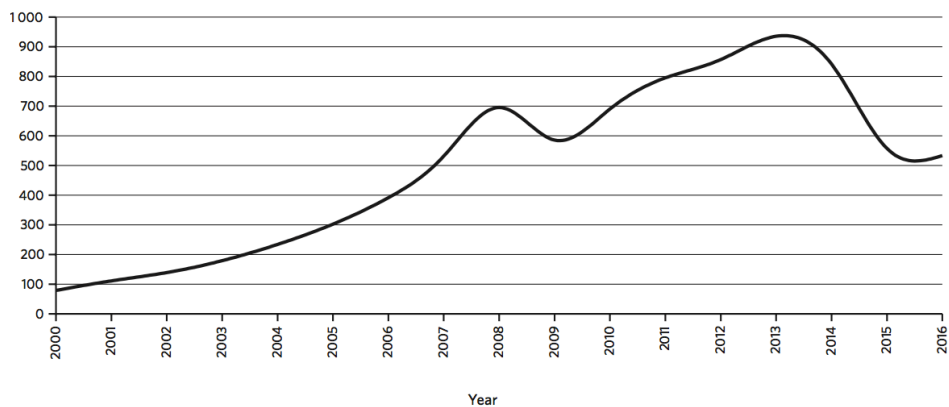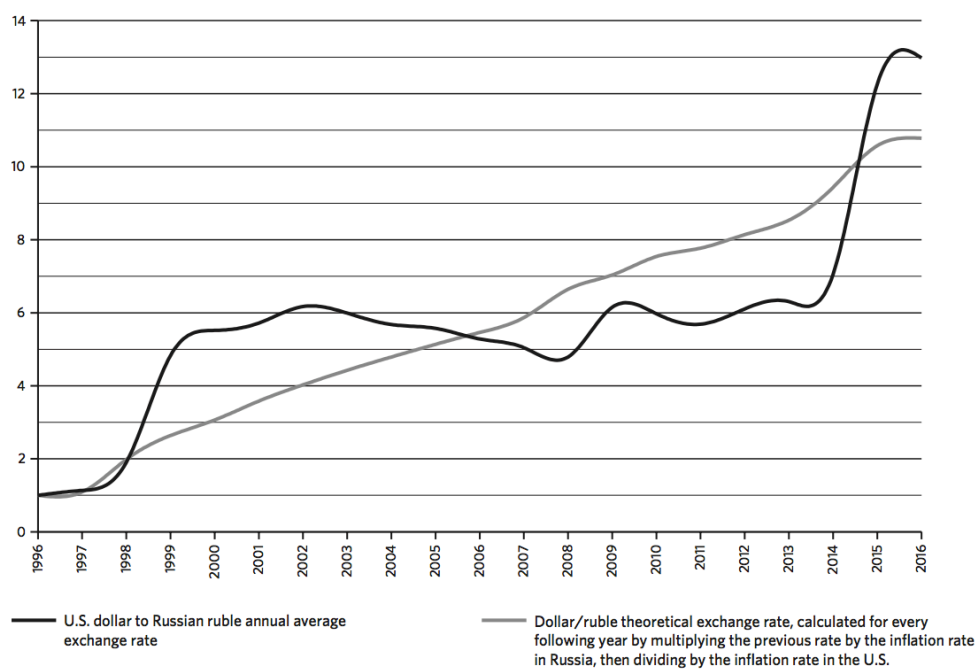
Figure 4.8. Average monthly salary in Russia in U.S. dollars. (Source: Movchan 2017)

Note. The data are normalized to 1996 year levels: the average annual exchange rate of the ruble to the dollar was at 5.1 rubles per dollar (5100 rubles in 1996 year prices), the estimated rate of the ruble against the dollar was 5.3 rubles.

Figure 4.9. U.S. Dollar to Russian Ruble Exchange Rate, Compared to 1996 Levels. (Source: Movchan 2017)

The annual numbers of real estate transactions to Russians seem to reflect the development of the Russian economy. The Russian real GDP in U.S. Dollars (Figure 4.7) and Average Monthly Salary in U.S. Dollars (Figure 4.8) increased steadily during the 2000s, although both underwent a temporary drop following the 2008 financial crisis. The financial crisis also seems to have affected the number of Russian real estate purchases that dropped from 907 in 2008 to 500 in 2009 (Figure 4.6). The transactions never recovered to the high 2007 and 2008 levels.

Russia's economy started a downturn in 2013, and the number of purchases also dropped. The devaluation of ruble against euro (Figure 4.9) made the real estate purchases more expensive for the Russians.

Spatio-Temporal Centroid Results

Figure 4.10 shows the mean center for each year of the transactions. Although the number of transactions was low in the 1990s and it is questionable if there are enough points for the analysis in these early years, the location of the centroids in the southern part of Finland points that the majority of properties purchased between 1994 and 1998 were not intended to be used as second homes because their location far from the more accessible areas for Russians. The centroids between 1999 and 2002 gravitated closer to the area where the centroids for 2003-2016 are located. This means that the phenomena of purchases in the Saimaa area (Figure 4.4) began in the early 2000s.
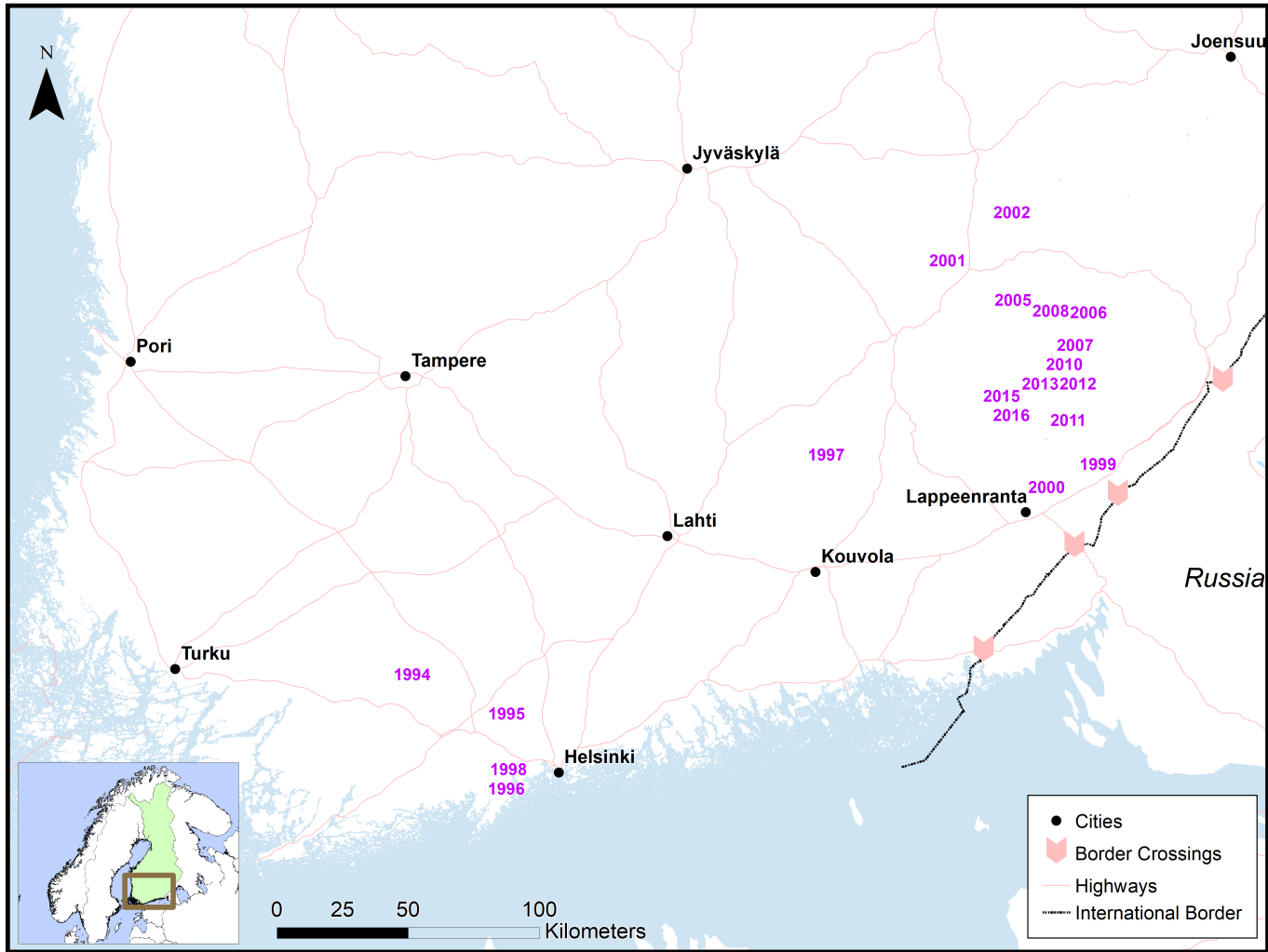
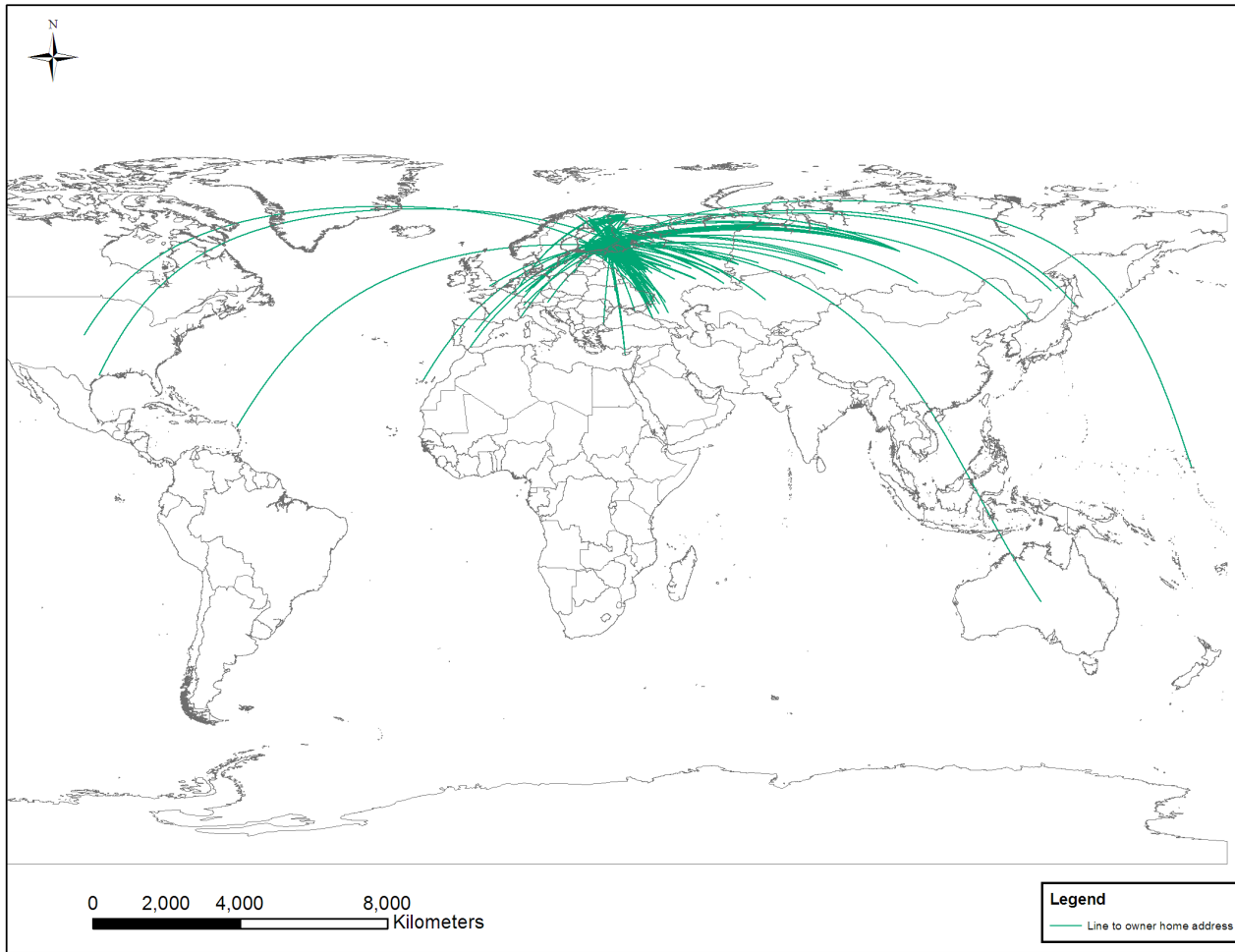Figure 4.10. Spatio-Temporal centroid by year of transaction.

Figure 4.11. Russian real estate buyer home addresses connected to the purchased property with a geodetic line (n= 3,787 parcels).
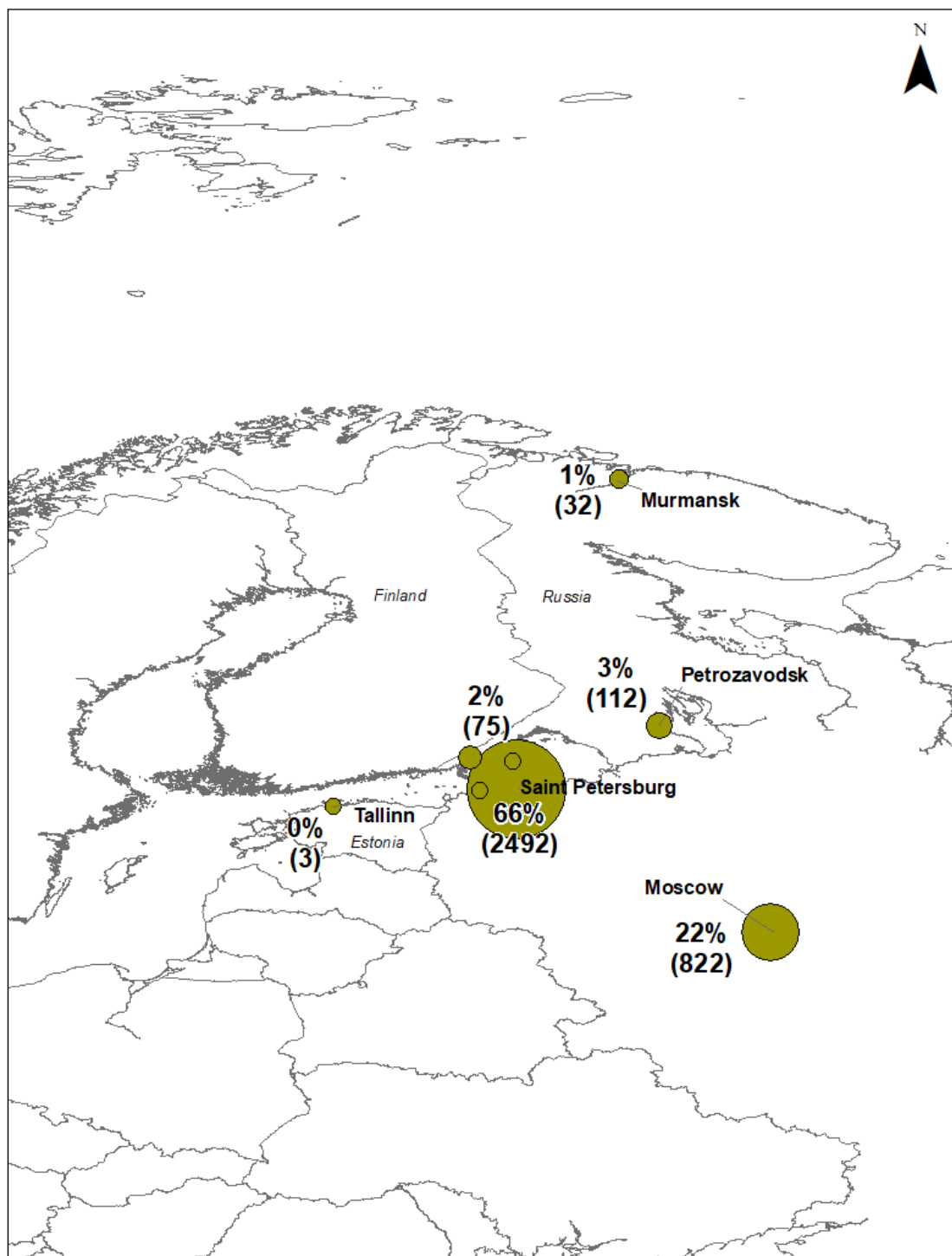
Figure 4.12. The home cities of the foreign buyers.

Buyer Home Addresses Analysis Results

Figure 4.11 shows that the Russian buyers have home addresses in different parts of the world. However, most of the buyers do still have home address in a Russian city within one day's driving distance from Finland (Figure 4.12).

Saint Petersburg area is the most common origin of the buyers as 66% originate from there, and Moscow is second with 22% of the buyers having a home address in the area (Figure 4.13). Saint Petersburg is Russia's second largest city with 5 million inhabitants, and is located just 180 kilometers from Nuijamaa border station. Moscow is Russia's capital and largest city with a population of 12 million. The driving distance to the Finnish border from Moscow is 900 km. Vyborg, a city with a population of 80,000 located 40 km from Nuijamaa border station, is home to 75 (2%) buyers.

Petrozavodsk, the capital of the Russian federal subject Republic of Karelia with a population of 250,000, is home to 112 (3%) of the buyers. The driving distance from Petrozavodsk to Nuijamaa border station is 300 km. Murmansk, the administrative center of Murmansk Oblast with 300,000 inhabitants, is home to 32 (1%) buyers. Driving distance from Murmansk to Raja-Jooseppi border station is 240 km.
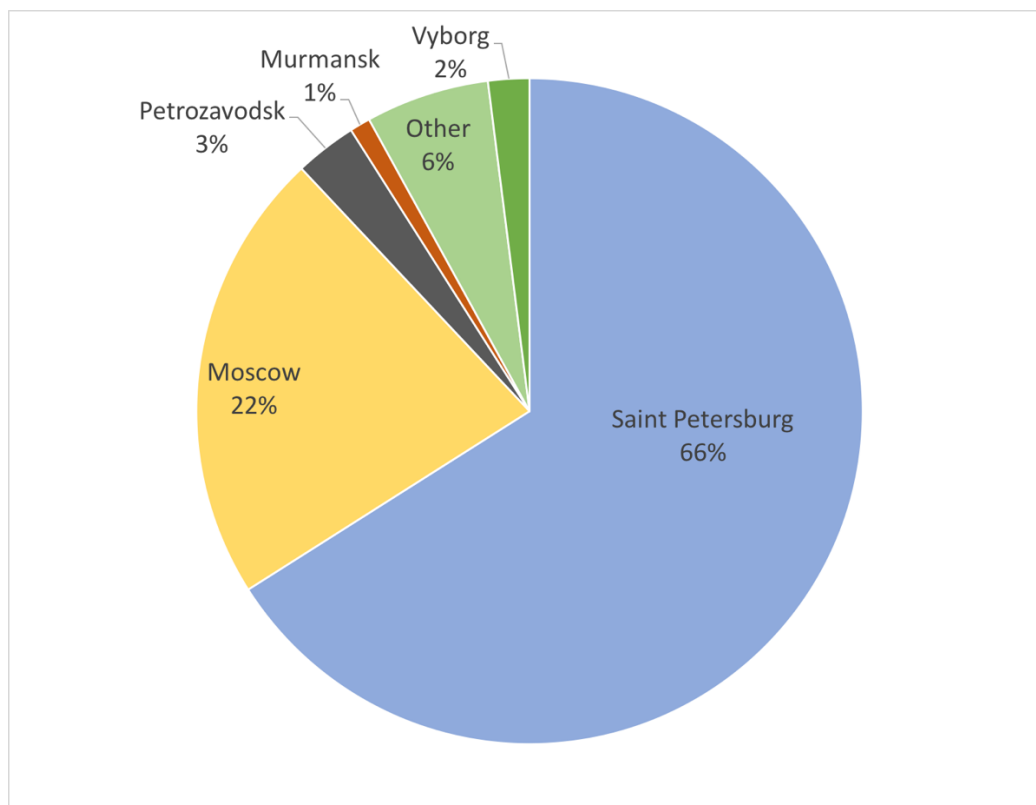
Figure 4.13. The home cities of the buyers with a foreign address.

The fact that most of the buyers live within one day's driving distance from Finland may confirm the assumption that most of the properties are indeed used as second homes. According to the analysis of the geodetic distances between the home address and the purchased property (Figure 4.14), the geodetic distance is 300 km or less in the majority of the cases. There is also a significant number of cases between 600 and 1000 kilometers. It is clear from Figure 4.14 that the majority of the former group live in Saint Petersburg, and the majority of the latter group in Moscow area.
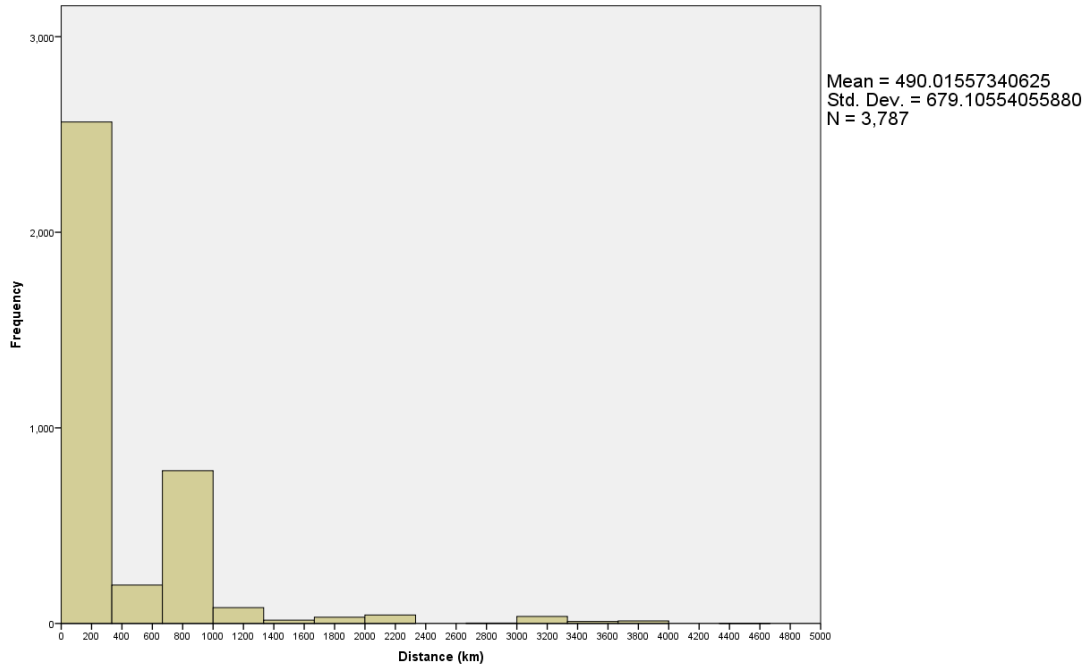
Figure 4.14. Geodetic distance from the buyer foreign home address to purchased real estate in Finland.

Figure 4.15 shows interesting patterns. It seems that much of the real estate in northern Finland were purchased by Murmansk residents. This could mean that they intend to travel by car to their properties. The map also raises some questions about its anomalies. Why would someone from Moscow purchase a property on the very end of the Finland's "northwestern arm", just next to the borders of Norway and Sweden, hardly accessible by any kind of transportation?

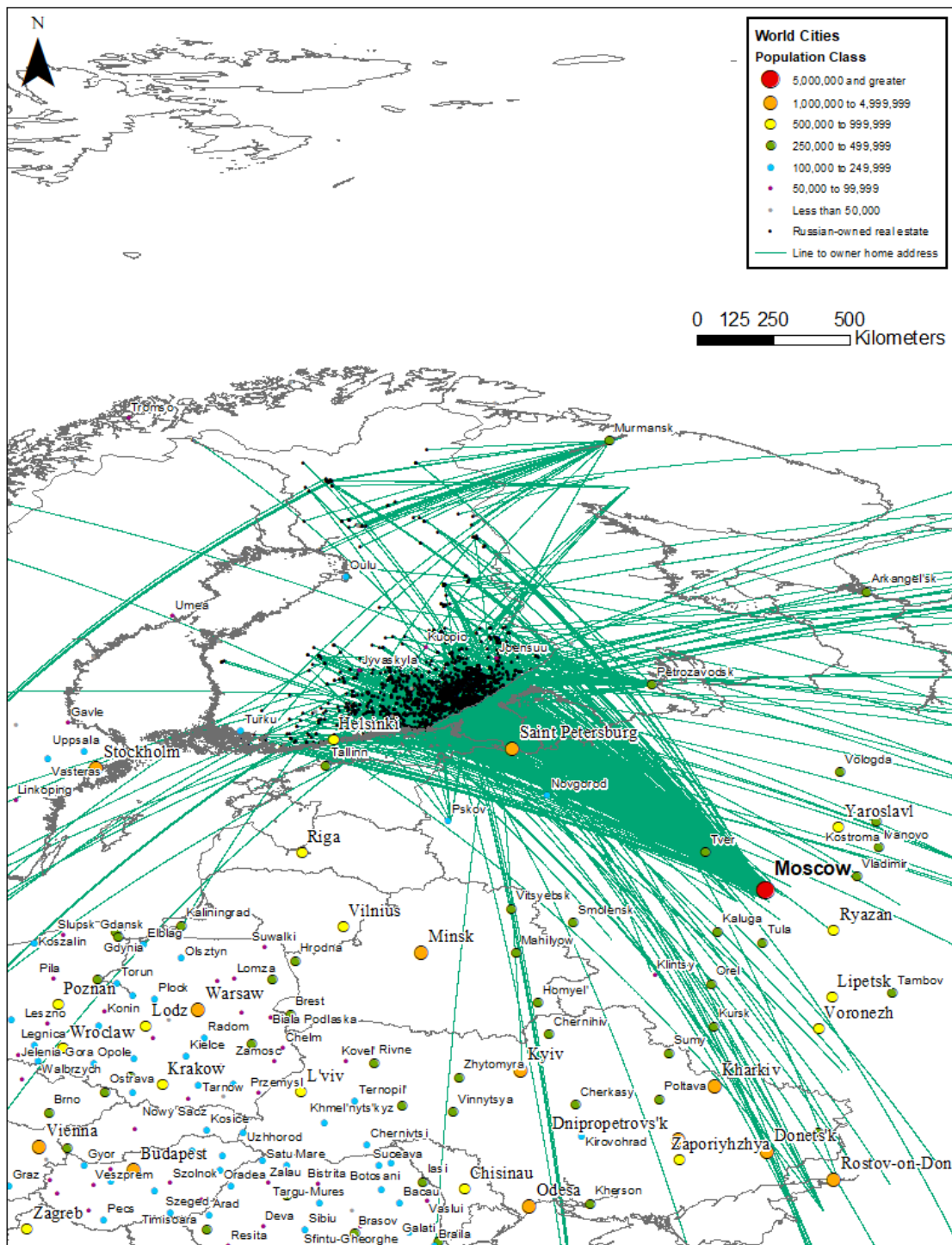Figure 4.15. The home cities of the foreign buyers and their purchased properties connected with a geodetic line.

Parcel Area

Russian buyers with a foreign home address tend to buy properties with a significantly smaller land area (Figure 4.16), with a mean value of 1.97 hectares (19,700 sq. m.), compared to those with a home address in Finland (Figure 4.17) that had a mean value of 8.63 hectares (86,700 sq. m.). The variance in parcel area was higher for the owners with a Finnish address (s=55.06) compared to owners with a foreign address (s=7.88). Water area is excluded from these numbers.
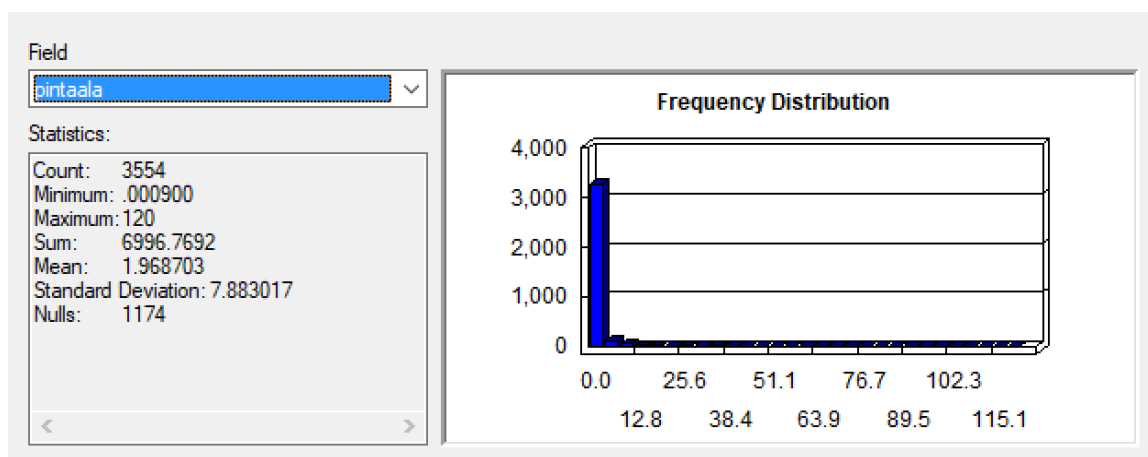
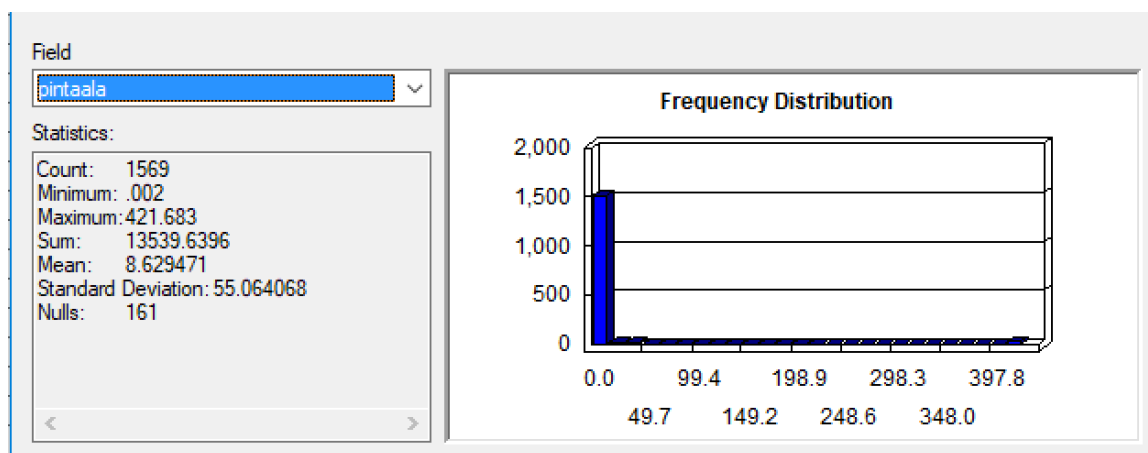Figure 4.16. Parcel land area in hectares where the owner has a foreign home address.

Figure 4.17. Parcel land area in hectares where the owner has home address in Finland.

Buildings Analysis Results

Out of the 6,458 records in the combined parcel dataset, 2,093 (32%) had a corresponding record in the RHR dataset that matched the parcel id. In other words, 32% of all of the parcels in the data had some type of building on them. Out of the 1,730 parcels purchased by a Russian who had a home address in Finland, 52% (905) had buildings on them. Only 25% (1,188 out of the 4,728) of the parcels owned by Russians with a foreign home addresses had a building on them. It should be noted that the building record data for all parcels is from August 4, 2016, and some real estate in the data might have been sold prior to this date to individuals that are not Russian.

The most common type of building in the data was a single-family house. There was a difference in the type of buildings between the parcels owned by Russians with a Finnish home address and those with only a foreign home address. In the first group (Figure 4.18), 65% of the buildings were single family houses and 7% were leisure residential buildings. These were often accompanied with outbuildings (12%), and saunas (4%).

For the second group (Figure 4.19), 42% of the buildings were single family houses and 19% leisure residential buildings, accompanied with outbuildings (17%) and saunas (10%). For these individuals with a foreign home address that had a building on the parcel, the building was more likely designated as a recreational home compared to the group that had a home address in Finland. The higher percentage of dedicated sauna buildings also support this notion. Detached saunas are more common in old houses, rural areas and recreational uses, while attached saunas in more common in modern primary homes and in urban areas.

Primary homes are often located in urban areas and of modern construction or renovated, older houses. Second homes are typically older houses without much modernization, or newer construction specifically built and designated as a leisure residential building, often with fewer amenities and a simplified structure not intended for year-round occupation. It is more affordable to build a house to these lower standards.
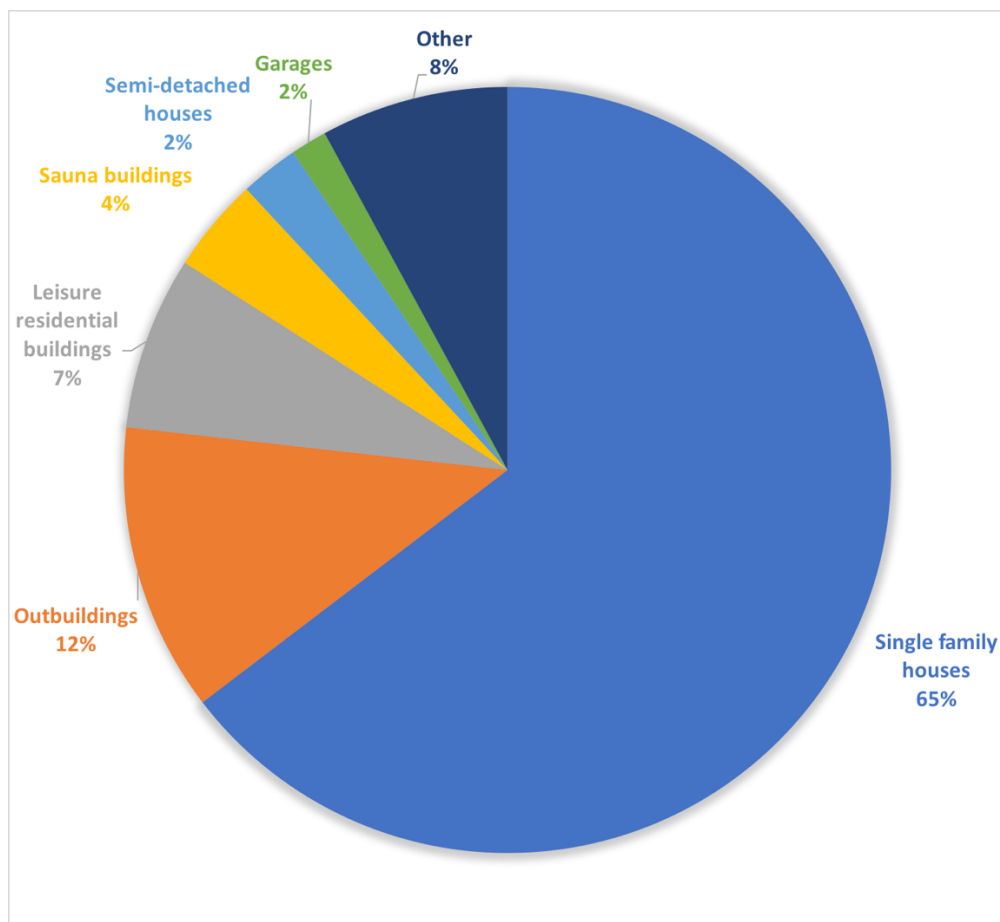
Figure 4.18. Building designations. Address in Finland. Combined RHR dataset.
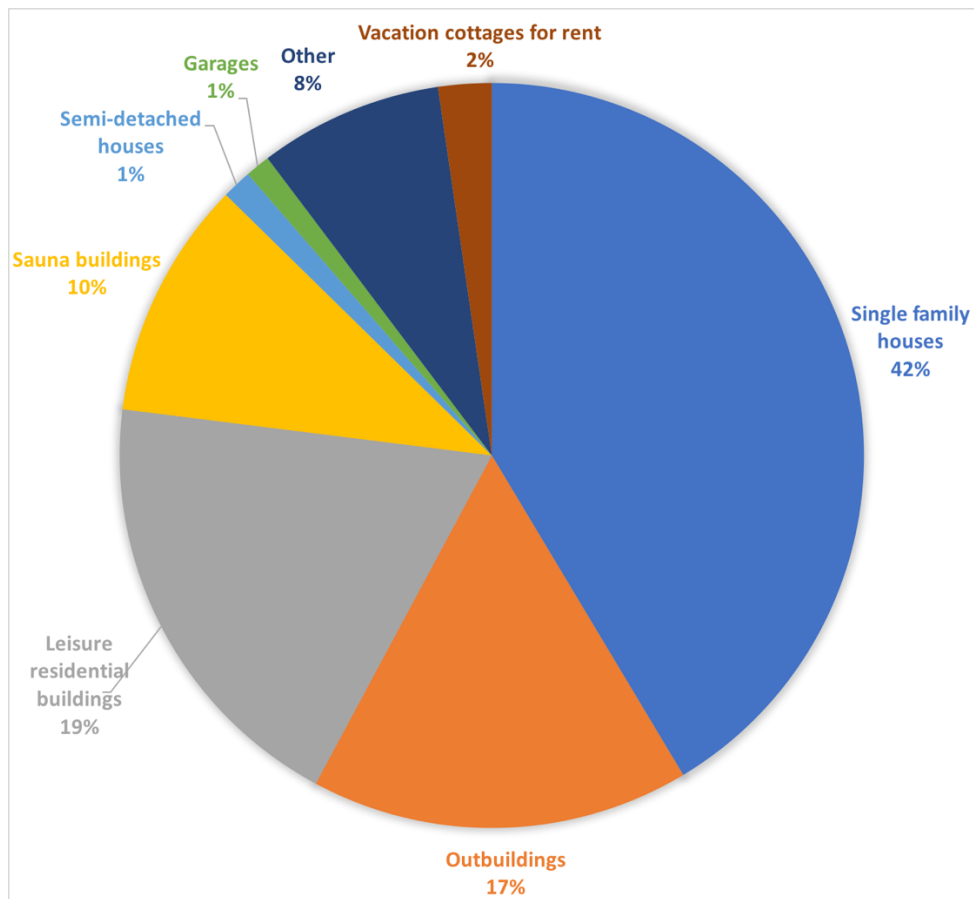
Figure 4.19. Building designations. Foreign home address. Combined RHR dataset.

Figures 4.20 and 4.21 show the year of completion of the buildings for these two groups, respectively. The same years are visible here. There was a lot of construction in 1920 because of a law that granted tenant farmers a right to acquire their rented land. There was also a high number of construction in the late 1940s related to reconstruction after the wars. People also had to be relocated in the 1940s during and after the wars from areas ceded to Russia and land was allocated and a lot of houses built for that reason.

Figure 4.20. Year of completion for single family, semi-detached and leisure homes. Home address in Finland.

Figure 4.21. Year of completion for single family, semi-detached and leisure homes. Foreign home address.

Chapter 5: Conclusion

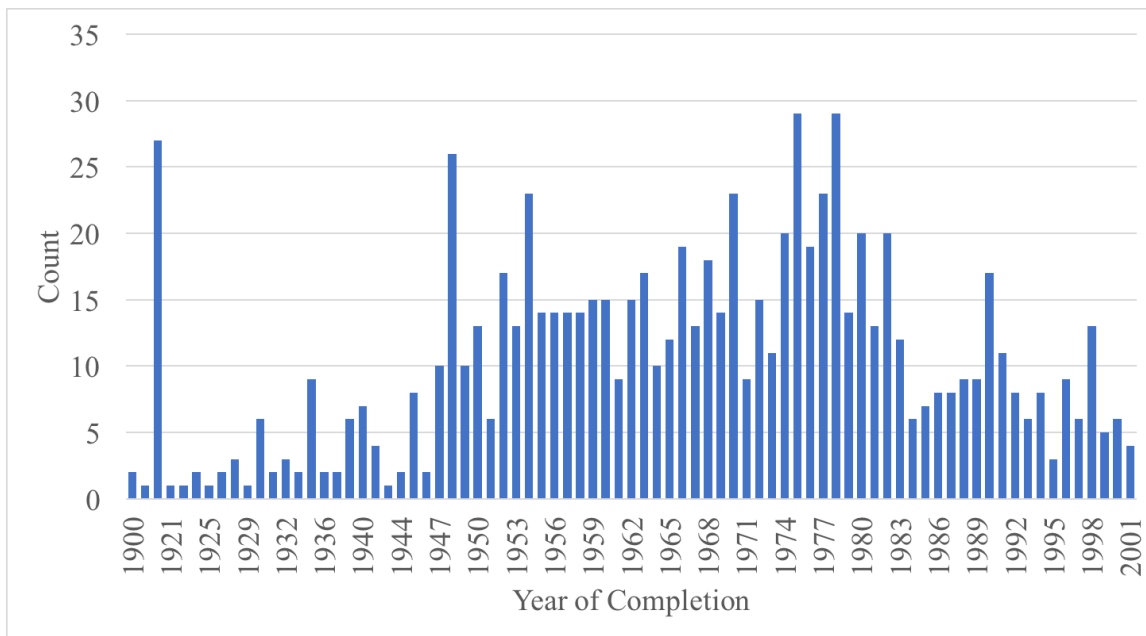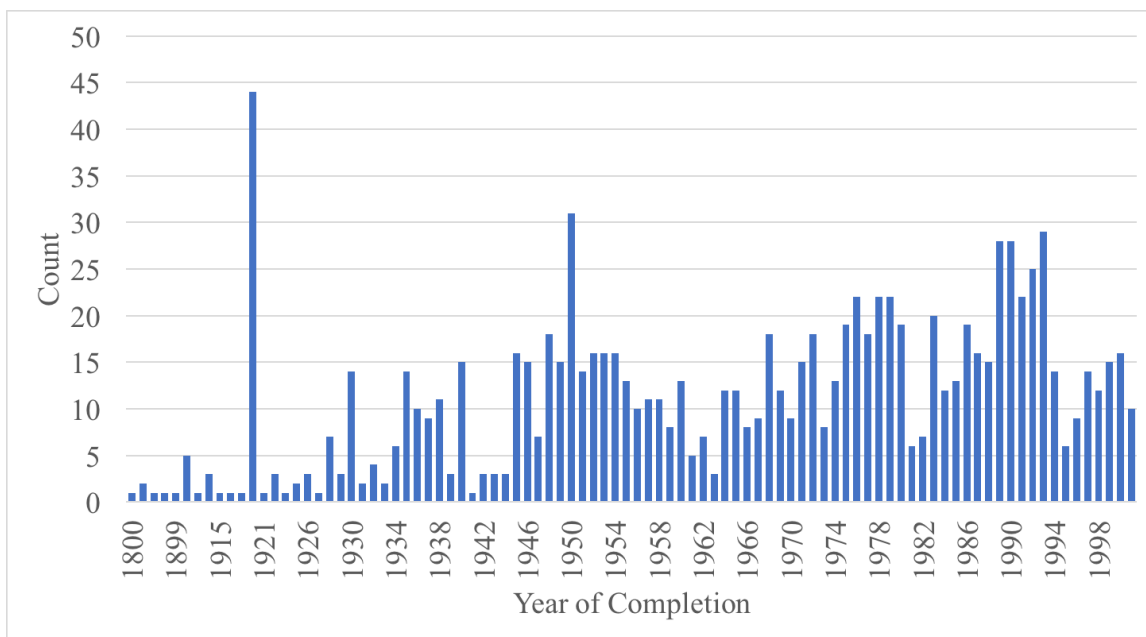The data collected are a good representation of the Russian real estate purchases in Finland between January 1990 and August 2016. After analyzing the spatial locations, temporal characteristics, origins of the buyers, and details of the purchased real estate, some distinctive patterns have emerged. Distinctive patterns are seen in the period of real estate sales in high numbers in relation to the Russian economy, hot spot areas of purchase in relation to the home cities of the buyers, the difference in building stock, and acreage between the buyers that live in Russia and those living in Finland. The results can help explain reasons behind these purchases.

This is the first time this data has been used for a study of Russian real estate purchases, and the numerous limitations in the data that should be taken into account. Not all purchases are included in the data, and the purchased real estate were combined from two incomplete and different databases. Many records were missing information, and some may be incorrect. Some of the real estate in the study may have been sold after the initial purchase to individuals of another citizenship, whereas building data for all parcels is from August 2016. Real estate purchased though a company registered to Finland were not included.

The purchases in high numbers by Russians started in the mid-2000s and had a peak between 2007 and 2012 (Figure 4.6), which coincided, excluding the 2008 financial crisis, with the peak in Russia's GDP and average salaries (Figure 4.7, Figure 4.8). The 2008 recession did come with a decrease in the number of purchases, but they still continued in relatively high numbers until 2015, when they declined to a level similar to

early-to mid 2000s. Russians were by then surpassed as the most significant buyers by citizens of the EU member countries.

It seems the high amounts of Russian purchases coincided with the rapid economic growth in Russia. The new law that was introduced in Finland in 2000 to allow foreign real estate purchases was timed perfectly to deliver for the demand created by the growth of the Russian economy. Hence, the number of purchases surged in the mid-2000s.

The buyers of the real estate came from Saint Petersburg (66%), Moscow (22%), Petrozavodsk (3%), Vyborg (2%), and Murmansk (1%) (Figure 4.12). These are the major Russian cities closest to Finland, all within a driving distance of one day or less, allowing frequent visits.

Russians mainly bought real estate in a cluster situated next to the southern land border between Finland and Russia that is approximately 300 km long and 100 km wide, and in another cluster centered around a popular ski resort Tahko in Nilsiä (Figure 4.3). The location of these purchases, in addition to the home cities of the buyers, is an indication that there was intent to use these parcels as recreational properties, because the driving distances and environment are very suitable for recreation.

All other factors being equal, purchases farther from border crossing stations, holiday resorts and Helsinki metropolitan area do not make sense for Russian citizens living in Russia because of longer travel times to their respective properties. Only 158 parcels out of 4,728 fell outside a 200 km buffer from border crossing stations. These anomalies could be further assessed in future research.

The spatial trend of where properties were bought was different in the early years, 1990 to 2002, when the number of purchases was very low. When the yearly purchases got higher in the early 2000s the purchases concentrated closer to the cluster near the border in southeastern Finland and there was no further significant change in their average location (Figure 4.10).

Figure 4.15 shows that there appears to be a relationship between the purchased property and the buyers' respective home addresses in Russia. It seems buyers in Murmansk predominantly purchased real estate in northern Finland, and buyers from Saint Petersburg and Moscow purchased in southeastern Finland.

There are differences between Russian citizens that have a home address in Finland and those that do not. Those with a home address in Finland are responsible for only 27% of the total purchases in the data. Russian buyers with a foreign home address amount for the rest of the purchases, and this thesis is more focused on that group.

The rights of the owners of real estate in Finland have over their property are limited. The owner has the right to transfer their possession by sale, gift, inheritance, lease, or trade, and they can mortgage the title. The owner can also build a residential building on the property if allowed by the authorities. In addition, they can also use their properties for forestry, hunting, and agriculture, but not all land can earn subsidies or is suitable for profitable agriculture. Practically all other uses are very limited or not exclusive for the owner.

Russian citizens living in Finland seem to make more use of their properties, because half the parcels have buildings on them. In contrast, only a quarter of the parcels owned by individuals that had a foreign home address had any buildings on them. They

likely bought land only to hold or speculate with its future value, possibly with distant plans to build a residential building on the property sometime in the future. Land in Finland is a safe investment that usually holds its value very well, and it might be an attractive destination for capital flight.

The mean parcel size for the individuals living in Russia (Figure 4.16) hints that most of those parcels were intended to be used as building sites for residential or leisure residences. The mean parcel size, 2 hectares, is hardly usable for commercial forestry or agriculture but it is very well suited as a building site for a primary home or a leisure residence. There are a lot of regulations in Finland regarding new construction, but one is generally granted a permit for constructing a building in a rural area as long as the parcel size is large enough, generally between 2,000 and 20,000 square meters, depending on local jurisdiction (Uudenmaan Liitto 2012, 32-33). In contrast, Russian citizens living in Finland owned much larger parcels with a mean size of 8.6 hectares.

Russians living in Russia had proportionately more leisure residential buildings, outbuildings, and dedicated sauna buildings on their properties, compared to the Russians living in Finland. This suggests that the buildings owned by Russians with a foreign home address were more oriented to leisure use.

The building type and hot spot analysis partially support Lipkina's (2013) assumption that Russians purchase real estate to be used as second homes, but the finding that only a quarter of the parcels owned by Russians with a foreign home address had buildings on them tells another story. The individuals Lipkina interviewed for her study did not mention 'speculative investment' as a reason for their purchases, but it might have been the case that these individuals could not be reached for an interview.

The unbuilt lots may be an indication of these parcels being bought mainly as investments or as a way to securely hold valuable assets outside of Russia. It has been discussed in the media that many of the houses acquired by the Russian buyers were in very poor condition and rarely visited (MTV 2010, Honkamaa 2014). It may be the case that a significant portion of these houses might not be suitable for living due to their condition.

The results suggest that the Russians' reasons for their purchases were twofold: holding tangible and liquid assets in a politically safe environment, that could also double as second homes. There were more purchases during times when the Russians had more disposable income, a portion of which the Russians wanted to safeguard by purchasing real estate in a country not susceptible by their native administration and judicial system.

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