

Cultural determinants of household financial decisions

**Research project proposal
to the NBER**

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1. Introduction

There exist tremendous differences in households' precautionary savings and indebtedness across countries.¹ These differences are important as only small changes in aggregate savings rates can affect a country's growth path and large-scale household debt can imperil an economy's financial stability. But why do they exist? Typically, these disparities are attributed to different institutional environments varying across countries, such as different tax systems or degrees of law enforcements. As these attempts have only been partly successful in explaining the observed differences, an emerging strand of the literature asks to what extent they reflect differences in "cultures" (e.g. Carroll et al. (1994)) that share common sets of preferences, beliefs and norms (Fernández (2011)).

So far the literature has analyzed the relevance of cultural factors using cross-country comparisons (e.g. Christelis et al. (2013), Bover et al. (2014)) and exploiting financial decisions of immigrants to a country (Carroll (1994), Haliassos et al. (2014)). While the first strand of the literature faces the problem of convincingly disentangle country-specific institutional from cultural factors, the second strand faces multiple sample selection issues that arise when comparing different immigrant groups with each other and with the nonimmigrant population (Bauer and Sinning, (2011), Sinning (2011), Piracha and Zhu (2012)). Besides, in both strands of the literature it remains unclear which of the beliefs and preferences that are common within cultural groups are relevant for the observed differences in the financial decisions.

In this project, I exploit within-country variation of historically determined language group (German vs. French/Italian) and religious group memberships (Catholic vs. Protestant) to identify the effect of culture on households' financial decisions (savings and debt taking). Hereby, I am able to isolate cultural differences of a representative sample of the population from differences in institutions, geography and climate. Besides, I test two channels – time preferences and trust in the counterparty of financial contracts – that are assumed to be most likely relevant for the observed differences.

2. Data & Methodology

To analyze these research questions, I employ survey data from the Swiss Household Panel (waves 1999 until 2012). This survey includes a wide range of socio-economic household characteristics such as income, the employment status and the exact location of each household. Furthermore, it includes characteristics of the person responsible for the management of household finances ("household head") (age, gender, education etc.), her preferred language spoken (French, Italian or German), her religious views and variables that have been shown to be good proxies for time preferences (e.g. past tobacco & alcohol consumption) (e.g. Sutter et al. (2013a)). I complement these data with detailed information on language and religious regions within

¹ Documented by e.g. Christelis et al. (2013), Bover et al. (2014).

Switzerland. Furthermore, I complement these data with proxies for social capital varying on the municipality level (as suggested by Guiso et al. (2004)).

To estimate the effect of language (religious) group membership on individual household financial decisions, I intend to apply a fuzzy regression discontinuity design. Hereby, the distance to the language (religious) border serves as an instrument for language and religious group memberships. I estimate the effect on precautionary savings and payment arrears. In order to further validate the exclusion restriction, I plan to also control for socio-economic personal and household characteristics such as age, income and employment status.

To investigate the potential channels relevant for the observed cultural differences, I complement the main analysis with three further empirical exercises. First, I test the existence of discontinuities of proxies for time preferences (past tobacco and alcohol consumption) and social capital (blood donation and electoral participation) at the language (religious) border. Second, I exploit the panel dimension of the panel by showing that households, in the run-up of financial distress, spend more on consumption relative to income compared to similar households. Third, I provide descriptive evidence on the relevance of time preferences by showing that households being in financial distress are more likely to have taken debt for consumption purposes.

3. Contribution to the existing literature

This project contributes to several strands of the existing literature. First, it contributes to the literature on how membership of cultural groups affects economic attitudes and outcomes. Being religious has been found to affect individuals' attitudes toward trust, cooperation and thriftiness (Guiso et al. (2003), Renneboog and Spaenjers (2012)). In particular, the literature suggests substantial differences between Catholics and Protestants with respect to the demand for leisure and government intervention (Basten and Betz (2013), gambling attitudes affecting portfolio choices (Kumar et al. (2011)) and thriftiness and risk aversion (Renneboog and Spaenjers (2012)). Also the membership of a specific language group has been shown to affect economic outcomes: the individual savings decisions (Chen (2013)), demand for social insurance (Eugster et al. (2011)) and unemployment duration (Brügger et al. (2009)).

Second, by analyzing the channels at work, my project contributes to the literature on how behavioral characteristics affect personal financial decisions: The growing literature on how language syntax affects intertemporal preferences and the corresponding savings decisions (Chen (2013), Sutter et al. (2013b)) and how present biasedness can lead to excessive borrowing and overindebtedness (Meier and Spengler (2010), Gathergood (2012)).

Last, it contributes to the literature on how social capital affects households' financial decisions: the decision on using formal and informal credit (Guiso et al. (2004) and the decision on holding stocks (Guiso et al. (2008), Georgarakos and Pasini (2011)).

4. Project output, schedule and resources

The results of this project will be presented in a working paper by February 2015 which will be submitted for publication in a top-field Economics or Finance journal. I plan to present the results at leading finance and economics conferences² in 2015. To disseminate my results in policy circles and the general public I will post summaries of the results on VOXeu.org. I apply for a moderate travel budget for conference attendance. The University of St.Gallen will cover salary and overhead costs.

² Indicated in section 6. *Budget*

5. References

- Basten, C. and F. Betz (2013). Beyond Work Ethic: Religion, Individual, and Political Preferences. *American Economic Journal: Economic Policy* 5(3), 67–91.
- Bauer, T. K. and M. G. Sinning (2011). The savings behavior of temporary and permanent migrants in Germany. *Journal of Population Economics* 24, 421–449.
- Bover, O., Casado, J.M., Costa, S., Caju, P., McCarthy, Y., Sierminska, E., Tzamourani, P., Villanueva, E., and T. Zavadil (2014). The distribution of debt across euro area countries: The role of individual characteristics, institutions and credit conditions. *Deutsche Bundesbank Discussion Paper 01/2014*.
- Brügger, B., Lalive, R., and J. Zweimüller (2009). Does culture affect unemployment? Evidence from the Röstigraben. IZA Working Paper 4283.
- Carroll, C., Rhee, B.-K., and C. Rhee (1994). Are there cultural effects on saving? Some cross-sectional evidence. *Quarterly Journal of Economics* 3, 685–699.
- Chen, K. (2013). The Effect of Language on Economic Behavior: Evidence from Savings Rates, Health Behaviors, and Retirement Assets. *American Economic Review* 103(2), 690–731.
- Christelis, D., Ehrmann, M., and D. Georgarakos (2013). Exploring Differences in Household Debt across Euro Area Countries and the US. Working Paper.
- Eugster, B., R. Lalive, A. Steinhauer, and J. Zweimüller (2011). The Demand for Social Insurance: Does Culture Matter?. *Economic Journal* 121, 413–448.
- Fernández, R. (2011). Does culture matter?. In Jess Benhabib, Matthew O. Jackson and Alberto Bisin editors: *Handbook of Social Economics*.
- Gathergood, J. (2012). Self-control, financial literacy and consumer over-indebtedness. *Journal of Economic Psychology* 33, 590–602.
- Georgarakos, D., and G. Pasini (2011). Trust, Sociability, and Stock Market Participation. *Review of Finance* 15, 693–725.
- Guiso, L., Sapienza, P., and L. Zingales (2008). Trusting the Stock Market. *The Journal of Finance* 63(6), 2557–2600.
- Guiso, L., Sapienza, P., and L. Zingales (2004). The Role of Social Capital in Financial Development. *American Economic Review* 94(3), 526–556.
- Guiso, L., Sapienza, P., and L. Zingales (2003). People’s opium? Religion and economic attitudes. *Journal of Monetary Economics* 50, 225–282.
- Haliassos, M., Jansson, and Y.Karabulut (2014). Culture and Household Financial Behavior. *unpublished manuscript*.
- Kumar, A., Page, J., and O. Spalt (2011). Religious beliefs, gambling attitudes, and financial market outcomes. *Journal of Financial Economics* 102, 671–708.

- Meier, S. and C. Spengler (2010). Present-Biased Preferences and Credit Card Borrowing. *American Economic Journal: Applied Economics* 2(1), 193–210.
- Piracha, M. and Y. Zhu (2012). Precautionary savings by natives and immigrants in Germany. *Applied Economics* 44(21), 2767–2776.
- Renneboog, L. and C. Spaenjers (2012). Religion, economic attitudes, and household finance. *Oxford Economic Papers* 64(1), 103–127.
- Sinning, M. G. (2011). Determinants of savings and remittances: empirical evidence from immigrants to Germany. *Review of Economics of the Household* 9(1), 45–67.
- Sutter, M., Kocher, M., Glätzle-Rützler, D., and S. Trautmann (2013a). Impatience and Uncertainty: Experimental Decisions Predict Adolescents' Field Behavior. *American Economic Review* 103(1), 510–531.
- Sutter, M., Angerer, S., Glätzle-Rützler, D., and P. Lugerporer (2013b). The effects of language on children's intertemporal choices. Working Paper.

6. Budget

Allotment	Estimated costs (USD)
Six conferences to present preliminary work³	
Flight (economy class (overseas), 6 times * 900 USD)	5'400.00
Conference fees (6 times * 300 USD)	1'800.00
Overnight stays at conference hotels (6 times * 3 nights * 180 USD)	3'240.00
	10'440.00

³ The working paper will be submitted to the conferences of the *American Finance Association*, *American Economic Association*, *European Finance Association*, *European Economic Association*, *Financial Intermediation Research Society*, *38th Annual NBER Summer Institute (Household Finance)*, *Boulder Summer Conference on Consumer Financial Decision Making*, *European Conference on Household Finance*.

Benjamin Guin

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Research Interests

Household Finance, Financial Intermediation, Economic and Financial Development

Current Professional and Academic Activities

Since 2014 Visiting Scholar at Columbia University

**Since 2011 Research Associate at Swiss Institute of Banking and Finance
(Universität St.Gallen)**

Since 2011 Ph.D. student in the Program in Economics and Finance (PEF)

Education

2011-2015 Ph.D. in Economics and Finance (PEF), Universität St.Gallen

Thesis: Essays in Household Finance and Financial Intermediation
(supervisor: Prof. Dr. Martin Brown)

Selection of advanced PhD courses:

Empirical Strategies for Causal Inference, Computational Statistics, Empirical Evaluation of Economic Models, Microeconomics of Banking, Dynamic and Non-linear Panel Data Models, Advanced Microeconomics.

Stays at other universities

Columbia University (USA) (2014, 9 months)
Universität Bonn (Germany) (2011, 9 months)

2005-2010 Master in Quantitative Economics, Universität Tübingen

Thesis: Pro-cyclicality and Bank Regulation
(supervisor: Prof. Dr. Claudia Buch)

Majors:

Econometrics, Economic Theory, Statistics, Financial Intermediation, International Economics.

Stays at other universities

University of Michigan, Ann Arbor (USA) (2009-2010, 6 months)
Universidad de Malaga (Spain) (2007-2008, 6 months)

Working Papers & Work in Progress

Microfinance Banks and Financial Inclusion

(with Martin Brown and Karolin Kirschenmann)

available on SSRN: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2226522

Revise and Resubmit at *Review of Finance*

Individual Mortgage Choice and Aggregate Mortgage Risk - Evidence from Switzerland

(with Martin Brown)

Submitted to a journal.

Switching Costs, Deposit Insurance and Deposit Withdrawals from Distressed Banks

(with Martin Brown and Stefan Morkötter)

available on SSRN: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2354197

Financial Distress, Culture and Time Preferences

(single authored project)

Hot Heads. The Effect of Temperature on Crime in India

(with Thiemo Fetzer and Jonathan Colmer)

Further publications & other academic work (peer reviewed)

"Microfinance commercialization and mission drift", 2012, *Swiss Journal of Business Research and Practice* 66, 340-357, with Martin Brown and Karolin Kirschenmann.

"Financial Institutions, In And Out Of Crisis" (review), 2013, *Financial Markets and Portfolio Management*.

Conferences and Seminars

2014:

International Risk Management Conference (IRMC) (Warsaw)*, International Banking, Economics and Finance Association (IBEFA) (Denver)*, Ph.D. Seminar at Columbia University (New York), 7th Swiss Winter Conference on Financial Intermediation (Zürich University, RoF, CEPR) (Lenzerheide), European Bank of Reconstruction and Development (London), Ph.D. Seminar (St.Gallen)*, Literature Seminar (St.Gallen)*

paper presented by co-author: 29th Annual Congress of the European Economic Association (EEA) (Toulouse)*, IFABS 2014 (Lisbon)*, 23rd European Financial Management Association conference (EFMA) (University of Rome Tor Vergata)*, International Finance and Banking Conference (Bucharest), Aalto University (Helsinki)

discussant: International Banking, Economics and Finance Association (Denver)

participant: New York Fed/NYU Stern Conference on Financial Intermediation (New York)

2013:

28th Annual Congress of the European Economic Association (EEA) (Gothenburg), 3rd European Research Conference on Microfinance (Kristiansand, Norway), International Ph.D. Workshop in Banking (Augsburg), Banking Workshop (Münster), Finance Brown Bag Seminar (St.Gallen), Ph.D. Seminar (St.Gallen), Literature Seminar (St.Gallen)

paper presented by co-author: AEL Conference 2013 "Development Economics and Policy" (Ifo institute, University of Munich, German Economic Association), Spatial Economics Research Council (SERC) (London School of Economics & Political Science) (London), Bank for International Settlements (BIS) (Basel), Swiss Financial Market Authority (FINMA), Universität Zürich, Universität Hannover, Swiss National Bank (SNB), University of Gothenburg, Finnish Economic Association Annual Meeting, BOFIT SEMINAR (Bank of Finland Institute for Economies in Transition) (Helsinki)

participant: 6th Swiss Winter Conference on Financial Intermediation (Tilburg University & EBC, CEPR), 2013 FIRS - Financial Intermediation Research Society Conference (Dubrovnik, Croatia)

2012 (and earlier):

Economics Brown Bag Seminar (St.Gallen), Brown Bag Seminar (Bonn), Finance Brown Bag Seminar (St.Gallen)

paper presented by co-author: Seminar at Universität Zürich, Young Scholars Nordic Finance Workshop (Stockholm School of Economics), Seminar at KfW Development Bank, Seminar at ProCredit Bank

participant: CEPR Workshop: Finance and the Real Economy (St.Gallen), 5th Swiss Winter Conference on Financial Intermediation (Tilburg University & EBC, CEPR) (Lenzerheide)

*scheduled

Honors, Scholarships, and Fellowships

Swiss National Science Foundation (2012, 2014), Swiss National Bank (2013, Travel Grant), Doctoral Scholarship (2011), Friedrich-Naumann Foundation Scholarship (2008-2010), European Commission (Erasmus Grant) (2007-2008), Dr. Rolf Wagner Foundation (2010), Prize for Master Thesis (runner's up) (2011), Master / Diplom in Quantitative Economics with distinction (2010), high-school graduation (Abitur) with distinction (2005).

Refereeing

Review of Finance

Past Employment

- | | |
|------------------|---|
| 2012 | Ph.D. Internship, Deutsche Bundesbank |
| 2010 | Student & Master Thesis Internship, Deutsche Bundesbank |
| 2008-2010 | Research & Teaching Assistant in International Macroeconomics and Finance (Prof. Dr. Claudia Buch), Universität Tübingen |
| 2006-2007 | Research & Teaching Assistant in Public Finance (Prof. Dr. Laszlo Goerke), Universität Tübingen |
| 2008 | Student Internship, KfW Development Bank |
| 2006 | Student Internship, Sparkasse Ulm |

Teaching

Teaching assistant

Empirical Banking (Master, Universität St.Gallen, Steven Ongena) (2012), Financial Institutions (Master, Universität St.Gallen, Martin Brown) (2012, 2013), Research Seminar Financial Institutions (Master, Universität St.Gallen, Martin Brown) (2012, 2013), co-supervision of master thesis projects (2011, 2012, 2013).

Class teacher

Introduction to Microeconomics (Bachelor, Universität St.Gallen) (2013), Microeconomics II (Bachelor, Universität St.Gallen) (2011, 2012), Intermediate Microeconomics (Bachelor, Universität Tübingen) (2009), Intermediate Macroeconomics (Bachelor, Universität Tübingen) (2008).

Test Results

GRE (quantitative): 800/(out of 800)

Other Activities

2012 - 2013 **Member of Executive Board, Doctoral Network at HSG St.Gallen (DocNet)**

2008 - 2009 **Student Representative, Universität Tübingen**

2006 - 2007 **Student Representative, Universität Tübingen**

2005 - 2010 **Member of the student council, Universität Tübingen**

In the Media

“Microfinance banks and financial inclusion in Southeast Europe: Is public funding still warranted?” (with Martin Brown and Karolin Kirschenmann), in Thorsten Beck, Ralph De Haas and Steven Ongena: “Understanding Banks in Emerging Markets: Observing, Asking, or Experimenting?”, VoxEU eBook, www.vox.org, 6 November 2013.

“Die Eigenschaften der Hypotheken sind ein wichtiger Risikofaktor“ (by Martin Brown and Stefan Heitmann), in *Neue Züricher Zeitung (NZZ)*, 10 December 2013.

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