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Master of Advanced Studies in Real Estate

The Phenomenon of Googlewil

Where and how do Swiss and foreigners live in Zurich?

Study of location choices of IT employees within Zurich area

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List of abbreviations

DINK	double income, no kids household
BFS	Schweizer Bundesamt für Statistik
CS	Credit Suisse
EU	European Union
NZZ	Neue Züricher Zeitung
OECD	Organisation for Economic Co-operation and Development
USA	United States of America
USSR	Union of Soviet Socialist Republics

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Abstract

This thesis studies whether the Swiss and foreigners differ in where and how they live in Switzerland. The study focuses on employees in the IT sector in the city of Zurich.

Using a survey methodology, the employees of five large IT-companies located in Zurich were studied to understand their choices on living locations and lifestyles. The survey results were analysed using basic aggregations, linear and logistic regressions. The sample consists of over 300 people surveyed, 31% Swiss and 69% foreigners representing over twenty countries. The general result of the survey indicates that foreigners' choices regarding household location do not differ significantly from those of the Swiss. However, the following interesting differences were observed.

Firstly, the phenomenon of 'Googlewil' is confirmed. Foreigners are nine times more likely than the Swiss to live in Adliswil. The main reasons include closeness to work, the local expat community and tax advantage on communal level.

Secondly, it is found that migrants to Switzerland bring the home-ownership preferences characteristic for their country of origin with them. There is a correlation: the higher the home-ownership rate for a given country, the stronger the preference for owning among people of this nationality in Switzerland. Overall, Swiss people want to rent twice more often than foreigners.

Thirdly, only 6% of the Swiss and 6% of foreigners move further from their workplace to save on cantonal taxes.

Further findings include Swiss people being twice as likely to live in houses (rented or owned) than foreigners, despite the fact that more foreigners than the Swiss prefer living in a house to living in a flat. Issues relating to money as location criteria (taxes & price) are more important to foreigners than to the Swiss. Nevertheless, as significant as money is, the quality of location matters more. Foreigners are twice as risk averse than the Swiss. Lastly, a Swiss home-owner commutes to work on average 16 minutes longer than a foreign home-owner.

1. Introduction

“I live in Googlewil” often comes up when talking to IT sector employees in Zurich. For some reason, many foreigners seem to favour the region of Adliswil and its surrounding district over other locations within the Zürich area when selecting where to live. Thus, there is a growing community of expats of various nationalities along the west coast of Lake Zurich, and a high incidence of international schools and foreign shops. In this thesis, I investigate whether ‘Googlewil’ really exists, and what drives the preference of foreigners for this district.

Specifically, this thesis asks two questions: Do foreigners show the same or different location patterns when compared to the Swiss people? Do these two groups of people compete for the same type of real estate?

1.1. Research objectives

The aim of this thesis is to verify whether *the Swiss and the non-Swiss in Switzerland differ in where and how they live*.

The *expected differences* to be researched include the following factors:

1. Geographical location (in particular, the ‘Googlewil’ phenomenon)
2. Rent or buy preference and reality (i.e., existing situation)
3. Approach to tax advantage
4. Other housing preferences such as: flat or house choice, importance of local communities and closeness of family, quality of the place, etc.

1.2. Narrowing of the research area

The research area was selected according to the following criteria:

Geography

The study focuses on the city of Zurich and its Canton. The Canton Zurich is especially interesting, because it absorbs a significant part (10%) of the immigration into Switzerland. It is also considered as the main hotspot of the Swiss real estate market.¹

¹ cf. Hoffer 2014, p. 1

Employment sector

The research is focused on a particular employment sector in Zurich, namely the IT industry. More than 3% of all employed in Switzerland work in the IT sector.² This sector was also chosen due to the ease of access to these people and the possibility to collect data on the relevant subjects via a survey.

Education and income level

“It is not the size of the population that is relevant but but how much that population is actually earning.”³ Following this idea, the present study focuses on immigrants who earn above-average salaries. This high socioeconomic group should have higher purchasing power, and are thus more likely to stand in competition with the Swiss for the same real estate for two reasons: Firstly, the higher earning sector is likely to have most influence on the demand-supply curve of the real estate market in Zurich as well as on the housing prices level, at least in the ownership sector. Secondly, higher earning immigrants should have the strongest incentives to relocate due to potential tax-burdens.

Moreover, there seems to be “convergence between the localisation choices of the Swiss and foreigners with the high occupation level. [...] The residential choice is driven more heavily by the occupation status than the (country of) origin.”⁴

1.3. Importance of the study

This study is *important* mainly due to the strong representation of foreigners within the Zurich area. Zurich is the largest city in Switzerland with a population of over 380'500. By 2008, 31% of the city's population was made up of foreigners from a total of 166 different countries. Of the OECD countries, Switzerland has one of the highest proportions of foreigners. Nearly 10% of all foreigners who move to Switzerland come to the City of Zürich.⁵

Many studies examine the behaviour of Swiss house prices with regard to immigration flows into this country. The results show a strong “nexus between immigration and

² BFS 2016

³ Steiner 2010, p.11

⁴ Schuler et al. 1999, citing from Schaerer et al. 2008, p.10

⁵ City of Zürich Homepage, Section Facts and Figures 2016

house prices.”⁶ Obviously, housing prices are driven mostly by those with the highest purchasing power, i.e., better-educated and employed in the highest sectors (including IT). Do the Swiss and foreigners exhibit the same location preferences and thus compete for the same type of real estate?

Regarding the academic and social point of view, the present work can be seen as a continuation of existing studies tackling the effects of immigration on the Swiss real estate market. Indeed, “in spite of political debates about the presence of foreigners and related policy migration in Switzerland, [...], the literature on residential segregation is relatively scarce, even at a descriptive level.”⁷ Therefore, “it would make sense to study the motivation of the location choice for the different foreign groups.”⁸ This research contributes to filling this gap by studying one particular foreign group, the highest earning class.

Last but not least, this study is also *interesting*. Many of the Swiss and foreigners who filled out the questionnaire expressed their interest in the outcome of the study and requested the results after the work has been completed.

1.4. Research design

Data collection was performed through a *survey* amongst the employees of 5 large IT-companies located in Zurich.

Data analysis techniques involve basic aggregations and simple comparisons. Next, linear regression is performed on numeric categories of data to determine which factors influence the location choices of the Swiss and foreigners. Lastly, logistic regression on the binary outcomes of the questionnaire is performed in order to analyse possible factors influencing the binary decisions such as rent or buy choice.

⁶ Degen 2010, p. 1

⁷ Schaerer et al. 2008, p. 3

⁸ Hoffer 2014, p. 57

2. Theoretical background

2.1. Definition of Terms

Swiss: Someone who has Swiss nationality (and possibly other nationalities.)

Foreigner: Someone who does not possess Swiss nationality. In this thesis, this term is used interchangeably with *immigrant*, *non-Swiss* and *expat*.

Primary breadwinner: Primary breadwinner or the “household head” is the person with the highest personal income in the household.⁹

Higher education: University degree or higher

Googlewil: Nickname for the community of Adliswil (CH 8134)

Lower tax cantons relevant for this study: Schwyz, Zug

Lower tax communities within canton Zurich relevant for this study¹⁰: Rueschlikon (75%), Kilchberg (76%), Thalwil (80%), Horgen (87%), Langnau am Albis (97%) and Adliswil (104%)¹¹.

2.2. Overview of immigration into Switzerland and Zurich

2.2.1. Immigration into Switzerland

Immigration into Switzerland ranges between 60'000 - 140'000 people (~1%) per year in the last decade (Figure 1).

Immigration fluxes into Switzerland are correlated with the business cycle of the country and were strongly influenced by the Bilateral Agreements II between Switzerland and European Union countries in 2004.

⁹ In many studies it is assumed that the primary breadwinner is the most relevant for the migration decision of the entire household. However, especially in DINK households or families where the secondary breadwinner has an equal education level as that of primary breadwinner, it is likely that both partners are equally relevant decision-drivers for migration. Thus, for the purpose of this study the preferences of primary and secondary breadwinners are treated equally.

¹⁰ cf. NZZ 2015

¹¹ Percentage values are multipliers of cantonal tax rate,

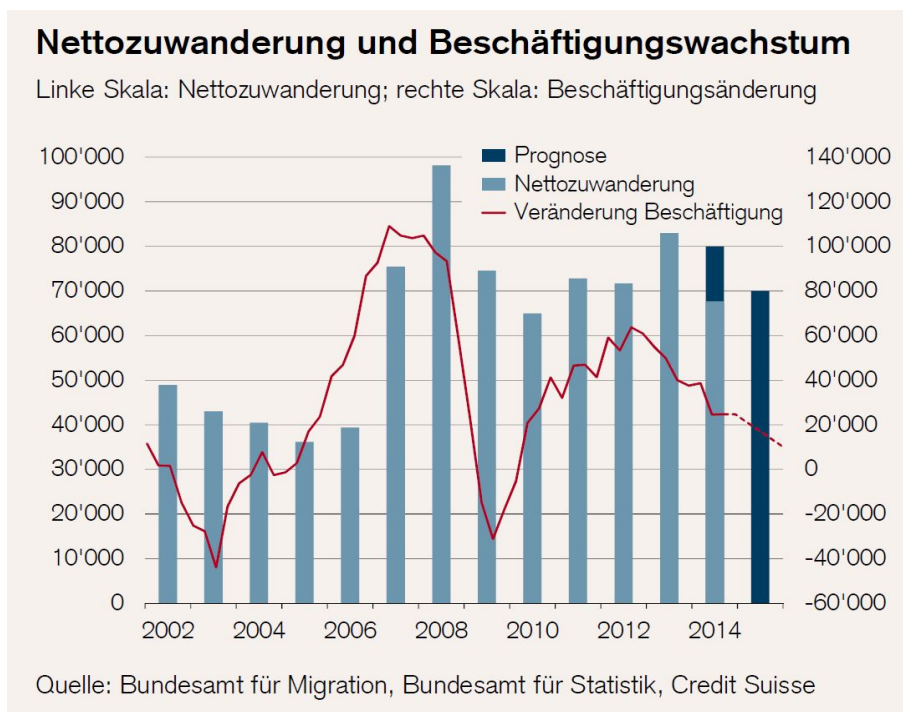


Figure 1: Net immigration into Switzerland 2002-2015. Hasenmaile et al. 2015, p. 26

Nevertheless, an important trigger of the recent immigration wave is also the evolution of the Swiss economy, which needs an ever-increasing percentage of highly qualified employees. This growing demand for professionals cannot entirely be covered by the inland workforce.¹²

Indeed, in recent years there has been an observed structural change in migration into Switzerland with regards to the country of origin (Figure 2) and the social status of a typical immigrant. Data show that 60% of the immigrants who moved to Switzerland in the immigration peak 2008-2010 are between 20 and 39 years old and have a tertiary education. Thus, a significant proportion of the immigrants arriving in the last few years belong to a high social class. With their relatively high purchasing power, they are likely to influence the housing prices in an inflationary way.¹³

¹² cf. Graf 2012, p. 10-11

¹³ cf. Wüest & Partner 2010, p. 44

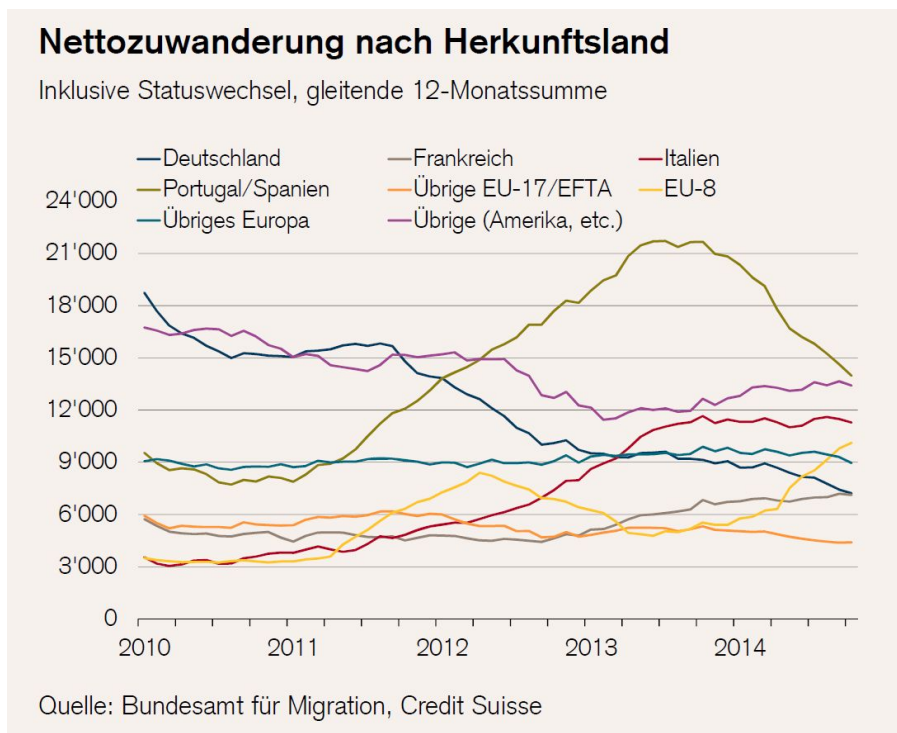


Figure 2: Net immigration into Switzerland 2010-2014 in respect to the countries of origin. Hasenmaile et al. 2015, p. 26

Young and well qualified immigrants are most likely attracted by interesting job opportunities that can be found in the biggest economic centers of Switzerland. Indeed, between 2007 and 2009, the agglomerations of Zurich and Geneva have welcomed about one third of the immigrant fluxes coming into the country.¹⁴ These two regions have a strong international character (e.g. international schools and expat communities) which is of certain interest for expatriates.

2.2.2. Immigration into the Zurich area

Over 130'000 foreigners live in Zurich, which makes up 32% of the total population of this city (413'000 people).¹⁵ The Study "Immigration 2030 - Szenarien für die Züricher Wirtschaft und Gesellschaft" shows that the Zurich region recently experienced an influx of mainly highly qualified immigrants.¹⁶ Immigration prior to 2007, aka *old immigration*, was mostly from Balkan, Turkey, southern EU, Asia, near East, USSR, Africa or Latin America and typically involved individuals of lower socioeconomic

¹⁴ cf. Wüest und Partner 2010, p. 44

¹⁵ cf. Stadt Zurich, Statistik Bevölkerung

¹⁶ cf. Stutz et al. 2010, p. 15-18

status. In contrast, more recent immigration, aka *new immigration* is more likely to be from German speaking countries, northern and eastern EU or other OECD countries and tends to involve individuals who have higher economic status.¹⁷

2.2.3. Popular opinion

Swiss popular opinion concerning immigration shows signs of concern about uncontrolled population flux into Switzerland. Indeed, “rising crime, wage dumping or pressure on the real estate market”¹⁸ as well as gentrification and transport congestion¹⁹ are some examples of the negative effects that the Swiss perceive as a result of the higher immigration rates that the country experienced since 2008, when the free movement agreements started. Attracted by the strong economy “foreigners snap up Swiss property”²⁰, say Wüest & Partner.

One common cause for concern is the suppression of the Swiss population in urban centres (the ‘Verdrängungsprozess’)²¹. According to CS Immobilien-Research, foreign newcomers have limited information in the beginning and thus tend to settle down in the city centre. In consequence of this over-demand, the locals migrate further away from the centers. With time, foreigners also move away from the city centres.²²

On the other hand, the above idea of a spatial “Verdrängungs-” phenomenon is rejected by Haye, who concludes that due to different location preferences, the two groups do not compete for the same real estate, at least not the highly qualified immigrants.²³

Concerns around immigration effects for the Swiss population have been demonstrated by a series of referenda and initiatives in recent years, on topics such as the expulsion of foreign criminals, initiative against mass immigration or vote against minaret construction and the wearing of burqas in Ticino.

¹⁷ cf. Heye et al. 2013, p. 17

¹⁸ Hoffer 2014, p. 1

¹⁹ cf. Rau 2009, citing from Hoffer 2014, p. 7

²⁰ Wüest und Partner 2012, citing from Mijuk 2012

²¹ cf. Hasenmaile 2014, citing from Soukup 2014

²² cf. Hasenmaile 2014, citing from Soukup 2014

²³ cf. Heye et al. 2013, p. 19

2.2.4. Immigration effects on real estate market

The above concerns around competitive effects are valid: immigration has been shown to increase the prices of real estate in Switzerland (Figure 3).

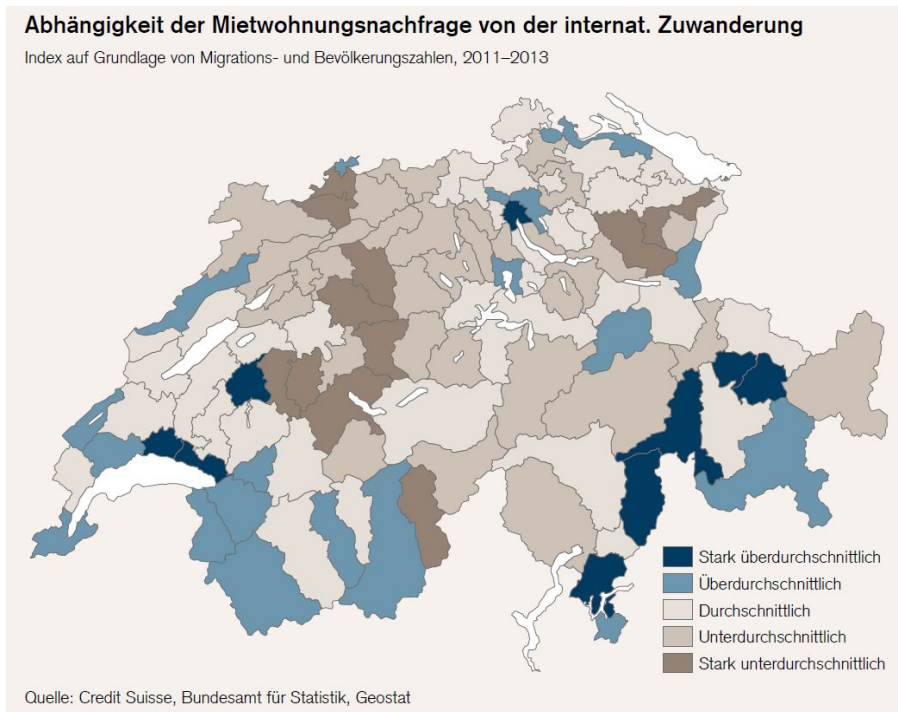


Figure 3: Dependence of housing demand on international immigration into Switzerland. Hasenmaile et al. 2015, p. 28

On the one hand, Heye and Hermann indicate that immigration into the Canton Zurich between 2000 and 2010 has had an inflationary influence on house prices, although this is not reflected in a rise in rental prices.²⁴ They found that “an immigration inflow equal to 1% of an area’s population is coincident with an increase in prices for single-family homes of about 2.7%.”²⁵

On the other hand, according to Hoffer immigration into Switzerland between 2009-2013 not only “affects housing prices in inflationary way”, but also “affects the rents in Canton Zurich.”²⁶ Hoffer concludes that “different foreign groups do not influence the rents in the same way”²⁷ and “an average income level of each foreigner

²⁴ cf. Heye et al. 2012, p. 24

²⁵ Degen 2010, p. 1

²⁶ Hoffer 2014, p. 55-56

²⁷ Hoffer 2014, p. 55-56

category should be estimated and taken into account.”²⁸ Therefore he suggests “it would make sense to study the motivation of the location choice for the different foreign groups.”²⁹ This research is a response to this suggestion, and focuses on one of these groups, the highest earning class.

2.3. State of the art

The topic of location choices of individuals in Switzerland and in Zurich has been previously studied by various authors. However, as Schaerer concludes, “in spite of political debates about the presence of foreigners and related policy migration in Switzerland, [...], the literature on residential segregation is relatively scarce, even at a descriptive level.”³⁰ Below are the most significant (though sometimes contradictory) contributions on this topic.

2.3.1. Location choices of households

Corina Heye researches the geography of immigration into Zurich. She concludes that the new immigration shows rather dispersed pattern of location within the agglomeration of Zurich and is rather spatially balanced across the districts of Zurich.³¹ In contrast, the old immigration tends to concentrate in lower quality districts with noise and pollution like Limmattal or the Flughafen-Region. Furthermore, within the new immigration there is little social segregation to be observed. Heye points out that income level of immigrants groups should be more taken into account when analyzing the differences in location choices.

The topic of income level as a factor in the location choice is tackled in the research of Caroline Schaerer and Andrea Baranzini. The authors conclude that in Geneva and Zurich “there is relatively little segregation, but the education level (as a proxy for the socio-economic status) should be taken into account.”³² The study shows the foreign population density and socio-economic composition of the neighbourhoods at the hectare and the district level (see Figures 4 and 5).

²⁸ Hoffer 2014, p. 57

²⁹ Hoffer 2014, p. 57

³⁰ Schaerer et al. 2008, p. 3

³¹ cf. Heye et al. 2013, p. 18-19

³² Schaerer et al. 2008, p. 2

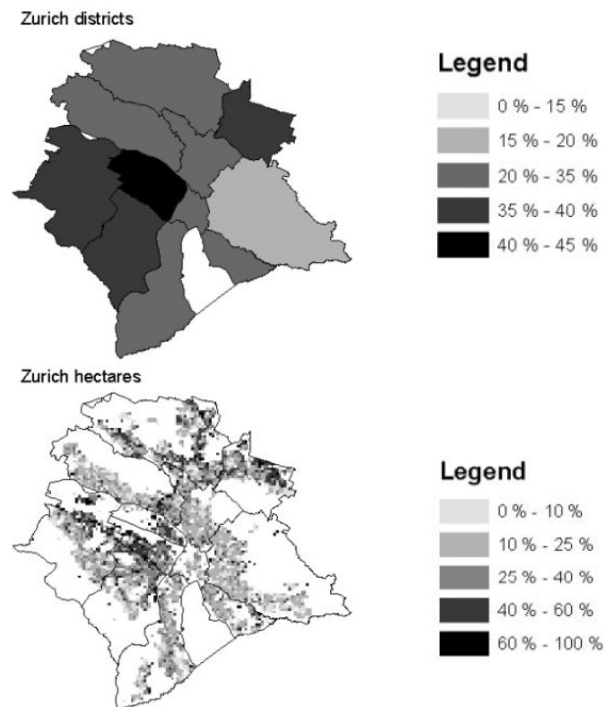


Figure 4: Percentage of foreign population as a proportion of the whole population by district and hectare for Zurich. Schaerer et al. 2008, p. 6

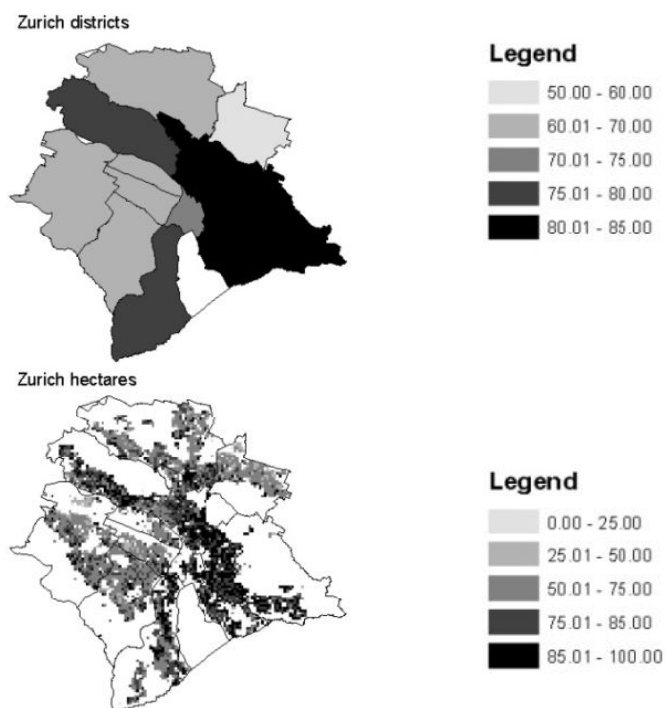


Figure 5: Percentage of foreigners with high education levels as a proportion of the working-age population. Schaerer et al. 2008, p. 6

Figures 4 and 5 show “an inverse relationship between the presence of foreigners and the level of education attainment: the higher the share of foreigners, the lower the educational attainment level. [...] The correlation between the share of foreigners and the share of individuals with higher education level at the district level accounts to -0.91 per cent in Zurich [...]”.³³ Furthermore, Schaerer and Baranzini states that individuals with higher education levels show more concentrated location patters.

2.3.2. Rent vs. ownership

The percentage of owners is said to remain higher among the Swiss as among foreigners.³⁴ Switzerland has *the lowest home-ownership rate in Europe* (see Table 1 and Figure 6), which is astonishing given the economic strength of the country. The “high house prices - relative to rents and to household incomes and wealth - are by far the most important cause of Switzerland's low ownership rate.”³⁵

Country	%	Country	%
Romania	91.6	New Zealand	67.8
Hungary	90.9	United States	66.2
Lithuania	84.9	Luxembourg	66.1
Spain	82.1	Canada	66.1
Slovenia	81.5	Finland	63.5
Ireland	76.9	Belgium	63.1
Norway	76.7	Latvia	59.6
Portugal	74.8	Poland	58.9
Slovakia	73.6	France	54.7
Estonia	72.2	Netherlands	50.4
Greece	71.7	Austria	48.7
Italy	71.2	Liechtenstein	48.1
Australia	69.5	Czech Republic	47.1
United Kingdom	68.0	Germany	42.0
Cyprus	68.0	Switzerland	33.6

Table 1: Home-ownership rates for selected European, North American, and Australasian countries. Bourassa et al. 2006, p. 37

³³ Schaerer et al. 2008, p. 6

³⁴ cf. Heye et al. 2013, p. 20

³⁵ Bourassa et al. 2006, p. 2

Wohneigentumsquoten Schweiz - EU (2008)

3.7

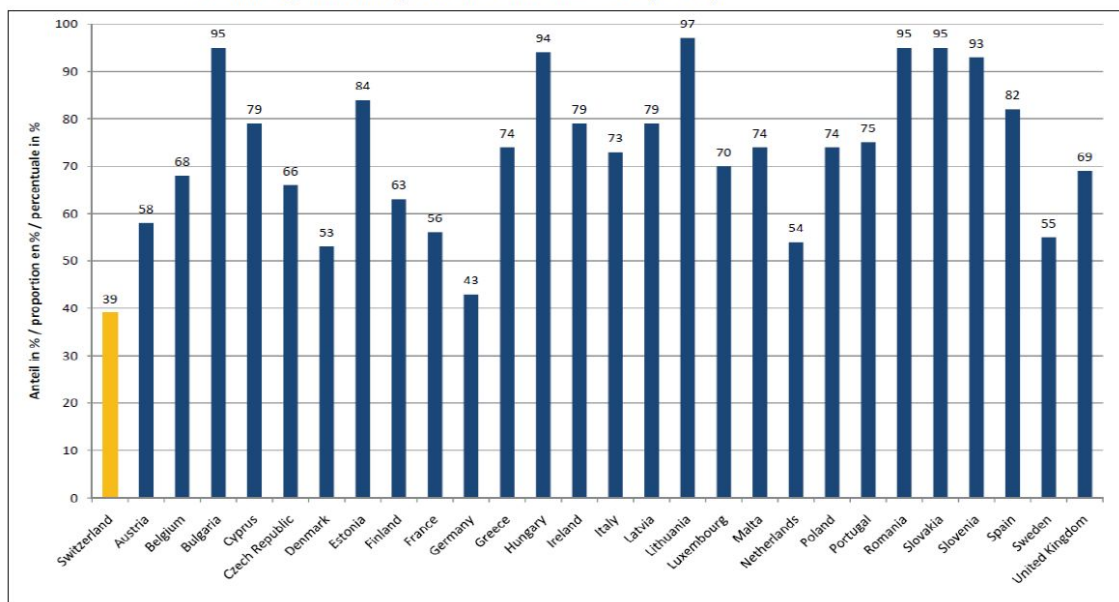


Figure 6: Home-ownership rates of selected European countries 2008. This graph complements Table 1 above with different set of countries, Bundesamt für Wohnungswesen 2015.

Do the ownership rates differ between the Swiss and foreigners in Switzerland, when comparing representatives of both groups with similar income status? Are there other factors that influence low ownership rate among those, that in fact could afford investment in real estate? This work focuses on home-ownership rates characteristic for those nationalities which are the most represented in the survey data.

2.3.3. Taxes affecting location choice

One of the first significant academic contributions in this field is that of Charles Tiebout, dating back to 1956. In his article³⁶, Tiebout proposed that population votes with their feet. Upon this idea, he builds a migration model that is based on income segregation hypothesis. He describes municipalities within a region as offering varying baskets of goods (government services) at a variety of prices (tax rates). Individuals will move from one local community to another in order to maximize their personal utility.³⁷

While the Tiebout model of migration focuses on heterogeneity of preferences, Ellickson and Westhoff focus on income as the main cause of location differences. The heterogeneity of income has an influence on households' location decisions. They

³⁶ cf. Tiebout 1956

³⁷ cf. Tiebout, Wikipedia

created an income segregation hypothesis, firstly explaining why rich households make different location choices to poor households, and concluding that fiscal federalism, as demonstrated in Switzerland, induces self sorting of the population by income.³⁸

Furthermore, when considering tax as a factor influencing location patterns, Schmidheiny confirms that clustering of rich and poor exists and is particularly strong in case of progressive tax schedules, such as in Switzerland.³⁹

Focusing on the Zurich area, the working paper by Schaltegger “Tax Competition and Income Sorting: Evidence from the Zurich Metropolitan Area” describes the effect of differences in income taxation on individuals’ location choice within the region of Zurich and provides substantial “empirical evidence for the influence of income taxes on the choice of residence of taxpayers at the local level.”⁴⁰

In summary, high income households are more likely to choose low tax communities, as their tax burden is relatively higher due to the progressiveness of the tax schedule.

Although the above mentioned empirical studies on tax competition in Switzerland support the notion that high earners tend to relocate to low-tax regions, there are some studies that state the opposite.

“Erreichbarkeit ist wichtiger als Steuern”⁴¹ concludes the spin-off study of Hochschule Luzern, which analyses the push and pull factors behind people’s moving within Switzerland.

The publication “The influence of taxes on migration; evidence from Switzerland” clearly states that there is “no tax-induced migration in Switzerland”⁴², although it has the largest within-country variation in tax rates among OECD countries. Whereas numerous circumstances determine the migration decisions, the strongest influence seem to have the accommodation related and personal factors. Regarding the high earning classes, “migration motives are fairly randomly distributed among the

³⁸ cf. Ellickson 1971 and Westhoff 1977, citing from Schaltegger et al. 2009, p. 2-3

³⁹ cf. Schmidheiny 2006, p. 455

⁴⁰ Schaltegger et al. 2009, p. 1

⁴¹ Delbaggio 2012, p. 28

⁴² Liebig et al. 2004, p. 2

population - with a notable exception: for highly qualified people, locality-related characteristics matter more than for other groups of the population.”⁴³

On the whole, it is stated that “despite numerous theoretical contributions, empirical studies on the effect of taxation on migration (in Switzerland) are still very rare.”⁴⁴

2.3.4. State of the art summary

Summing up, there is some general research on differences in location decisions of the Swiss and foreigners in Switzerland and Zurich. However, many publications suggest that it would make sense to study the motivation for choosing one location over another in various foreign groups according to their income level. This research focuses on the higher-earning class coming from the IT sector.

3. Empirical research

3.1. Methodology

The data was acquired through a *questionnaire*. Next it was mathematically analyzed (detailed methods described in Section 3.5.) with respect to the the possible differences between the Swiss and foreigners as listed in Section 1.1.

3.2. Acquiring of data

A questionnaire (Appendix 1) was sent out electronically to the employees of five IT companies in Zurich: Google Zurich, Swisscom Zürich, Credit Suisse Zurich and Oerlikon, SwissRe Kilchberg and Open Systems Zurich. The questionnaire was opened for 20 days with answers from over 300 people surveyed. The sample consists of 31% Swiss and 69% foreigners, representing over twenty countries. The most commonly represented countries in the ‘foreigner’ sample were, Germany 15%, Russia 15%, USA 12%, and Poland 11% followed by Hungary 7%, France 6%, the Netherlands 6%, Austria 5%, Romania 5% and Ukraine 4%.

⁴³ Liebig et al. 2004, p. 17

⁴⁴ Liebig et al. 2004, p. 3

3.3. Biases

There might be some potential biases in the collected data regarding age and marital status of the respondents. Firstly, the average Swiss is three years older than the average foreigner in the sample. The reason behind it might be that foreigners are more inclined to migrate young, due to a larger planning horizon, where migration is more likely to pay off. Secondly, there are more single Swiss than single foreigners in the sample. This might reflect the general demographic trend in Switzerland: Swiss have fewer children⁴⁵ and tend to have them later than foreigners.⁴⁶ Thus one might argue if the above are biases or the reflection of the reality.

3.4. Data preparation

The results of the questionnaire as raw data are presented in Appendix 2. These data were adjusted in the following ways:

Converting text to numeric values

Many answers in the questionnaire were text rather than numeric. To permit comparisons and quantitative analysis these were converted to numerical values:

Answers to questions about ranking were translated to numbers:

- “strongly disagree” → 1, ... “strongly agree” → 3.
- “not important” → 1, ..., “very important” → 3.

Second, the answers to questions with binary outcomes such as ‘Are you an owner or tenant?’ and ‘Do you live in a house or a flat?’ were translated to numbers 0 and 1 in order to run logistic regressions. The encoded results prepared for the linear and logistic binary regressions are presented in Appendix 3. The binary variables are listed and defined in Table 2 in Appendix 4.

⁴⁵ cf. European statistics 2014

⁴⁶ cf. European statistics 2014

Custom answers

For questions where the respondents could give a custom reply or write “other”, the answers are replaced with the best matching value.

Missing values

In cases of missing values (ten answers accounting for less than 3% of the sample) the blanks were filled with the average value for that question (e.g., “door to door distance to work”). In questions about ranking the importance of various location criteria, if a field is left blank it is considered as “not important” and filled with a 0.

Filtering

The 20 answers (7%) from foreigners that came to Switzerland for fewer than 5 years were not considered in the analysis. It can be assumed that this group is likely to have less interest in buying real estate in Switzerland.

Some parts of the study restricts the data to tenants or owners only (see Section 4.). Firstly, this helps to concentrate on one or the other group and draw conclusions specific to owners’ or tenants’ location choices. Secondly, it eliminates some bias effects, e.g. of the Swiss inheriting a house, which naturally affects the geographical location of a household, and thus is no longer a conscious choice of location but a pre-given state.

3.5. Data analysis methods

The following data analysis methods are used in this work:

Basic aggregations

Simple comparison analyses of the Swiss and the non-Swiss were performed using basic Excel tools. This allowed us to draw significant conclusions on the differences between the Swiss and foreigners. For example, it can be easily found and compared what fractions of Swiss people and foreigners want to buy real estate. The results are presented as pie charts and various graphs created using Excel.

Linear regression

The method of *linear regression* (using the add-on XLSTAT⁴⁷ in MS Excel) is applied mainly for consistency checks and for the analysis of correlations between variables with numeric outcomes. Examples include factors influencing the number of rooms required by a household or the distance to work.

For instance, in a simple linear regression, the number of rooms used by a household can be described by various factors, which are combined with the help of weighing parameters. Number of rooms N (response variable) is the sum of different factors x (explanatory variables) weighted with parameters $\beta_1, \beta_2, \beta_3, \dots$. The number β_0 (intercept with the y-axis) is a constant that results from the regression process and u is the error term.

$$N = \beta_0 + \beta_1 \cdot x_1 + \beta_2 \cdot x_2 + \beta_3 \cdot x_3 + \dots + u$$

Logistic regression

In this study, the most common output variables are not numeric, but binary (rent or buy, flat or house, in Googlewil or elsewhere). In such cases, linear regression does not apply, and *logistic regression* should be used instead. Again, the calculations are performed with the help of the MS Excel add-on XLSTAT.

Hansen-Hurwitz estimator

The *Hansen-Hurwitz estimator* is used in context of cluster sampling. When clusters are not of the same size, it is more efficient to sample these clusters using probabilities proportional to size, rather than simple random sampling.⁴⁸

In this work the Hansen-Hurwitz estimator was used in order to weigh accordingly the underrepresentation and overrepresentation of the Swiss and the non-Swiss within the various districts of Zurich. For example, we want to estimate the proportion of the Swiss to the non-Swiss in a particular district, where 20% of the respondents were the Swiss (S_j) and 80% were foreigners (F_j). However, the overall representation of the Swiss (S) to the non-Swiss (F) in the data set collected for this research was 31% to

⁴⁷ cf. XLSTAT

⁴⁸ cf. Hansen-Hurwitz

69% respectively. Thus, in order to accurately weigh the representation of each group in the sample it is necessary to carry out an adjustment. The appearance of each group is adjusted with the probability proportional to the overall population of this group in the sample. For example, the adjusted number of Swiss people in district 1 is obtained using the following formula:

$$\frac{\frac{S_1}{S}}{\frac{S_1}{S} \cdot \frac{F_1}{F}}$$

3.6. Data consistency checks

Consistency checks are performed on the data.

First, using basic aggregation and comparison, it can be found that those who live in cantons Schwyz and Zug said that taxes are a very important location criterion. Similarly, the great majority of those living in houses (i) are families with kids, (ii) live outside central Zürich and (iii) occupy more than five rooms.

The second check involves linear regression to detect the factors affecting the number of rooms people live in (see Appendix 5). For p-value < 0.05, this number grows e.g., with age (thus larger family) and distance to work (thus house or bigger flat).

All of the above findings were very much expected and suggest that the data and the techniques used have no major flaws.

4. Results

The objective of this thesis is to investigate where and how the Swiss and foreigners live in the area of Zurich. Keeping in mind the selected target group of this work (see Section 1.2.), in what follows, by “Swiss” or “foreigner” is meant a person with higher income level, employed in the IT sector in Zurich.

The main differences, unexpected similarities and interesting findings regarding the researched topic include the following findings.

4.1. Location choices

The phenomenon of Googlewil is confirmed.

Firstly, out of all 32 Googlers living in Community of Adliswil in our sample, 31 are foreigners. Of course, these numbers should not be taken on their face value, because there are roughly twice more foreigners than Swiss people in our sample in general. But even after adjusting for this imbalance (see Section 3.6.), the foreigner-to-Swiss ratio is 9 to 1. In other words, when looking at the sample of Zurich Googlers, *a random foreigner is nine times more likely to live in Adliswil than a random Swiss*. This clearly confirms the the existence of Googlewil.

Secondly, considering the whole sample living in the Community of Adliswil and surrounding districts (Wollishofen, Leimbach, Kilchberg and Ruschlikon), the adjusted foreigner-to-Swiss ratio is 4 to 1.

The prevailing location criteria named as very important by people living in the above districts are closeness to work, quality of the place, school for kids, and closeness to a community of similar people. In contrast, the latter criterion, community of similar people, is hardly ever mentioned by the Swiss.

Indeed, in Googlewil and surrounding districts there is a rich choice of international education offered by the numerous bilingual schools located on the ‘Silver Coast’, like the Zurich International Schools in Adliswil and in Kilchberg or the Swiss International School and the bilingual LIP Schule, both located in Zurich Wollishofen. This attracts foreigners, in turn creating more demand and establishing a positive feedback loop.

The above findings were verified using a binary logistic regression (Appendix 6). This analysis confirms the existence of Googlewil and gives an insight into some possible factors influencing people’s decision to live in Adliswil and its surrounding. The response variable in the regression is the binary location decision: ‘household located in Adliswil = 1, household located somewhere else = 0’. As expected, the strongest explanatory variable is the factor ‘Are you Swiss?’ with a negative coefficient of -3.3 and a p-value of 0.09. This means that the Swiss are hardly present in Adliswil. Moreover, other factors such as age, number of people in the household and whether the

person's family in the past has owned or rented are positively and significantly correlated with the decision to live in Googlewil (Appendix 6).

Figures 7 and 8 show the location preferences of the Swiss to foreigners for various districts in Zurich (not only Googlewil).

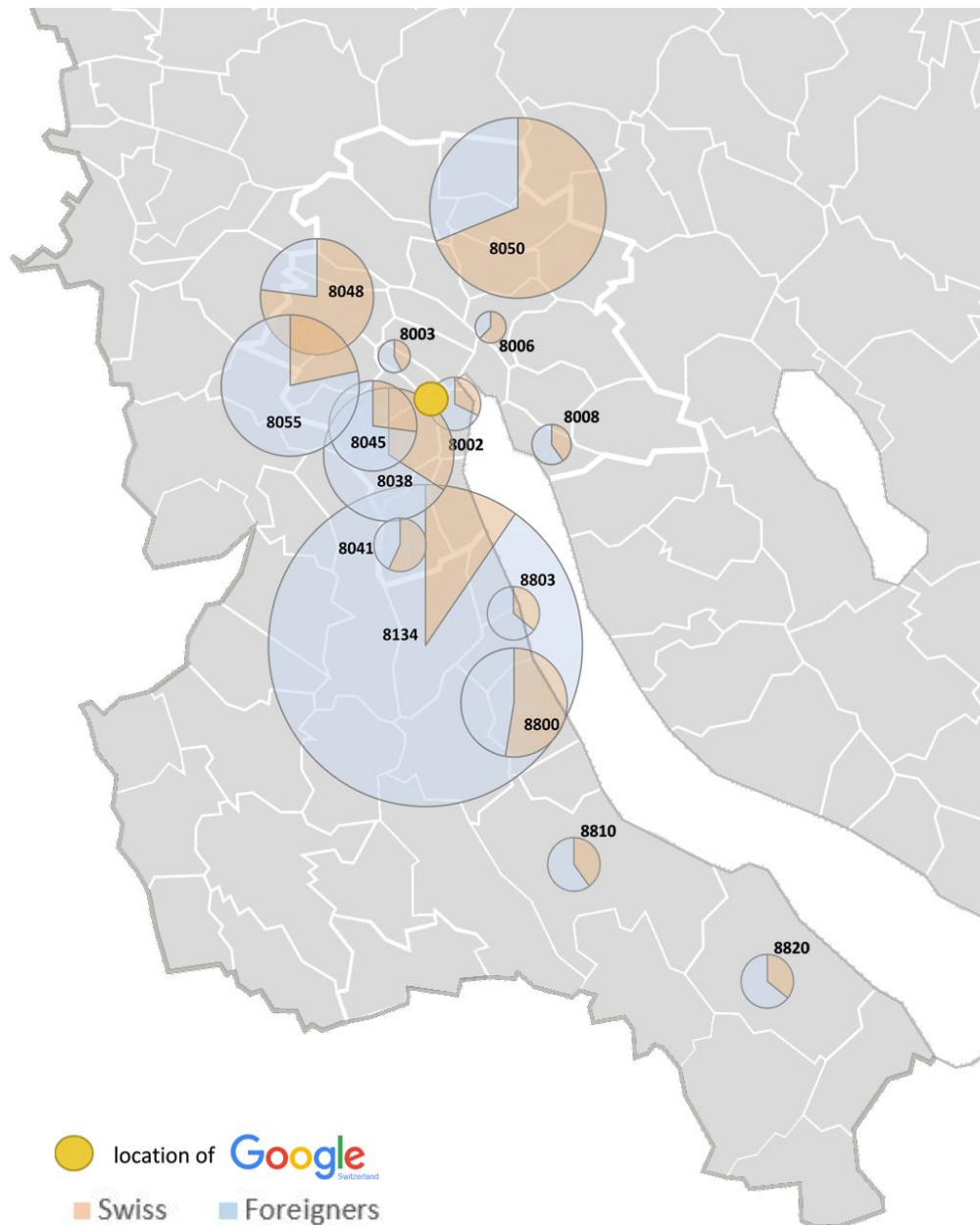


Figure 7: Swiss and foreign population preferences per quarter in Zurich. Results corrected for sampling weights bias.

Interpretation: Pie size is proportional to the number of Zurich IT employees living in the given community. Pie composition reflects the preferences of the Swiss and foreigners; e.g., if the blue area is two times larger than red, then a random foreigner is two times more likely than a random Swiss person to select the community in question.

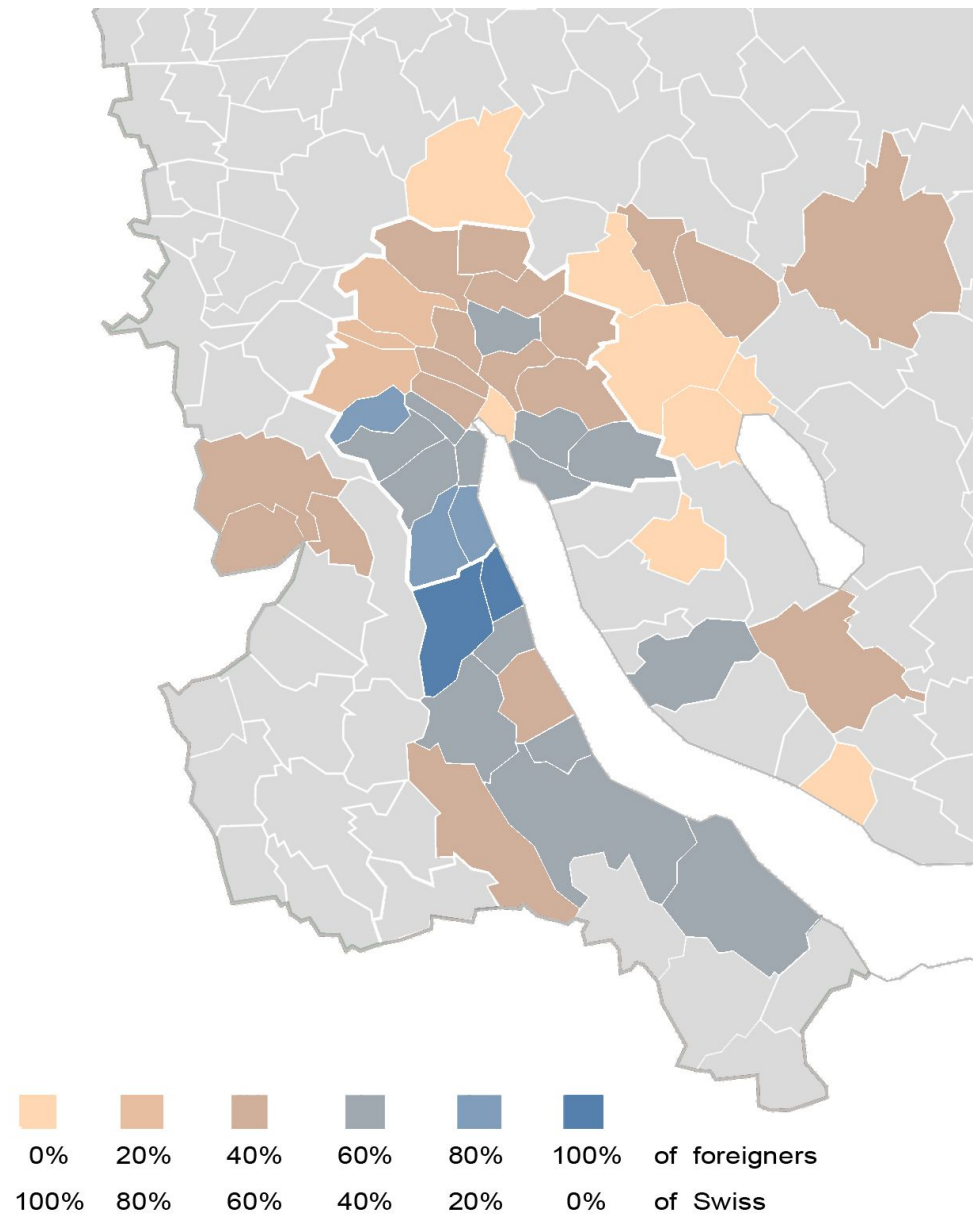


Figure 8: Fraction of foreign and Swiss population per quarter in Zurich. Results corrected for sampling weights bias.

Interpretation: orange coloured quarters indicate 100% of foreign population, blue coloured quarters indicate 100 % of Swiss population, light grey coloured quarters - not enough significant data points

4.2. Home-ownership vs. renting

Regarding home-ownership vs. renting, the *Swiss want to rent twice more often than foreigners* (36% vs. 19%, respectively). At the same time, the Swiss are twice as likely to own property than foreigners (Figure 9).

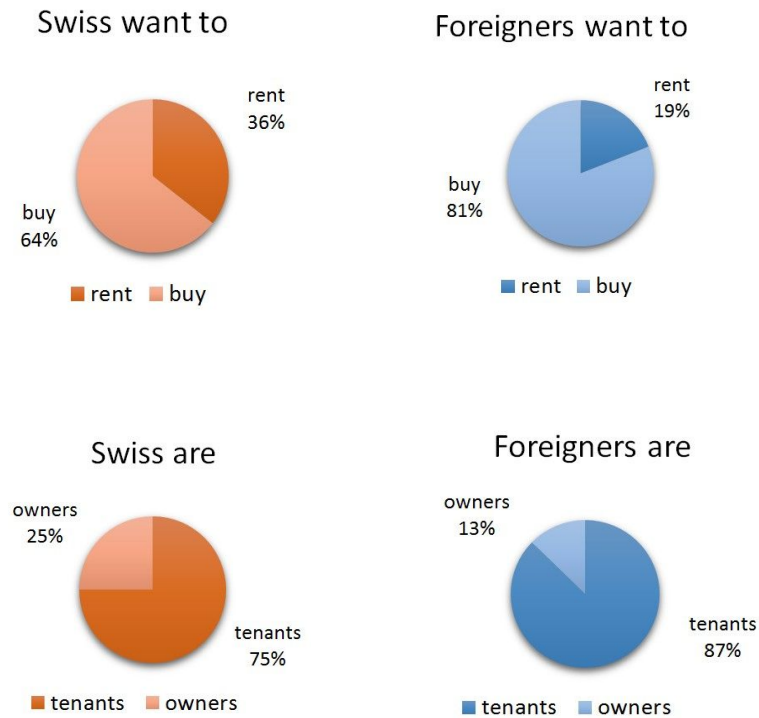


Figure 9: Comparison of the Swiss and foreigners regarding rent or buy preference and owner or tenant proportion

To get more insight into the issue, a logistic regression with the binary rent or buy dependent variable was run (Appendix 7). Although being Swiss appears to be strongly linked with renting, the p-value of this result is far from significant (0.58), so no firm conclusions can be drawn. On the other hand, this analysis provides some interesting insights on what influences the ownership vs. rent decision. From the analysis it is clear that buying real estate is positively correlated with person's age and personal preferences (Appendix 7).

The above finding can also be explained by the general statistics regarding ownership rates across the world (Figure 10). Clearly, the higher the home-ownership rate in the country of origin, the stronger the intent of home owning in Switzerland. In other words *when migrating, people take their home-ownership preferences with them.*

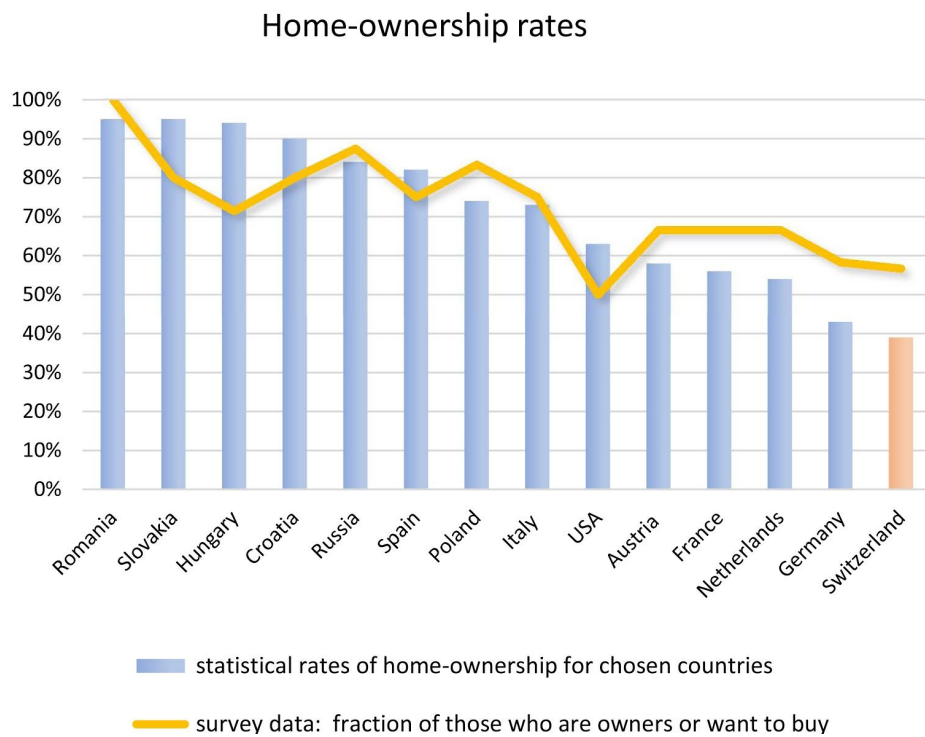


Figure 10: People's preferences for home-ownership or renting (based on data from the questionnaire) in comparison to home-ownership rates across different countries in the world. Only countries with at least ten survey data points are shown.

The way people grew up, in a house or a flat and in an owned or rented place, is highly correlated with one's preferences in adult life. We can conclude from this that the decision between ownership and rent is more culturally than economically dictated.

Moreover, as expected, those who live in a *house are twice as likely to own than rent.*

4.3. Tax advantage vs. distance to work

Taxes on cantonal level were taken under consideration.

When analysing the locations of Swiss and foreign households, it can be concluded that *the same fraction of both groups, 6% of the Swiss and foreigners move further from*

their workplace to save on cantonal taxes. These results are refined by excluding those Swiss who live in tax-advantaged cantons mainly due to closeness to their relatives and not because of the advantage that lower taxation levels bring.

Furthermore, as expected, the majority of those who declared taxes to be an important location criterion live in low-tax locations, either cantons with a tax advantage like Zug and Schwyz (lower taxes on cantonal level), or communities within Canton of Zurich with lower taxes such as: Kilchberg, Rueschlikon, Thalwil (lower taxes on communal level).

However, when asked about the importance of tax advantage in the questionnaire, Swiss people and foreigners differ. The tax advantage as a location criterion is mentioned twice as often by foreigners as the Swiss. This rule is valid for all of the respondents as well as for those who already live in low tax regions (Figure 11).

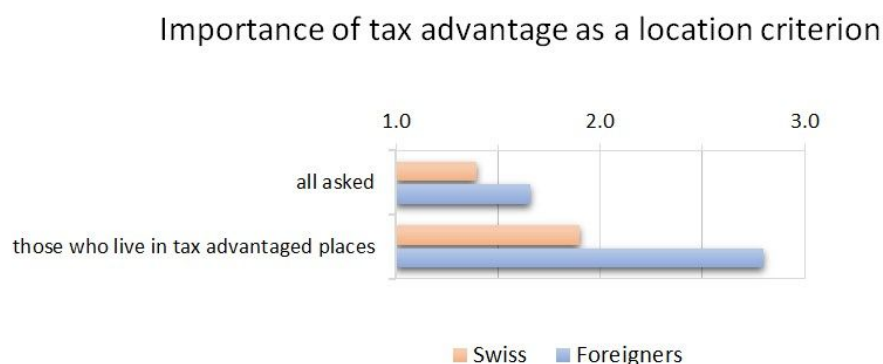


Figure 11: Importance of taxation levels as a location criterion for the Swiss and foreigners
Interpretation: 1.0 - not important, 3.0 - very important

Logistic regression confirms some of the above findings. There is no significant difference between the Swiss and the non-Swiss when seeking tax advantages by relocating to lower-tax cantons. However, as expected, those who claim taxes to be important tend to relocate to lower-tax areas (see Appendix 8). Predictably correlated with this finding is that these people regard distance to work, local community or price of living as less important location criteria, which seems logical.

4.4. Other location preferences

4.4.1. House vs. flat

Swiss people are twice as likely to live in houses (rented or owned) than foreigners. This is despite the fact that more foreigners than Swiss people prefer to live in a house (Figure 12).

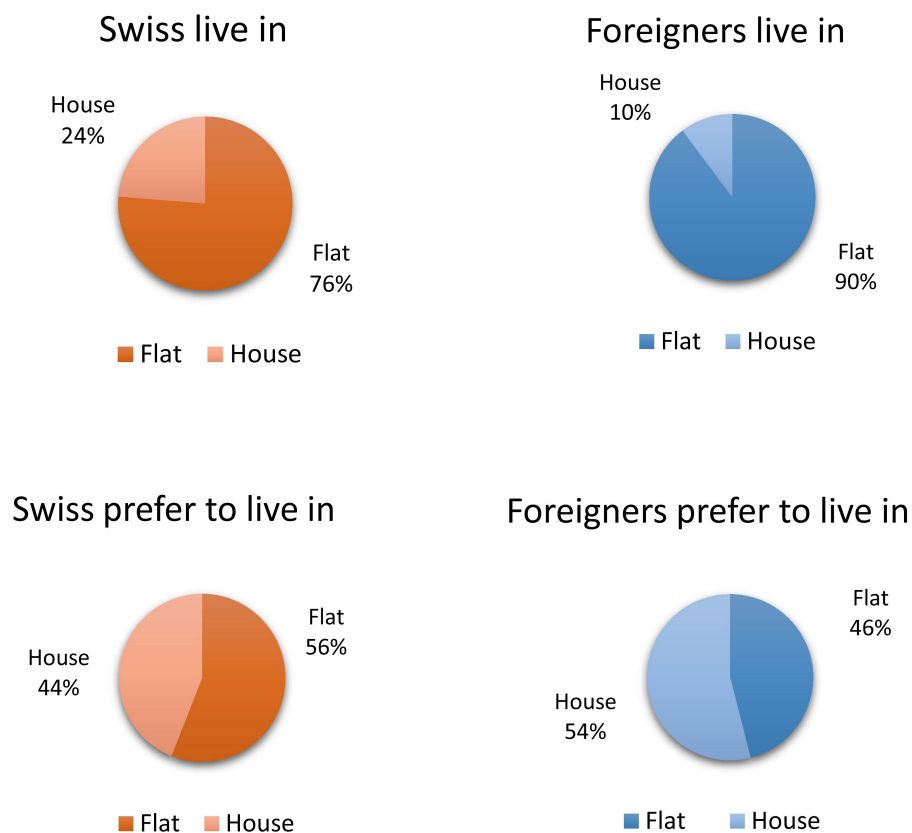


Figure 12: Comparison of the Swiss and foreigners regarding house vs. flat preference and reality

A possible explanation for the above could be that some Swiss may have inherited houses from previous family generations. The survey did not pose any questions around inheritance of property due to privacy reasons, thus it is impossible to eliminate this bias. A further possible explanation according to Patrick Schnorf is that on arrival to Zurich, foreigners don't know the market well and tend primarily to settle down in central locations.⁴⁹ This naturally restricts their choice of flats vs. houses due to the access to this type of accommodation and its affordability.

⁴⁹ cf. Schnorf 2014, citing from Soukup 2014

Moreover, there seems to be a significant correlation between preference for a house or a flat and the type of accommodation respondents grew up in as a child. Indeed, almost twice as many foreigners than Swiss people grew up in a house, and these individuals demonstrate a stronger preference for this type of accommodation in adulthood.

The following findings are a consequence of the Swiss being more likely to live in a house than foreigners:

- Swiss occupy more rooms (Swiss people have on average 1 room more than foreigners)
- Foreigners are twice as likely to walk to work than the Swiss
- Swiss are more likely to travel to work by car (Swiss people use car twice more often than foreigners)
- Swiss live further from their workplace (Swiss people commute 6 minutes or in other words 20% longer)

4.4.2. Money matters

Money is a key criterion in housing decisions yet it is not the main criterion. To foreigners money related issues as location criteria (taxes & price) are more important than to the Swiss (Figure 13).

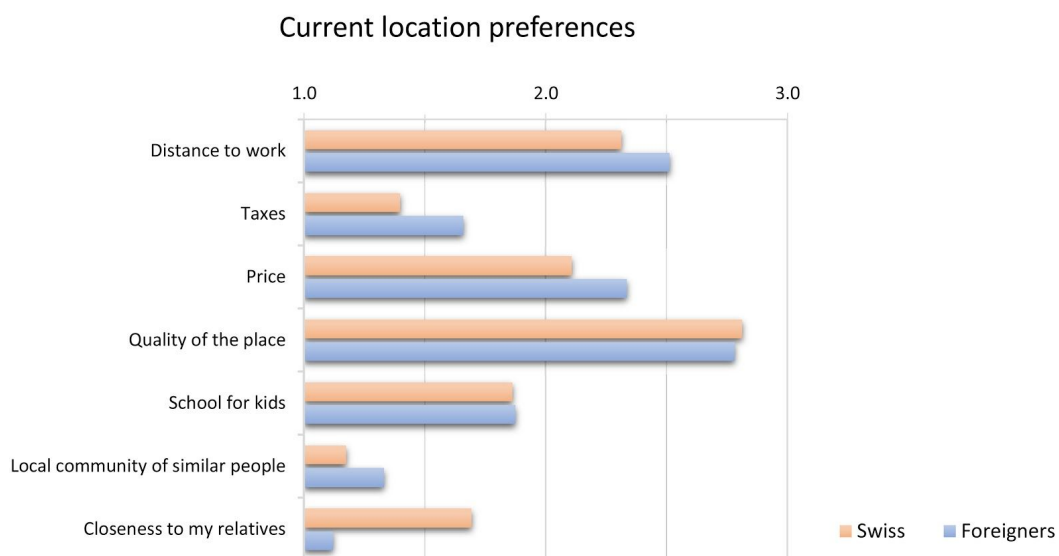


Figure 13: Comparison of the Swiss and foreigners regarding location preferences
Interpretation: 1.0 - not important, 3.0 - very important

One explanation for the above may be that many foreigners move to Switzerland temporarily, seeking to put some money aside before returning to their home country.

Nevertheless, as much as money matters, by far the strongest location criterion for both groups is the quality of the place. It is also the main incentive for people to relocate within Switzerland (Figure 13).

4.4.3. Risk approach

Foreigners are twice as risk averse than the Swiss.

It should be noted however, that risk of the investment is not named as a top barrier in buying real estate. When it comes to investment, foreigners name financial issues like high prices of real estate in Switzerland and high down payments, as the main drawbacks preventing them from buying (Figure 14).

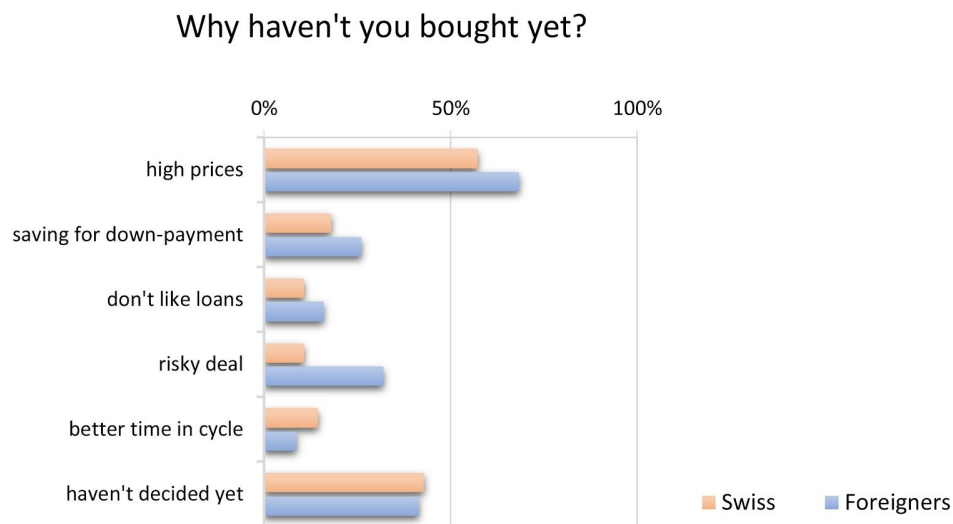


Figure 14: Comparison of the Swiss and foreigners regarding reasons behind waiting with investment in real estate

4.4.4. Building one's place

Foreigners want to build their own place three times more often than the Swiss (Figure 15). In Switzerland living in an old house or renovated building is highly-valued whereas in the new world (USA, Australia, New Zealand) it is more common to build one's own place.

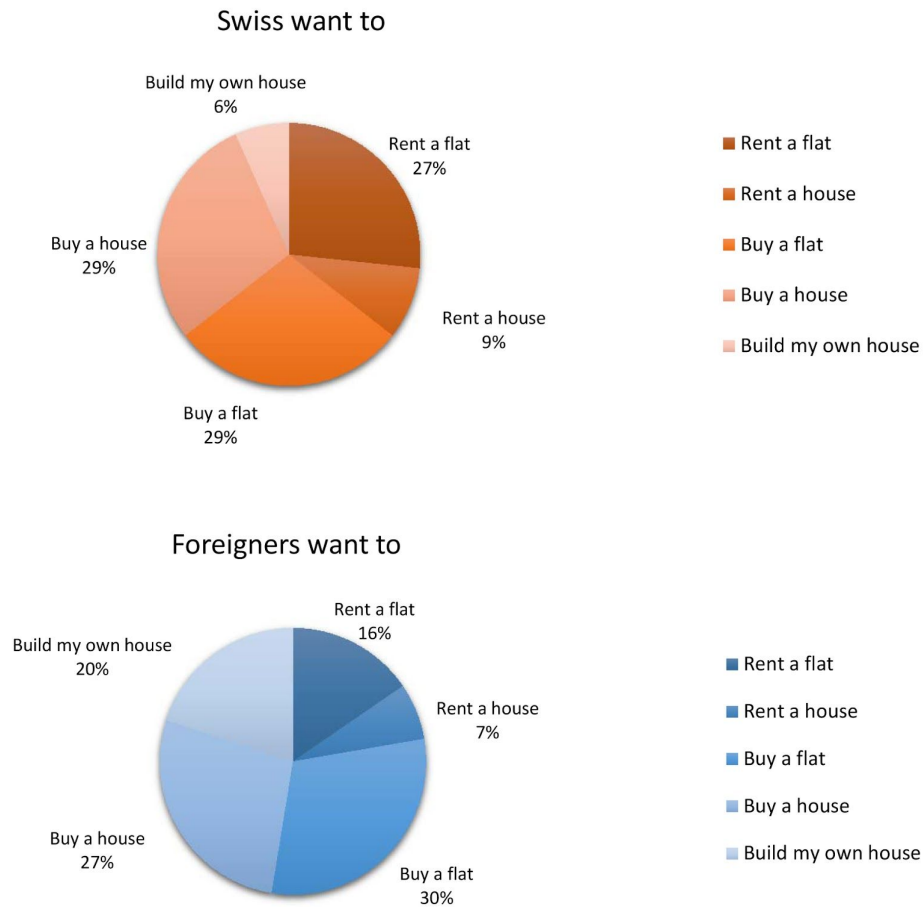


Figure 15: Comparison of the Swiss and foreigners regarding ideal form of living

4.4.5. Commute time

A Swiss *owner* travels to work on average 16 minutes longer than a foreign owner (Figure 16). A possible explanation could be that foreigners in Switzerland are new settlers. When buying real estate foreigners have fewer constraints, such as closeness to their families or friends ties, and thus are more flexible in choosing their location. In contrast, foreigners do not usually inherit property in Switzerland, and instead chose their home location carefully to be close to work. Thus they can walk, bike and have shorter commutes to work.

This difference in commute is reduced to 4 minutes for *tenants* only. Neither the Swiss nor foreign tenants are subject to any constraints mentioned above.

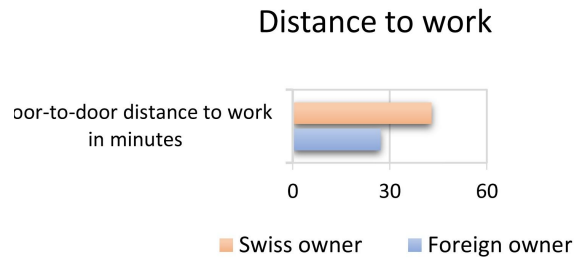


Figure 16: Comparison of the Swiss and foreign owners regarding distance to work in minutes

4.4.6. Means of transport

Swiss people are twice as likely to commute by car than foreigners (Figure 17). This finding is totally unexpected. Could the Swiss be ecologically less conscious? A first explanation that comes to mind would be that the Swiss have houses far away (see Section 4.4.1.). However, the conclusion from Section 4.4.6. still holds true when considering tenants only, in which case the distance to work is roughly the same.

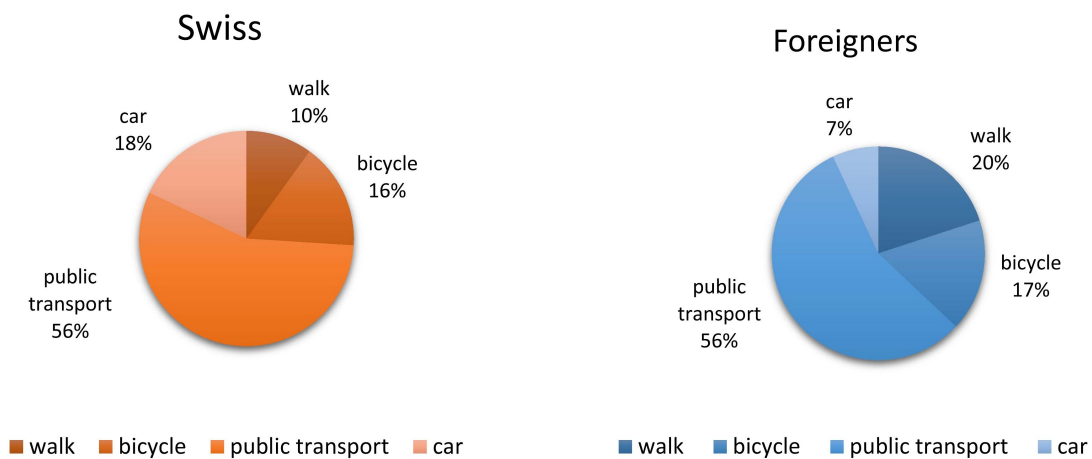


Figure 17: Comparison of the Swiss and foreigners regarding means of transport to work

4.4.7. Closeness of family

Not surprisingly, closeness to family is fairly important for the Swiss, whereas for foreigners living in Switzerland it is of little importance (Figure 13). Indeed, foreigners who migrate to Switzerland already made the decision that geographically they will live far from their families.

5. Conclusion

5.1. Summary of results

Foreigners' choices regarding household location don't differ significantly from those of the Swiss. However, the following interesting differences and facts were observed:

- The phenomenon of Googlewil is confirmed: *among Zurich Googlers a random foreigner is nine times more likely to live in Adliswil than a random Swiss*. The main reasons mentioned include closeness to work, closeness to an expat community and tax advantage on communal level.
- Ownership vs. renting: Swiss people want to rent twice more often than foreigners. Interestingly, at the same time, the Swiss are home-owners twice as often than foreigners.
- When migrating, people take their home-ownership preferences from their country of origin with them. There is a correlation: the higher the home-ownership rate for a given country, the stronger the preference for owning among people of this nationality in Switzerland.
- Tax advantage: the same fraction of both the Swiss and foreigners, 6%, move further from their workplace to save on cantonal taxes.
- House vs. flat: Swiss people are twice as likely to live in houses (rented or owned) than foreigners. This is despite the fact that more foreigners than Swiss people prefer to live in houses.
- Money matters: to foreigners money related issues as location criteria (taxes & price) are more important than to the Swiss. Nevertheless, as much as money matters, the quality of location matters more.
- Risk approach: foreigners are twice as risk averse than the Swiss.
- Foreigners want to build their own place three times more often than the Swiss.

- Commute time: Swiss home-owners commute to work on average 16 minutes longer than foreign home-owners (4 minutes longer for a Swiss tenant).
- Means of transport: Swiss people are twice more likely to commute by car than foreigners.
- Closeness to family is important for the Swiss, but not for foreigners who moved to Switzerland.

5.2. Discussion

Firstly, it is important to keep in mind the constraints of the above conclusions resulting from the narrowing of the research area (Section 1.2). The analysed sample of the Swiss and foreigners is narrowed down geographically, by income and by employment sector. Thus, it could be argued whether the above conclusions are applicable to a broader population of the Swiss and foreigners living in Zurich.

The main finding of this thesis, that the differences between the Swiss and foreigners regarding their location choices do not differ significantly may, on the face of it, be surprising. Despite this overarching finding, there are some important differences between the groups. Most notably, one of the most interesting conclusions from this research is the fact that human preferences do not change much even after migrating to a new country. In other words, the conditions in which one grew up impact people's decisions in later life. For instance, people take their inborn preferences regarding home-ownership and preference for house vs. flat when migrating. This conclusion is supported e.g., by the strong correlation between the home-ownership rates for different countries and the preference for owning or renting typical for the representatives of different foreign nationalities living in Switzerland.

The findings of this study are also relevant for the future investments in housing real estate in Zurich. This thesis indicates that IT staff prefer to live close to their office. At the same time Google wants to grow. Between 2020 and 2030 Google Zurich plans to move all employees to the new location at Europaallee. The capacity of this office-space is 5'000 workplaces. If Google keeps the offices at the current location, the Hurlimann Areal with 1'500 places, it could have the possibility to increase its capacity to 6'500

workplaces.⁵⁰ The new Googler population across both locations could make up 1.5% of the whole population of the city of Zurich (currently 400'000 inhabitants). This minority of individuals with strong purchasing power and should not be ignored when planning investments in housing and real estate in central locations in Zurich.

5.3. Open questions, ideas for future research

It would be interesting to repeat the study in a decade and explore what happens when Google Zurich relocates to Europaallee. Would the existing tenants, who are flexible regarding location change, move closer to the office? Would the home-owners be more inclined to sell their properties in Kilchberg, Adliswil or Wollishofen and look to buy real estate in Wipkingen or Zurichberg? Would people's commute to work be affected, e.g., shorter commute and in favour for public transportation or bicycle? Would the sunny side of Lake Zurich, the 'Sonnenküste', gain more popularity in comparison to the currently favoured left lake coast 'Pfnüselküste'? Finally, would these small inner city migrations be noticeable in the demand-supply profile for Zurich?

⁵⁰ cf. NZZ 2014

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Appendices

Appendix 1. Questionnaire

Where and How do Swiss and foreigners live in CH?

purpose of the study: Master Thesis, MAS Real Estate Management, Universität Zürich
<https://www.uzh.ch/cmsssl/curem/de.html>

Thanks for your help !!!

Marta Kurant

Basic Information

1. Age

Mark only one oval.

- ☐ below 20
☐ 20 - 30
☐ 30 - 40
☐ 40 - 50
☐ above 50

2. Gender

Mark only one oval.

- ☐ Female
☐ Male
☐ Other: _____

3. Education

Mark only one oval.

- ☐ Higher (master or phd)
☐ Middle (high school, college)
☐ Basic (obligatory level)

4. Household you live in

Mark only one oval.

- ☐ Single person household
☐ Me & partner
☐ Family with child(ren)
☐ WG (community of students or friends)

Swiss or non-Swiss

5. Are you Swiss?

Mark only one oval.

- ☐ Yes Skip to question 11.
☐ No Skip to question 6.
☐ I became Swiss in the last 10 years Skip to question 11.

Foreigners

6. Country of origin

7. Do you speak German?

Mark only one oval.

	1	2	3	4	5	
not at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	fluent

8. Since when do you live in CH?

Mark only one oval.

- ☐ 2016
☐ 2015
☐ 2014
☐ 2013
☐ 2012
☐ 2011
☐ 2010
☐ 2009
☐ 2008
☐ 2007
☐ 2006
☐ 2005
☐ 2004
☐ 2003
☐ 2002
☐ 2001
☐ 2000
☐ before 2000

9. Reason for moving to CH

Mark only one oval.

- ☐ Studies
- ☐ Current job
- ☐ Other job
- ☐ Joining family member in CH
- ☐ Other: _____

10. Intended length of stay in CH

Mark only one oval.

- ☐ Less than 2 years
- ☐ 2 - 10 years
- ☐ I want to settle down here
- ☐ Don't know, I plan my life as I go

Work

11. Employment

Mark only one oval.

- ☐ Stay-at-home parent Skip to question 15.
- ☐ Primary breadwinner Skip to question 12.
- ☐ Secondary breadwinner Skip to question 12.
- ☐ I don't work Skip to question 15.
- ☐ Other: _____ Skip to question 15.

Work location

12. Where is your work located?

city and district, e.g., Zürich Enge

13. How do you usually commute to work?

Mark only one oval.

- ☐ Walk
- ☐ Bicycle
- ☐ Public transport
- ☐ Car
- ☐ Other: _____

14. Door-to-door distance to work

Mark only one oval.

- ☐ < 10 min
- ☐ 10 - 20 min
- ☐ 20 - 40 min
- ☐ 40 - 60 min
- ☐ > 1h

Home location

15. Postal code of your home

16. Type of accommodation

Mark only one oval.

- ☐ Flat
- ☐ House
- ☐ Other: _____

17. Number of rooms at your place

Mark only one oval.

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ above 5

18. You grew up in

Mark only one oval.

- ☐ Urban flat in a block of flats within a big city
- ☐ Flat in the suburbs of a city
- ☐ House in a city
- ☐ House on a countryside
- ☐ Other: _____

19. **Your family**
Mark only one oval.

☐ Owned the place

☐ Rented the place

☐ Other: _____

Preferences

20. **Why do you live at your CURRENT place?**
Rate the following criteria upon importance:
Mark only one oval per row.

	very important	somewhat important	not important
Distance to work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Taxes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Price	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality of the place	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
School for kids	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local expat community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Closeness to my relatives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

21. **Stay or relocate?**
If you could choose an ideal location for your household, it would be
Mark only one oval.

☐ I'm happy with my current location Skip to question 24.

☐ Return to home country Skip to question 22.

☐ Move to some other country Skip to question 22.

☐ Relocate within Switzerland to another city, community, district Skip to question 22.

Relocation

22. **Where would you like to relocate? IMPORTANT QUESTION**
district, city, country

23. **Main reasons for POTENTIAL RELOCATION**
Rate the following criteria upon importance:
Mark only one oval per row.

	very important	somewhat important	not important
Distance to work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Taxes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Price	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality of the place	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
School for kids	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local expat community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Buying real estate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Want a bigger / smaller place	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Closeness to my relatives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Rent or buy?

24. **Are you an owner or a tenant?**
Mark only one oval.

☐ Tenant (I'm renting) Skip to question 25.

☐ Owner Skip to "THANK YOU !!!!."

Wanna buy?

25. **Ideally I'd like to:**
Mark only one oval.

☐ Rent a flat Skip to "THANK YOU !!!!."

☐ Rent a house Skip to "THANK YOU !!!!."

☐ Buy a flat Skip to question 26.

☐ Buy a house Skip to question 26.

☐ Build my own place Skip to question 26.

Buying real estate

26. **Why haven't you bought anything yet?**
Check all that apply.

☐ High prices of real estate in CH

☐ Saving for the down-payment

☐ I don't like loans

☐ Risk connected with the deal, like economy, interest rates, job-security, fluctuating prices of real estate, housing bubble....

☐ Waiting for a better point in the economical cycle

☐ Haven't decided yet what I want

27. **Are you actively searching for a flat or house to buy?**
Mark only one oval.

123

not actively☐☐☐very actively

THANK YOU !!!!

Appendix 2. Raw data from the questionnaire

<https://drive.google.com/open?id=0B2gzcrN8crd-SHQ1d2dQSzl1Nmc>

Appendix 3. Encoded data from the questionnaire, prepared for the regression analysis

<https://drive.google.com/open?id=0B2gzcrN8crd-eF9icWxTVk50OEK>

Appendix 4. Binary variables

Variable	Definition
Are you Swiss?	= 1 if Swiss, = 0 if foreigner
Where do you live?	= 1 if in Googlewil, = 0 if not
Are you an owner or a tenant?	= 1 if owner, = 0 if tenant
Your family owned or rented?	= 1 if owned, = 0 if rented
Ideally you'd like to own or rent?	= 1 if own, = 0 if rent
Type of accommodation	= 1 if house, = 0 if flat
You grew up in	= 1 if house, = 0 if flat
Your ideal accommodation	= 1 if house, = 0 if flat

Table 2: List of binary variables used

Appendix 5. Linear regression to predict probability of number of rooms people have

Regression Statistics	
Multiple R	0.684048013
R Square	0.467921684
Adjusted R Square	0.440363843
Standard Error	1.108122647
Observations	265

ANOVA					
	df	SS	MS	F	Significance F
Regression	13	271.0484915	20.84988	16.9796206	9.16017E-28
Residual	251	308.2118859	1.227936		
Total	264	579.2603774			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	88.11	52.03	1.69	0.09	-14.36	190.58	-14.36	190.58
Age	0.03	0.01	3.14	0.00	0.01	0.05	0.01	0.05
Household you live in: no.of people	0.66	0.11	5.98	0.00	0.44	0.88	0.44	0.88
Are you Swiss?	-1.08	0.79	-1.37	0.17	-2.64	0.47	-2.64	0.47
Do you speak German?	-0.02	0.07	-0.29	0.77	-0.16	0.12	-0.16	0.12
Since when do you live in CH?	-0.04	0.03	-1.69	0.09	-0.09	0.01	-0.09	0.01
Door-to-door distance to work	0.01	0.00	2.49	0.01	0.00	0.02	0.00	0.02
Type of accommodation	1.24	0.25	4.91	0.00	0.74	1.73	0.74	1.73
You grew up in	0.44	0.16	2.78	0.01	0.13	0.75	0.13	0.75
Your family owned or rented	-0.04	0.18	-0.23	0.82	-0.39	0.31	-0.39	0.31
Your ideal form of living: buy or rent	-0.10	0.19	-0.53	0.60	-0.48	0.28	-0.48	0.28
Your ideal form of living: house or flat	0.34	0.16	2.15	0.03	0.03	0.65	0.03	0.65
Are you an owner or a tenant?	0.31	0.25	1.24	0.22	-0.18	0.80	-0.18	0.80
Are you actively searching for a flat or house to buy?	-0.14	0.16	-0.91	0.36	-0.46	0.17	-0.46	0.17

Appendix 6. Logistic binary regression to predict probability that a person will choose to live in Googlewil

Model parameters (Variable Adliswil & around):				
Source	Value	Standard error	Wald Chi-Square	Pr > Chi²
Intercept	-6.452	1.611	16.044	< 0.0001
Age	0.050	0.029	3.068	0.080
Household you live in: no.of people	0.705	0.356	3.922	0.048
Are you Swiss?	-3.303	2.002	2.724	0.099
Do you speak German?	0.053	0.161	0.107	0.744
Since when do you live in CH?	0.011	0.059	0.038	0.846
Door-to-door distance to work	0.006	0.011	0.256	0.613
Type of accommodation: house or flat	-0.959	0.797	1.446	0.229
Number of rooms at your place	-0.212	0.188	1.277	0.259
You grew up in house or flat	0.215	0.400	0.289	0.591
Your family owned or rented	0.993	0.550	3.260	0.071
Your ideal form of living: buy or rent	0.901	0.617	2.138	0.144
Your ideal form of living: house or flat	0.200	0.420	0.227	0.634
Are you an owner or a tenant?	0.167	0.648	0.067	0.796
Are you actively searching for a flat or house to buy?	0.201	0.402	0.251	0.617

Appendix 7. Ownership vs. rent preference analysed by means of logistic regression

Source	Value	Standard error	Wald Chi-Square	Pr > Chi²
Intercept	1.116	1.196	0.870	0.351
Age	-0.040	0.024	2.652	0.103
Household you live in: no.of people	0.041	0.285	0.020	0.887
Do you speak German?	-0.153	0.169	0.818	0.366
Since when do you live in CH?	0.022	0.064	0.120	0.729
Door-to-door distance to work	0.015	0.012	1.551	0.213
Number of rooms at your place	0.007	0.152	0.002	0.961
Are you Swiss?-0	0.000	0.000		
Are you Swiss?-1	-1.131	2.059	0.302	0.583
Type of accomodation: house of flat-0	0.000	0.000		
Type of accomodation: house of flat-1	-0.143	0.782	0.033	0.855
You grew up in house or flat-0	0.000	0.000		
You grew up in house or flat-1	-0.183	0.417	0.192	0.661
Your family owned or rented-0	0.000	0.000		
Your family owned or rented-1	0.520	0.418	1.548	0.213
Your ideal form of living: house or flat-0	0.000	0.000		
Your ideal form of living: house or flat-1	1.377	0.377	13.346	0.000
Adliswil & around-0	0.000	0.000		
Adliswil & around-1	0.770	0.586	1.730	0.188
Are you an owner or a tenant?-0	0.000	0.000		
Are you an owner or a tenant?-1	3.305	1.434	5.314	0.021
Are you actively searching for a flat or house to buy?-1	0.000	0.000		
Are you actively searching for a flat or house to buy?-2	3.764	1.440	6.838	0.009
Are you actively searching for a flat or house to buy?-3	2.983	1.598	3.484	0.062

Appendix 8. Tax preference analysed by means of logistic regression

Model parameters (Variable Where do you live? TAXES):				
Source	Value	Standard error	Wald Chi-Square	Pr > Chi²
Intercept	0.718	4.247	0.029	0.866
Age	-0.066	0.071	0.856	0.355
Household you live in: no.of people	-0.553	1.146	0.233	0.630
Are you Swiss?	-0.446	1.212	0.135	0.713
Door-to-door distance to work	-0.058	0.030	3.732	0.053
Type of accomodation: house of flat	0.086	1.463	0.003	0.953
Number of rooms at your place	0.441	0.426	1.072	0.301
Your ideal form of living: buy or rent	-0.137	1.306	0.011	0.916
Your ideal form of living: house or flat	0.552	0.958	0.332	0.564
Are you an owner or a tenant?	-0.481	1.138	0.179	0.672
Are you actively searching for a flat or house to	-0.728	0.940	0.601	0.438
Importance: Distance to work	-1.459	0.711	4.217	0.040
Importance: Taxes	3.123	0.783	15.907	< 0.0001
Importance: Price	-1.249	0.755	2.736	0.098
Importance: School for kids	0.957	0.777	1.515	0.218
Importance: Local community of similar people	-2.517	1.213	4.306	0.038
Importance: Closeness to my relatives	1.084	0.800	1.835	0.176

Ehrenwörtliche Erklärung

Ich versichere hiermit, dass ich die vorliegende Arbeit mit dem Thema „*The Phenomenon of Googlewil, Where and how do Swiss and foreigners live in Zurich?*“ selbstständig verfasst und keine anderen Hilfsmittel als die angegebenen benutzt habe. Alle Stellen die wörtlich oder sinngemäss aus veröffentlichten oder nicht veröffentlichten Schriften entnommen sind, habe ich in jedem einzelnen Falle durch Angabe der Quelle (auch der verwendeten Sekundärliteratur) als Entlehnung kenntlich gemacht. Die Arbeit hat in gleicher oder ähnlicher Form noch keiner anderen Prüfungsbehörde vorgelegen und wurde auch noch nicht veröffentlicht.

Zürich, den 29.08.2016

A handwritten signature in black ink, appearing to read 'M. Kurant', with a long horizontal stroke extending to the right.

Marta Kurant