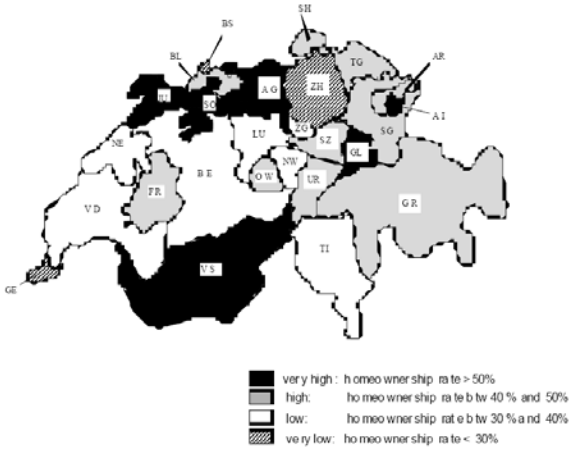


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# The Determinants of Homeownership across Swiss Cantons

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# The dream of homeownership …

# Introduction

- In Switzerland, about 38% of all households live in their own house or apartment (data for 2000).

- Even though the homeownership rate has steadily increased, mainly since 1990, it is still considered as very low compared to other countries.

- Within Switzerland, however, there exist large differences between the cantons and regions, respectiveley (e.g. canton Wallis 60% vs. canton Basel-Stadt 15%).

- The complex reasons behind these large disparities and their consequences have not been systematically investigated within an integrated framework.

# Objectives and new aspects of our study

- What are the main determinants of the homeownership rates across Swiss cantons and regions, and how can the disparities be explained?

- What are the consequences of these disparities for the economic and spatial development of Switzerland?

- What are possible policy recommendations that can be derived from our analyses, also in view of the existing (and discussed) law-based policy measures to promote homeownership? (HEV: „Eigene vier Wände dank Bausparen“ „Sicheres Wohnen im Alter“; SGFB: „Bausparinitiative“)

➡ First study that analyzes these issues within an econometric framework with Swiss data.

# International homeownership rates

Spain: 87%

Norway: 78%

Ireland: 77%

Italy: 73%

France: 58%

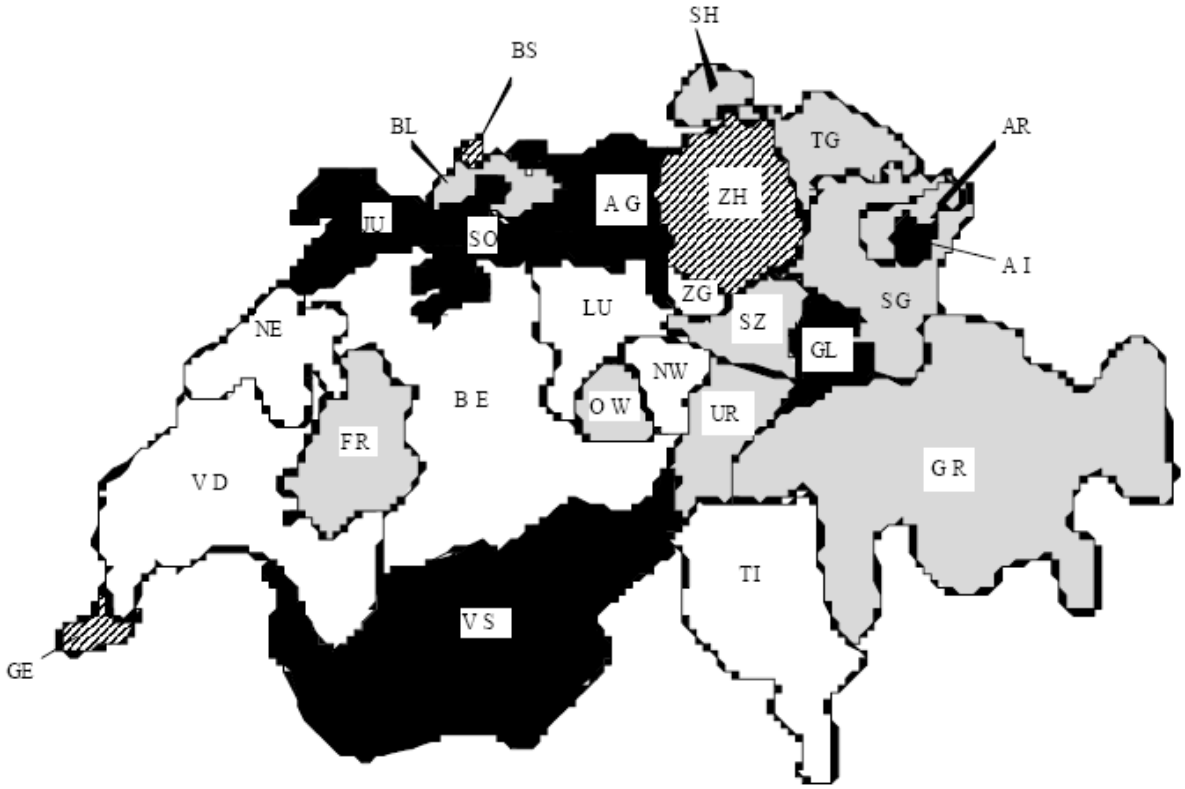
Austria: 56%

Germany: 43%

**Switzerland: 38%**

Source: Euroconstruct (2008)

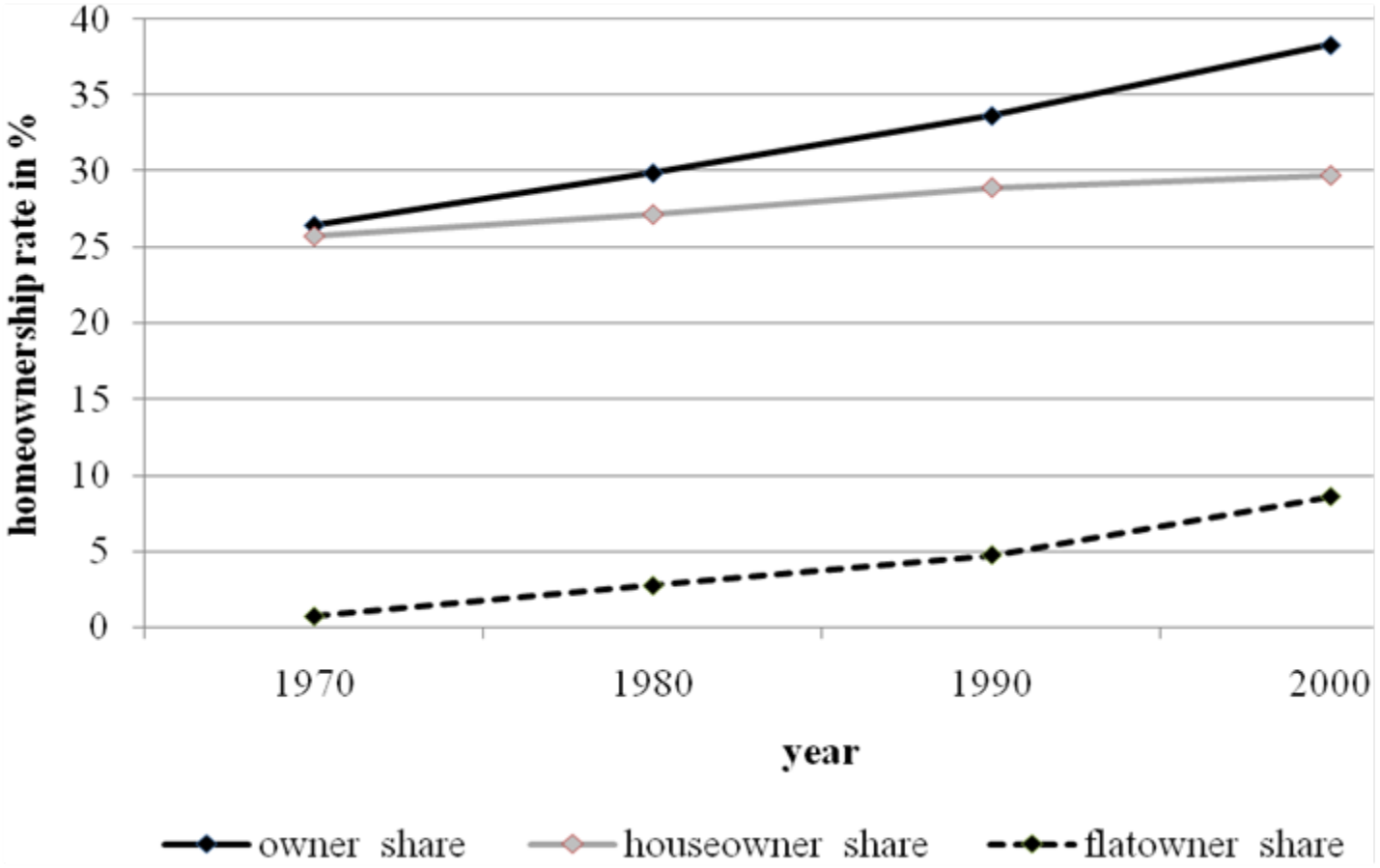
# Homeownership across Swiss cantons in 2000




very high : homeownership rate > 50%
high: homeownership rate btw 40 % and 50%
low: homeownership rate btw 30 % and 40%
very low: homeownership rate < 30%

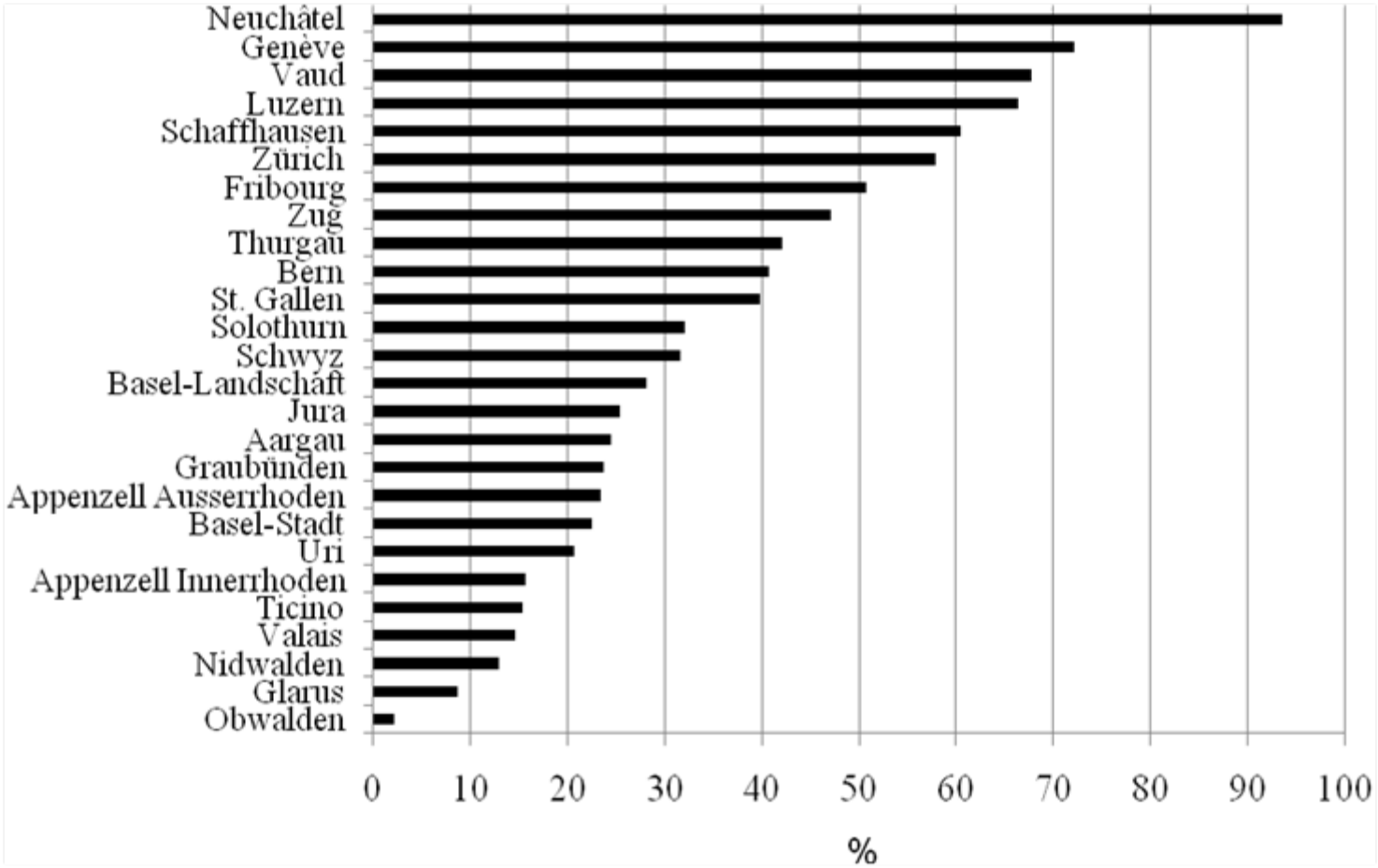
Source: Volkszählung 2000. Eigene Berechnugen.

# Homeownership in Switzerland from 1970 to 2000



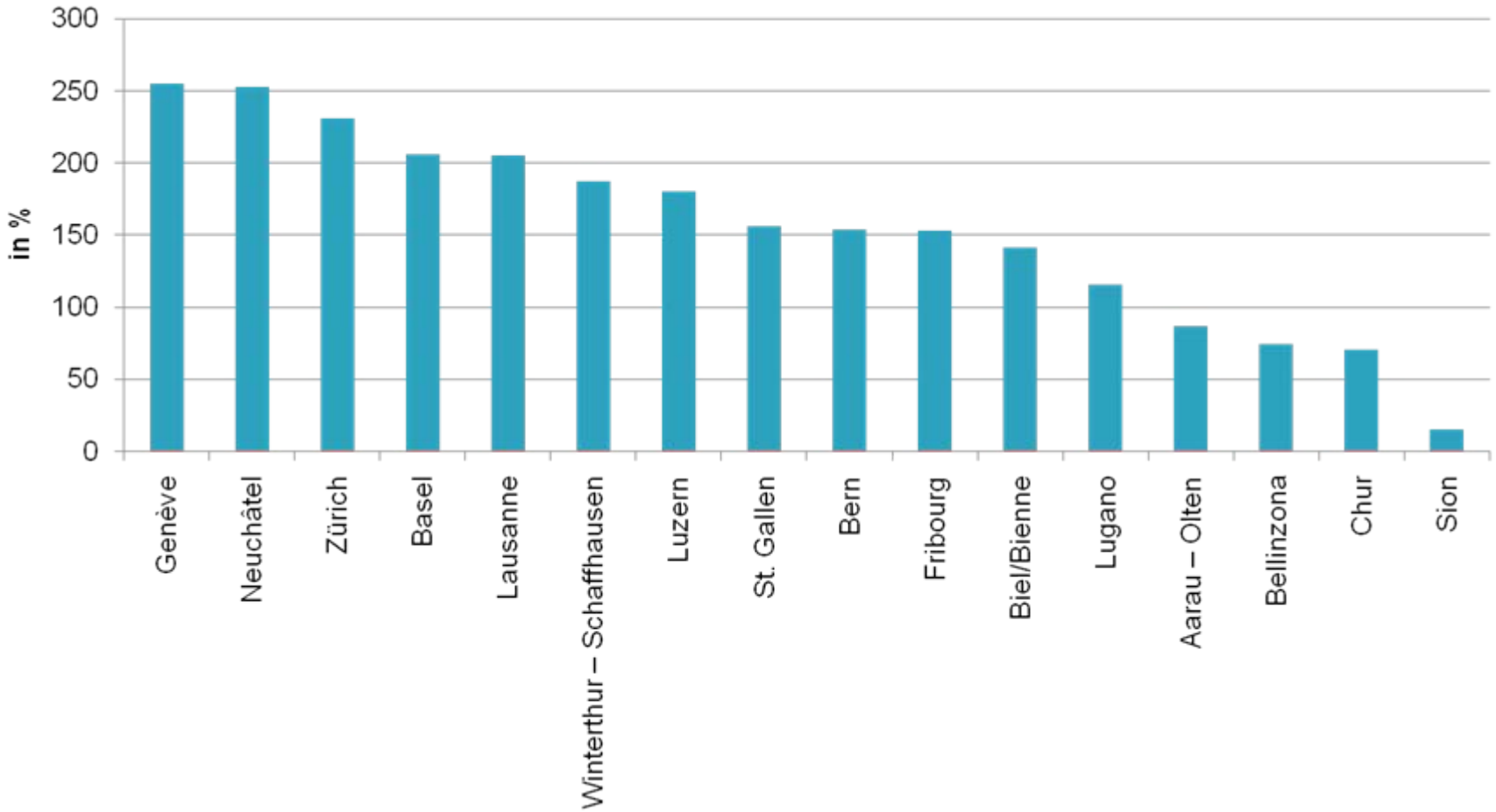

Source: Volkszählungen 1970, 1980. 1990 und 2000. Eigene Berechnugen.

# Relative change in homeownership rates (in %) from 1970 to 2000 by canton



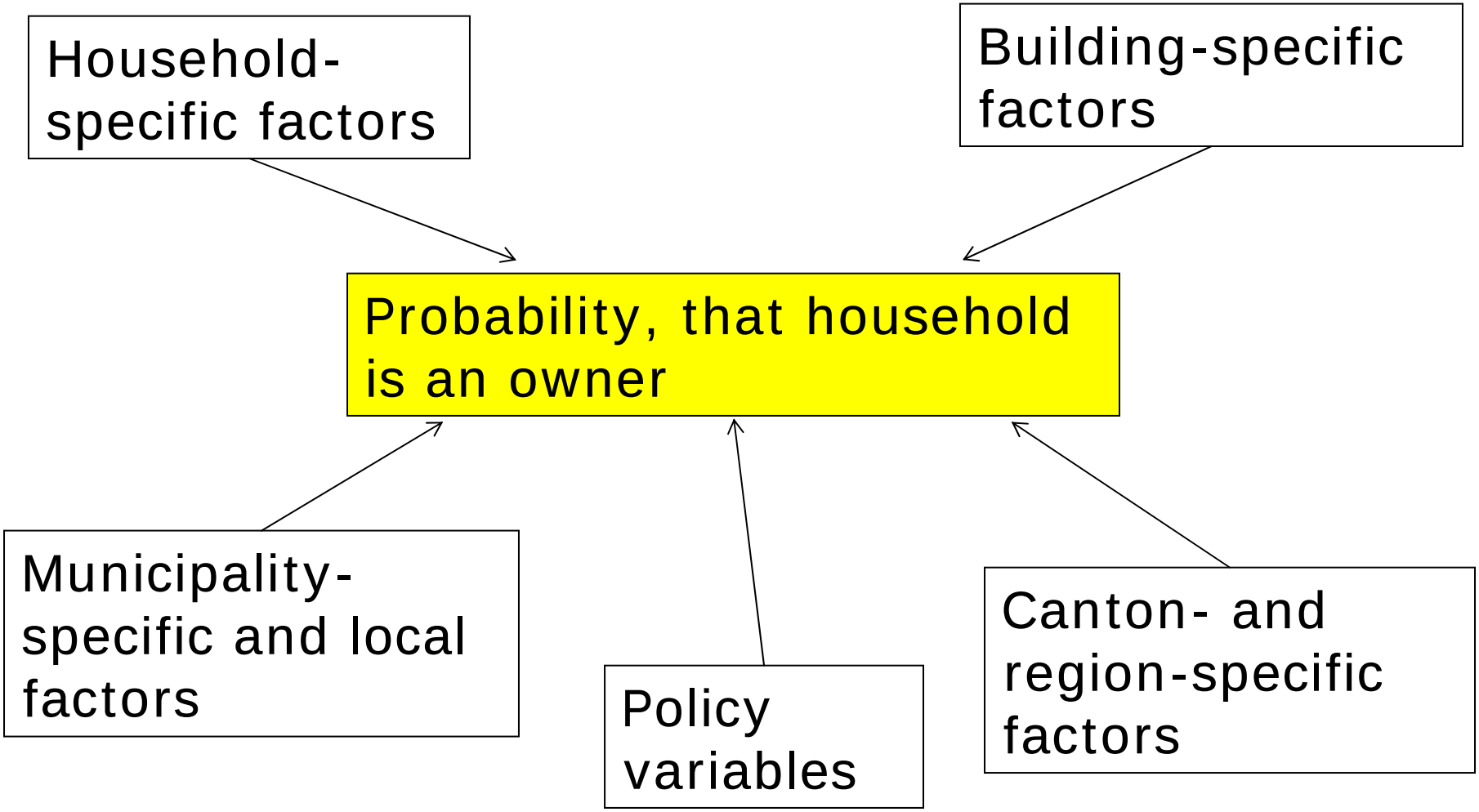

Source: Volkszählungen 1970 und 2000. Eigene Berechnugen.

# Relative change in homeownership rates (in %) from 1970 to 2000 by labour market region




Source: Volkszählungen 1970 und 2000. Eigene Berechnungen.

# The determinants of homeownership



# Model specification

$$\Pr(own_{ilt}) = \alpha_0 + \alpha_1 x_{it} + \alpha_2 a_{it} + \alpha_3 (A_{lt})_{it} + \alpha_4 (P_{lt})_{it} + \alpha_5 D(l)_{it} + \varepsilon_{it}$$

Probability, that household is an owner

House-hold specific factors

Building-specific factors

Municipality-specific and local factors

Policy variables

Canton- and region-specific dummies

Error term

-Estimation method: Logit ({0,1} as LHS var.)

-Separate estimations for censuses 1970, 1980, 1990 and 2000 plus change over time

# Data sources

- Population census data (1970, 1980, 1990 and 2000) for household- and building-specific information from BFS

| | Number of observations | | | |
|---|---|---|---|---|
| **year** | **1970** | **1980** | **1990** | **2000** |
| Number of households | 1‘385‘005 | 1‘849‘875 | 2‘192‘568 | 2‘346‘803 |
| Number of municipalities | 2‘890 | 2‘891 | 2‘896 | 2‘893 |

- Statistic on the federal direct taxes from BFS

- Spatial planning statistic (2000) from BFS

- Information on housing policies from several sources (Swiss Federal Office for Housing, Hornung (2000), federal tax administration, cantonal administrations).

# Explained variables

| Variables | Description |
|---|---|
| *HO all* | Dummy variable, is one if household is owner of a house or of a condominium, and zero else. |
| *HO house* | Dummy variable, is one if household is owner of a house, and zero else. |
| *HO condo* | Dummy variable, is one if household is owner of a condominium, and zero else. |

# Explanatory variables: household-specific (1)

| ***Household-specific characteristics*** | |
|---|---|
| *Age head* | Age of household's head. |
| *Single head* | Dummy variable: is one if household head is single, and zero else. |
| *Foreigner head* | Dummy variable: is if household head is a foreigner, and zero else. |
| *Number of children* | Dummy variables for the number of children by household: |
| | -no children (reference category) |
| | -one child |
| | -two or more children |
| *Interaction Age - Children* | Interaction between age of household's head and number of kids in household (3 categories) |

# Explanatory variables: household-specific (2)

| ***Household-specific characteristics*** | |
|---|---|
| *Education level head and partner* | Dummy variables for the education level of household head and partner |
| *Interaction Education – Age head* | Interaction between the age of the household's head and the level of education |
| *Earnings situation head and partner* | Dummy variables for the earning situation of head and partner - differentiation between fulltime/part-time |
| *Self-employment head and partner* | Dummy variables for the employment situation of head and partner no children – differentiation btw self- and not self-employed |

# Explanatory variables: household-specific (3)

| ***Household-specific characteristics*** | |
|---|---|
| *Same place of birth and place of residence* | Dummy variable: is one if head was born and lives in the same municipality |
| *Constant place of residence* | Dummy variable: is one if head has been living in the same municipality for the last 5 years |
| *Same place of residence and place of work* | Dummy variable: is one if head lives and works in the same labour market region (defined according to BFS 2005) |
| *Average taxable income per household* | In 1'000 CHF; based on the federal direct tax revenues at the municipality level (level and squared values included) |

# Explanatory variables: building-specific

| ***Accomodation-specific characteristics*** | |
|---|---|
| *Type of building* | Dummy variables:<br>- single family house<br>- two-family house<br>-more than two families house (reference category) |
| *Age of building* | Dummy variables: Four different categories:<br>- Building was built before 1946<br>- Building was built btw 1946 and 1980<br>-Building was built btw 1981 and before 1995<br>- Building was built btw 1996 and 2000 (reference category) |

# Explanatory variables: location-specific

| ***Location-specific characteristics*** | |
|---|---|
| *Empty housing share* | Share of empty housing for rent and sale relative to total number of housing (in %). |
| *Population density* | Number of inhabitants pro hectare residential area in the municipality (in %). |
| *Building density* | Percentage of not yet built area within the residential area of the municipality (in %). |
| *Type of municipality* | Dummy variables based on classification of BFS 2005: Five categories:<br>- central municipality of an agglomeration (reference category),<br>- other municipality of an agglomeration,<br>- isolated municipality<br>- rural municipality |

# Explanatory variables: location-specific (2)

| ***Location-specific characteristics*** | |
|---|---|
| *Touristic municipality* | Dummy variable: take the value of one if community is a touristic municipality |
| *Canton rsp. Arbeitsmarktregion* | Dummy, one category per canton, resp. Arbeitsmarktregion |

# Selected results (1 / 4)

## Preliminary comments:

- Our model specifications explain up to 58% of the variation in the dependent variable; most of the coefficients are statistically significant.

- Many results are intuitive, some are unexpected and need further explanations. Overall, very large number of findings.

- In what follows: presentations of a few results only, and in particular those with relevance for the NRP.

# Selected results (2 / 4)

**Household-specific factors:**

- The older the household head, the more likely is the household living in the own house or apartment.

- Children: negative impact on homeownership, but this effect is affected by age of household head: The older the household head, the more likely is homeownership.

- Higher education of household head and his/her partner does not necessarily lead to a higher homeownership rate. Again, effect is influenced by age.

# Selected results (3 / 4)

**Household-specific factors: (cont.)**

- Identical birth and living place: Homeownership is more likely.

- Same living place during the last 5 years: Homeownership is more likely.

- Living and working in the same labour market region: Homeownership is more likely for apartment owners and less likely for houseowners.

# Selected results (4/4)

## Location-specific factors:

- Share of empty housings by municipality: Positive effect on homeownership.
- Density of population: The higher the density by municipality, the less likely is homeownership.
- Type of municipality: The more rural the place, the more likely is homeownership.
- Touristic municipalities: Higher share of homeowners.

# Homeownership and new regional policy (1 / 2)

*„The federal government promotes the development of innovations […]. Its objectives are to increase the competitiveness of the regions […].*

*The federal government only supports projects that strengthen the region as a* ***business location*** *[…]“*

SECO, The federal government’s regional policy, p. 4 and 22

➡ Strategies for residential locations are not included in NRP!

# Homeownership and new regional policy (2/2)

However …

- our study shows that the place of work, the place of residence and the probability of owning a home are interlinked with each other.

This means that a NRP …

- promoting businesses and therefore creating new jobs influences tenure choices and, therefore, not only the *quantity* but also the *quality of housing demand* as well as the the *mobility behavior* of the population, with all its consequences.

➡ *Business location strategies need to be flanked by complementary residential location strategies!*

# Conclusions

- Switzerland has a low homeownership rate, but there exist very large differences between cantons and regions.

- Explaining homeownership rates in Switzerland calls for a complex model that integrates many different aspects.

- Housing is directly related to labour market outcomes, i.e., any policy that promotes a region as a business location also has to take into account any effects on the demand (and supply) of housing and on mobility.