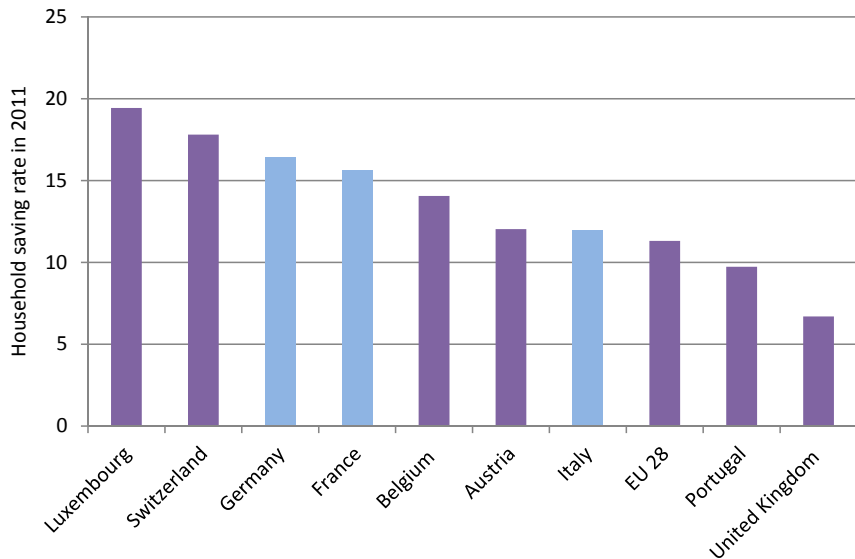# Culture and Household Saving

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Fourth Conference on Household Finance and Consumption, Frankfurt
(17.12.2015)

Household saving rates in Europe

Why is it important to understand household saving?

1. Household saving can be relevant for economic growth.

2. Low saving rates imply low household wealth.
   This can imperil financial stability in case of systematic income or expenditure shocks.

3. Important for designing institutions - e.g., pension systems.

What is the scope of this paper?

1. Does membership to cultural groups determine household saving?
   - exploiting language regions in Switzerland (German vs. French).

2. What are the channels of culture?
   - Time preferences.
   - Norms of using formal or informal credit in financial distress.

Results of this paper

1. Households in the German-speaking part

   - are substantially more likely to save.

2. Households in the German-speaking part seem to

   - be less impatient.
   - be less likely to take informal credit in case of financial distress (not more likely to take formal credit).

Contribution of this paper to the academic literature

1. Social interactions among peers are relevant for

   - household consumption (e.g., Kuhn et al. (2011), Luttmer (2005)).

   - retirement savings (e.g., Duflo and Saez (2012)).

   - stock market participation (e.g., Hong et al. (2004)).

2. The role of culture for household debt and portfolios using

   - cross-country comparisons (e.g., Breuer and Salzmann (2012)).

   - immigrants (e.g., Caroll et al. (1994), Haliassos et al. (2014)).

3. How culture shapes preferences & norms

   - Language shapes time preferences (e.g., Chen (2013)).

   - Social norms on household defaults (e.g., Guiso et al. (2013)).

Outline

1. What is "culture" and how does it affect household saving?

2. Background
   - Language and institutional borders in Switzerland
   - Household saving by income and language groups

3. Data & Methodology
   - Data
   - Empirical strategy

4. Results
   - Language region and impatience & planning

What is "culture" and how does it affect household saving?

What is "culture"?

- In line with Guiso et al. (2006) and Fernandez (2011), I define cultural differences as:

 *systematic variation in norms and preferences shared within social groups.*

- I focus on social groups that share a common language as *one* specific dimension of culture.

- I test the relevance of *specific dimensions of preferences & norms*.
  - Higher discount rates might lead to lower saving.
  - Different norms of taking credit in distress. Anticipation might lead to lower ex-ante saving.
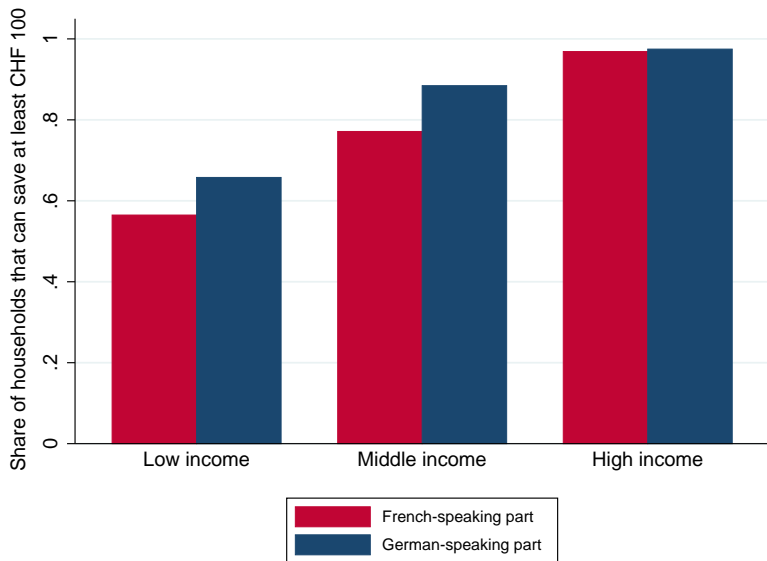
Background: Language regions and household saving

Language regions in Switzerland

- German-speaking part
- Italian-speaking part
- French-speaking part
- Lakes
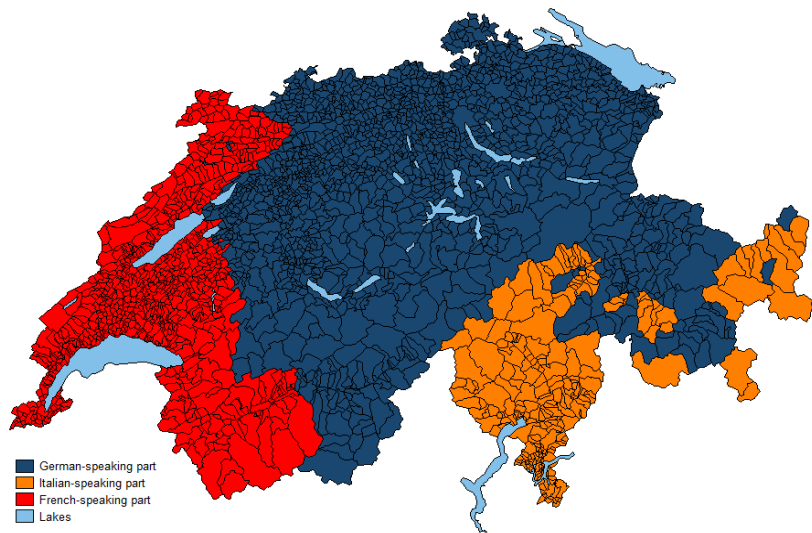
Household saving rates by language regions
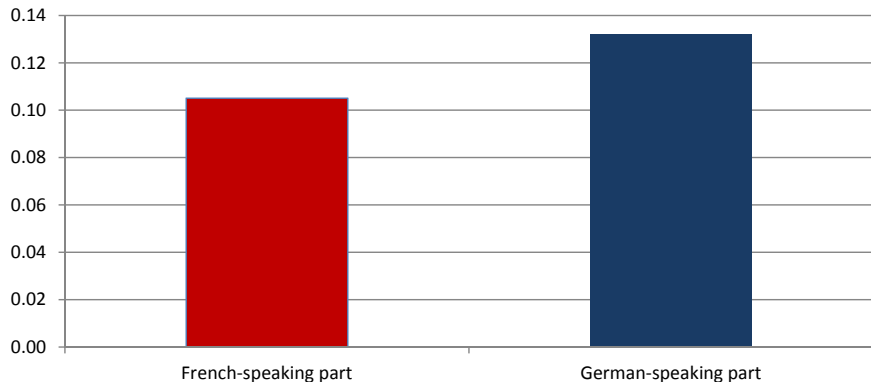
Household saving by income and language regions

Data & Methodology

Data

- Swiss Household Panel (SHP)

  - longitudinal survey of households resident in Switzerland.

  - yearly waves (1999-2012).

  - includes household characteristics (household income & size).

  - includes "household head" characteristics (age, gender, education, employment, religion).

  - preferred survey language (French, Italian, German).

- Complemented with further data

  - location of each household & distance to the language border.

  - local unemployment rates on the district-level.

  - population per municipality.

Data: key outcome variables

- Household saving

  - *Can you save at least 100 frs monthly?*

  - *If you consider the total of your household's income and expenses, would you say that your household eats into its assets and savings?*

- Ex-post insurance

  - *Taking credit from family and friends in financial distress.*

  - *Taking formal credit from banks in financial distress.*

- Impatience & Planning

  - *Have you ever consumed tobacco?*

 - *Is it worth to make plans?*

Empirical strategy

German-speaking part
Italian-speaking part
French-speaking part
Lakes
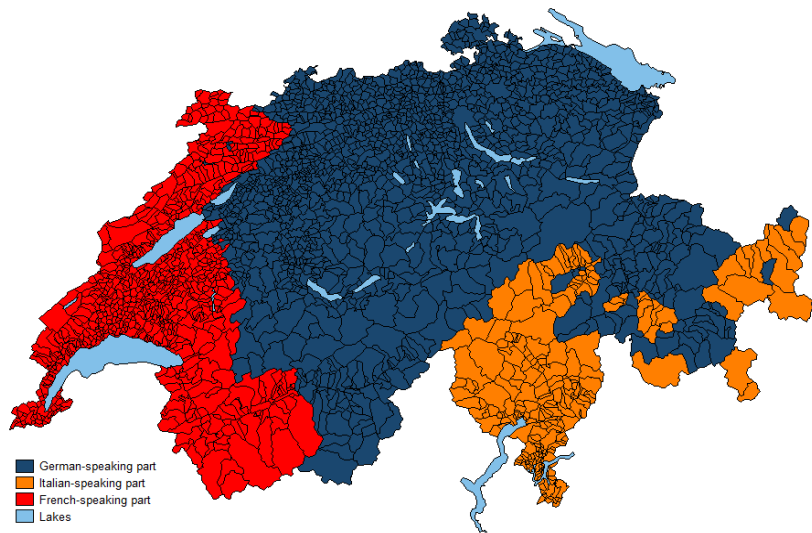
Estimation

$$Y_{i,m} = \alpha + \delta G_{i,m} + \beta_{l1} G_{i,m} Distance_{i,m} + \beta_{r1} Distance_{i,m} + X_i'\gamma + \epsilon_{i,m}, \qquad (1)$$

where

- $Y_{i,m}$ is a binary variable if the household saves at least CHF 100 per month (zero otherwise).

- $G_{i,m}$ is a binary variable that takes on the value of 1 if the majority of the municipality m in which the household i resides speaks German (zero otherwise).

- $X_{i,m}$ is a vector of variables that capture differences between individuals i and municipalities m.

- $Distance_{i,m}$: Walking distance between household i and the language border in km.

Language region and household saving

Language region and household saving
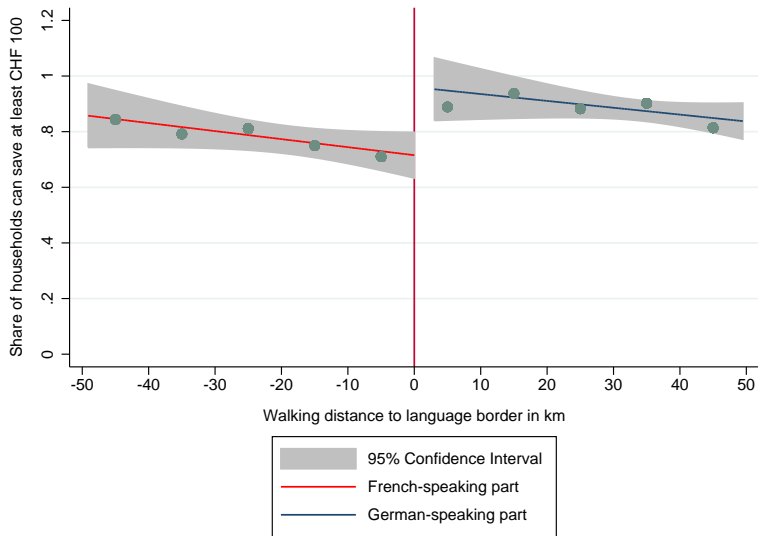
Language region and household saving

	1	2	3	4	5
Survey Wave	1999-2003	1999-2003		1999-2003	
Bandwidth	50km	50km		50km	
Dependent variable	Saving	Saving		Saving	
German-speaking part	0.121***	0.294***	0.359***	0.280***	0.355***
	[0.031]	[0.045]	[0.061]	[0.057]	[0.079]
Distance	NO	Linear	Linear	Quadratic	Quadratic
Household controls	NO	NO	YES	NO	YES
Regional controls	NO	NO	YES	NO	YES
Year FE	NO	YES	YES	YES	YES
Canton FE	NO	YES	YES	YES	YES
Observations	577	577	577	577	577
Households	577	577	577	577	577
Share in German-speaking part	0.55	0.55	0.55	0.55	0.55
Municipalities	157	157	157	157	157
Mean of dependent variable	0.83	0.83	0.83	0.83	0.83
R-squared	0.025	0.048	0.137	0.050	0.137
Method	OLS	OLS	OLS	OLS	OLS

- Saving: Dummy = 1 if the household can save at least CHF 100 per month.
- German speaking part: Dummy = 1 if the household is located in the German speaking part (zero otherwise).
- Distance: Walking distance to the language border in kilometers.
- Household control variables are Household income (natural logarithm), Household size, Male, University, Age, Swiss, Employed, Self employed, Unemployed.
- Regional control variable is the district-level unemployment rate.
- Standard errors are clustered on the municipality level.

The channels of culture

Channels of culture

1. Households in the German-speaking part

   - are less likely to use informal credit but not formal credit in financial distress.
   - are less impatient.

These results are robust to

- Varying bandwidths by 20 kilometers (30km & 70km).

- Including higher-order distance polynomials.

- Controlling for religion of the household head (catholic, protestant, other).

Validity of the research design

Testing supply of financial services:

- There are not more bank branches in the German-speaking part.

Verifying the assumptions of the research design (Imbens & Lemieux (2008)):

- Test whether household characteristics are discontinuous at the language border.

- Placebo tests: Discontinuities in household saving within a language region.

- No systematic variation of residuals between language regions.

...the next steps: eliciting channels with school students
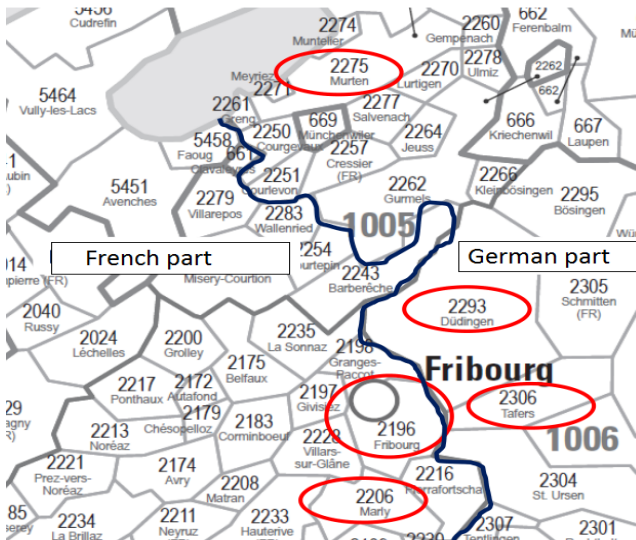
Summary & conclusion

1. Households in the German-speaking part

   - are substantially more likely to save.
   - are less likely to use informal credit but not formal credit in financial distress.
   - are less impatient.

2. ...the bigger picture

   - Culture might - at least partly - explain cross-country differences in saving (and debt).