Annual Report 2016
Department of Economics
This annual report gives an overview of the most important outputs of our department in 2016. As usual, in addition to the complete list of new publications you find a couple of short articles highlighting some of this year’s research results and events. This publication used to be called “newsletter” but this year we decided to change its name to ‘annual report’ as this clearly fits better its actual content.

There has been one major change in our faculty staff in 2016. Prof Olivier Bochet accepted an offer for a tenured position at New York University Abu Dhabi and left our department in spring. We are happy that we managed to fill this position in a rather smooth process: In July 2017, Igor Letina, who is currently at the University of Zurich, will join us as assistant professor with tenure track in microeconomics. In addition, I would like to report that our former doctoral student and postdoctoral researcher Kaspar Wüthrich has joined the department of economics at UC San Diego as assistant professor with tenure track. This year he also received the Haller medal of the University of Bern that honours outstanding young scholars who graduated from schools and the University of the Canton of Bern.

In 2016, the management of the University of Bern has decided to renew the mandate of the Center for Regional Economic Development (CRED). This interfaculty center was founded in 2012 with the department of economics in charge of its management. With the new four-year mandate and the allocation of additional resources the CRED can substantially expand its applied research on a broad range of aspects regarding the economic development of regions. One of the four divisions of the CRED is the research unit tourism; this year it celebrated 75 years of tourism research at the University of Bern.

I would like to thank all members of the department for their important contributions in research, teaching and outreach in 2016.

Aymo Brunetti
December 2016
Interview with Kaspar Wüthrich

You started as an Assistant Professor at UCSD three months ago. Did you get the chance to surf?

Only once, unfortunately! I work much harder than during my time in Bern, including most weekends and many evenings. I often even eat lunch and dinner in my office; joint lunches and coffee breaks are not as common as in Bern. But don’t get me wrong, I am extremely happy with my new job. UCSD offers a great environment for research and is very supportive of young researchers.

Are there further differences between the two institutions?

There are, of course, many differences. First of all, the size of the two departments is very different: there are around 40 faculty members at UCSD compared to less than 20 in Bern. As a result, we host weekly seminars with external speakers in most subfields as well as additional lunch seminars where graduate students present their research. I usually participate in at least two seminars per week.

Secondly, UCSD has a strong tradition in econometrics (including the Nobel Prize 2003 for Robert F. Engle III and Clive W. J. Granger). The staff includes numerous econometricians as well as many applied researchers with exceptional methodological skills. In combination with the very research-friendly culture this leads to a lot of informal exchange, feedback on my own research, and many new research ideas.

Did your time as a PhD student at the Department of Economics in Bern prepare you well for your new position?

Yes, thanks to the guidance and support of my main supervisor Blaise Melly who encouraged me to pursue ambitious projects and provided invaluable feedback on my work at various stages. Also, Blaise arranged for me to spend two semesters at the Massachusetts Institute of Technology (MIT) and guided me through the academic job market, all of which ultimately led to my job at UCSD. I should emphasize that my research visit at MIT was one of the key determinants of success by allowing me to attend advanced field courses, interact and collaborate with some of the best econometricians worldwide, get new research ideas and build up a network in the field. During my visit, I worked harder than I ever had before and wrote more than half of my dissertation. I highly recommend such a research visit to everyone!

Besides the official preparation, what do you consider important for an academic career?

From my limited personal experience, I can tell you that being a researcher is certainly not a nine-to-five job. It requires a lot of hard work, commitment, dedication and intrinsic motivation. Additionally, there is substantial uncertainty about one’s career path, especially with respect to the work location. Thus flexibility is equally important. On the other hand, I cannot imagine a more rewarding job than being a researcher—it is certainly worth it!

Kaspar Wüthrich, thank you very much for this interview.
Research Bit I: Does Full Insurance increase the Demand for Health Care?

Michael Gerfin – In order to prevent unnecessary demand for health care, health insurance plans include cost sharing instruments, e.g. deductibles. In our paper, we estimate the effect of cost sharing on the demand for health care by exploiting a natural experiment in which a subset of individuals had full insurance for a limited time. We find that cost sharing is effective, but there is substantial variation in the size of the effect.

Do people demand more health care if they pay less? If so, this excess demand generates a welfare loss to society because the private benefit is less than the cost of providing the additional health care. For this reason, health insurance plans usually contain some form of patient cost sharing such as deductibles or co-payments to mitigate this moral hazard effect. Overutilization due to moral hazard is among the most discussed issues in health economics and public health politics. Last December, the Swiss parliament decided to commission the Federal Council to change the cost sharing regulation in the health insurance law (KVG) with the aim of reducing health care spending. At the moment, individuals in Switzerland can choose between 6 deductible levels ranging from CHF 300 to CHF 2500 per year, with reduced premiums for higher deductibles.

The problem in estimating the effect of cost sharing on health care demand is that individuals choose their cost sharing degree as a function of their health status, expected health care expenditures, risk attitudes and income, among other factors. In other words, cost sharing is not as good as randomly assigned. Possible solutions to this endogeneity problem are randomized experiments (e.g. the famous RAND health insurance experiment), or natural experiments where variations in cost sharing are caused by exogenous events such as policy changes.

In the paper, we exploit a natural experiment to identify the effect of full insurance (no cost sharing). Between 1996 and 2002 the CSS insurance company offered an HMO plan without any cost sharing in order to attract customers. In 2003, the cost sharing instruments already in place for regular insurance were introduced. We obtained data from CSS covering the years 2002-2004 for both HMO and regular insurance. The individual-level data contain information on total health care costs per year, insurance plan as well as some basic characteristics such as age and gender. The individuals with regular insurance serve as control group (24'971 observations) whereas the individuals in the HMO plan are the treatment group (3'571 observations).

We estimate average treatment effects using the standard difference-in-differences approach as well as quantile treatment effects based on the changes-in-changes approach. The data from the year 2004 allow to perform a placebo test: since there is no variation in cost sharing between 2003 and 2004 we should find no treatment effects in this period. This is indeed the case, supporting the credibility of our identification strategy.

We find that full insurance decreased the probability of having zero health care expenditures by 7 percentage points. Given that this probability was 25% in the HMO group in 2003, this is a rather large effect. Total health care expenditures increased by about 15% (roughly CHF 200) under full insurance. Note that this is an average effect across all deductible levels. The effect appears to be much stronger for individuals who chose a high deductible in 2003 (roughly 55%). The average treatment effect implies an elasticity of health care expenditures with respect to the price of about -0.15 and thus somewhat smaller (in absolute terms) than the well-known benchmark of -0.2 obtained in the RAND experiment.

The quantile treatment effects are much stronger at lower quantiles. At the 3rd decile, health care expenditures increase by almost 100% with full insurance. This is due to the large decrease in the probability of having zero health care costs from 0.25 to 0.18. In absolute terms the effect is about 90 CHF. At the 7th decile full insurance increase health care expenditures by 10%. The effects at the highest quantiles are not significantly different from zero.

We provide evidence that cost sharing is an effective tool to reduce overconsumption of medical care. However, given that the cost-saving effects are concentrated at the bottom of the health care expenditures distribution, the overall impact on cost containment may be limited. While recent political proposals aim at increasing the lowest deductible, they may turn out to be rather ineffective as most individuals choosing the lowest deductible find themselves at the higher end of the health care expenditures distribution.

Boes, Stefan & Gerfin, Michael (2016). Does full insurance increase the demand for health care? Health Economics, 25(11), 1483-1496.
Research Bit II: Long-Run Money Demand Reconsidered

Luca Benati – Since the early 1980s, it has been conventional wisdom among macroeconomists that money demand does not exhibit any stability whatsoever, and that its behaviour is dominated by velocity shocks. In this article I discuss some results from a project in which I re-examine the long-run demand for M1 based on a dataset comprising 32 countries since 1851. The main finding is that—contrary to conventional wisdom—the long-run demand for M1 is, in most cases, remarkably stable.

Since the early 1980s, it has been conventional wisdom among macroeconomists that money demand does not exhibit any stability whatsoever—even in the very long run—and that its behaviour is dominated by velocity shocks. In what is probably the single most influential paper in this literature, Friedman and Kuttner (AER, 1992) for example failed to detect a stable long-run demand for any U.S. aggregate they examined (M1, M2, credit, ...).

In this article I discuss some findings from a project in which I re-examine the long-run demand for M1 based on a dataset comprising 32 countries since 1851 (some of the raw data are shown in Figure 1). Our main findings can be summarized as follows:

(i) In many cases cointegration tests identify a long-run equilibrium relationship between either velocity and the short rate, or M1, GDP, and the short rate. Evidence is especially strong for the U.S., the U.K., and Canada over the entire period since World War I, and for high-inflation countries.

(ii) With the exception of high-inflation countries—for which a “log-log” specification is preferred—the data often prefer the specification in the levels of velocity and the short rate originally estimated by Selden and Latané six decades ago, and forgotten even since. This is especially clear for the U.S.

Although the bulk of our evidence is based on cointegration tests, in fact, the stability of the long-run demand for M1 can be illustrated in a much simpler way by just focusing on the low-frequency (i.e. trend) components of the short rate (which proxies for the opportunity cost of money) and of the ratio between nominal M1 and nominal GDP. Figure 2 plots the low-frequency components of the two series for some selected countries. Once the series are stripped of higher-frequency fluctuations, evidence of a remarkably strong and stable negative relationship between the short rate and the demand for M1 (as a fraction of GDP) emerges very starkly. This evidence is, in fact, even more convincing than that produced by cointegration analysis as it is based on a remarkably simple technique such as linear filtering, which uniquely hinges on defining a specific frequency band of interest.

The bottom line is that—contrary to conventional wisdom—the long-run demand for M1 is, in most cases, quite remarkably stable, and that permanent velocity shocks play either no role whatsoever (in cases such as the U.S., the U.K., Canada, etc., for which the short rate is cointegrated with M1 velocity), or a much smaller role than previously thought (in those cases in which we do not detect evidence of cointegration).


The most recent version is available at: https://sites.google.com/site/lucabenatiswebpage/
Konstantin Büchel & Stephan Kyburz – The expansion of the railway network was one of the largest infrastructure investments in Switzerland’s history and marked the start of the “modern transport revolution”. We aim at quantifying its economic consequences at the local level based on a unique data set that combines geo-referenced railway network information and various indicators of regional economic development. Municipalities that gained railway access benefited from accelerated industrialization, higher population growth rates, and improved (biological) living standards.

Background

Both, policy makers and entrepreneurs, were eager promoters of a rapid expansion of the Swiss railway network in 19th century Switzerland. Economic considerations, both from a national growth and regional development point of view, dominated the political debate on the foundation of a national railway network. Being a small export-oriented market with few natural resources, Switzerland was particularly dependent on fast and reliable means of transport. For this reason the federal government concluded that a well-designed railway network was critical to the country’s welfare. Yet, having built its first railway line in 1847—the famous “Spanish-Brötli-Bahn”—Switzerland was a late adopter of railway technology compared to its European neighbors. Besides, the provision of railway construction to private contractors raised concerns on whether the railway would amplify regional disparities in development prospects since private companies were likely to neglect thinly populated areas.

Empirical Strategy

Our analysis of the impact of railway access on regional economic development takes into account that railway companies may have targeted quickly developing towns and villages. By linking topographic features and actual railway construction expenses we simulate hypothetical railway lines that connect the major towns (traffic nodes) at the least cost possible and use these lines to instrument actual railway access. The identifying assumption is that a municipality between two towns (nodes) that lies on a least cost path is as good as randomly assigned when controlling for other determinants of railway expansion. This so-called inconsequential units IV approach and the careful analysis of pre-railway data allow us to infer whether transportation infrastructure indeed promoted growth or just followed favorable regional developments.

Results

We estimate an effect of railway access on population growth of additional 0.4 percentage points per year for municipalities that gained access to the railway. The small-scale Swiss municipalities allow for a precise geographic analysis, uncovering considerable nonlinearities in the effect of railway proximity. We show that municipalities within 2 kilometers to the railway line benefited disproportionately from railway access in terms of population growth (see figure 1). At the same time, municipalities at a distance of 3-8 kilometers away from the railway line experienced a pronounced growth slowdown compared to municipalities farther away. This pattern was primarily driven by the migration balance as fertility rates were hardly impacted. Apparently, people living within the mentioned intermediary distance relocated to places nearer to a railway line.

Figure 1: Distance to railway and population growth, local polynomial with 95% confidence band
Settings: Kernel: Epanechnikov, Degree=0, Bandwidth = 0.43, Pwidth = 0.64. Residuals: Calculated based on OLS regression of population growth (1850–1900) on control variables, i.e. distance to the nearest town node (log), distance to the nearest Stephenson-Swinburne node (log), access to main road (binary), access to navigable water (binary), elevation (log), water power potential (binary), town privilege (binary), population in 1850 (log), area in km² (log), and annual district population growth 1800–1850, and cantonal fixed effects.

Our analysis further shows that the improved railway infrastructure was an important driver of industrialization. Railway access led to a decreasing share of people working in the agricultural sector while increasing the share of industrial and service workers. Using body height data of army recruits, we further provide evidence that railway access advanced the population’s (biological) wellbeing possibly due to improvements in nutrition and labor conditions.
Lea Wirth was awarded the Schmeller-Prize 2016 for her excellent master’s thesis titled “A Model of Interbank Markets” that she wrote under the supervision of Cyril Monnet. After completing her Master’s degree, Lea Wirth started working as a teaching assistant at the Study Center Gerzensee and is writing her dissertation in the field of macroeconomics at the University of Bern. In what follows, she gives a short summary of her prizewinning master’s thesis.

Motivation

Originating in the financial sector, the recent global financial crisis showed the fragility of a banking system highly dependent on well-functioning interbank markets as these are of great importance to banks’ liquidity management. While among the most liquid markets in the financial sector during normal times, they started to dry up in August 2007 as banks became less willing to lend money to peers. The liquidity hoarding was mainly motivated by the desire for self-protection against higher than expected liquidity needs as well as increasing uncertainty regarding counterparty risk with lenders not knowing what risky assets potential borrowers were holding.

Model

My master’s thesis is a first step to make the adverse selection problem endogenous by looking at the formation of the lending network. The main agents of the model are three banks (A, B and C), which are imperfectly connected with each other and heterogeneous with regards to their investment possibilities. At the beginning of the period, bank A is the only bank receiving client deposits and has to decide how to manage these funds. Bank A can either invest in its own outside option or interact with bank B in the interbank market. In case bank A grants a loan to bank B, bank B has to decide how to invest these funds by choosing between relending the funds to bank C or investing in the outside option. To ensure a clear credit line, I further assume that bank C has to invest in the outside option and is not able to interact with other banks in the interbank market, when receiving a loan from B. The model is solved backwards, by analyzing bank C’s behavior in a first step.

Asymmetric Information

One of the main frictions is counterparty risk, which is intensified by asymmetric information. Introducing private information with regards to the different types of bank B and C might lead to adverse selection: Banks granting loans are concerned about the interest rate on these loans and the repayment probability of their borrowers. In a model with asymmetric information, lending banks no longer know what the types of all involved banks are. Hence, they have to take their expectations of the other banks’ types into account when making their decisions.

Results

The thesis should be understood as a first step towards making the adverse selection problem endogenous. The model can explain the market freeze in the interbank market. Besides the analysis of introducing asymmetric information in different ways, the model also allows to study the effect of different capital requirements on the agents’ behavior. The results support the argument that banks are less willing to take risk when exposed to it with their own capital.

Figure 1: The general model setup

Notes: \((1+r_D)\) stands for the interest rate on deposits. \(R_A\) is the return on bank A’s outside option. The interbank rate between bank A and bank B and the rate between bank B and C are denoted by \((1+r_{AB})\) and \((1+r_{BC})\), respectively. There are two types of banks B and C. With probability \(q^B\), a particular bank \(i = B, C\) will face a safe outside option and with probability \((1-q^B)\) a risky one.
Annual Report 2016

The 75th Anniversary Celebration "75 Years of Tourism Science" at the Universities of Bern and St. Gallen

Therese Lehmann Friedli & Sarah Hämmerli – "Decoding the gene of tourism". Under this title, the Universities of Bern and St. Gallen invited to their joint anniversary celebration of "75 Years of Tourism Science in Switzerland" on October 20, 2016. A wide variety of guests from scientific, political and practical backgrounds accepted the invitation and re-experienced the most important milestones of the past. They also helped derive the key questions of the future. According to representatives from the tourism industry, science should provide a mental map as an orientation guide.

Showpiece of Interdisciplinary Research

During his welcome speech, Prof Aymo Brunetti, Director of the Center for Regional Economic Development (CRED) at the University of Bern, emphasized that tourism science is a veritable showpiece of interdisciplinary thinking. Prof Thomas Bieger, Rector of the University of St. Gallen, added to this by stating that tourism science should be practised at universities especially because new developments and trends (e.g. digitalization) are often observed at an earlier stage than in other purely disciplinary fields.

Foundation of the Tourism Institutes despite Turmoils of War

In her greeting message, Marie-Gabrielle Ineichen-Fleisch (Director of SECO) praised the foundation of the two institutes: "The foundation of two institutes in the middle of World War II was not only a courageous, but also a far-sighted decision". In the first institute ordinances of the Canton of Bern, scientific research, academic teaching and a non-binding mission in continuing education were assigned to the Research Institute of Leisure and Tourism (FIF) as its key responsibilities. The first Director of the Institute, Prof Kurt Krapf, highlighted the maxim that tourism science should not proudly withdraw into its ivory tower, because science and practice, knowledge and action, are two inseparable worlds.

Development of Tourism Research

Following World War II and accompanied by fast and broad development of the tourism industry, the FIF focused mainly on economic and planning interrelations in health resorts. In 1971, Prof Jost Krippendorf was elected as the new Director of the FIF. One of his personal milestones can be seen in his book "The Landscape of the FIF. One of his personal milestones can be seen in his book "The Landscape Consumers—Tourism and Recreational Areas, a Curse or a Blessing?" which was published in 1975. With this critical analysis of current (undesirable) developments in tourism, he pointed towards the self-destructive tendencies of the phenomenon. A further FIF-milestone was the publication of the tourism synthesis within the framework of the UNESCO research programme "Man and Biosphere" entitled "Alpsegen Alptraum – Für eine Tourismusentwicklung im Einklang mit Mensch und Natur") in 1886. During the 1990s, tourism in Switzerland faced hard times and research pointed towards service quality as key to recovery. Prof Hansruedi Müller, who was elected as the successor of Krippendorf in 1989, developed the three-tiered Quality Programme for Swiss Tourism that fast became an international standard in the promotion of quality.

Comprehensible Communication of Research Findings

High-quality applied research should emerge from a dialogue with practitioners. This was one of the core principles which convinced a renowned podium at the anniversary celebration. Therefore, it was important that science strove for a close collaboration with practitioners, especially when implementing the research results. In the same vein, the former member of the Swiss National Council, Franz Steinegger, stated: “Research findings have to be communicated to practice in a simple language and in a short, summarising manner”.

Embedding of Tourism Science into the University Structure

With Hansruedi Müller’s emeritation in 2012, the management of the University of Bern decided to create the Center for Regional Economic Development CRED which was integrated into the Department of Economics. With regards to research focus, the CRED stands on four pillars: CRED Economics, CRED Entrepreneurship, CRED Geography and CRED Tourism. The tourism research unit CRED-T holds a cross-diisional function and thus has an interdisciplinary focus. Over 75 years of development, the two institutes, FIF and later CRED, focused on understanding tourism science and contributing to interdisciplinary research. The organizational form, during this time, adapted to changing circumstances. It proved flexible and well-equipped for future endeavours.

Further information: http://www.cred-t.unibe.ch/ueber_uns/75_jahre_tourismus_forschung_schweiz/rueckblick
Journal Articles


FERNANDEZ, OCTAVIO, JOSEPH FRANCOIS & PATRICK TOMBERGER. 2016. MRIO Linkages and Switzerland’s CO2 Profile. *Aussenwirtschaft, forthcoming.*


Monographs


Book Chapters


Other Publications


**RADULESCU, DOINA & FABIAN FEBER.** 2016. Spannungsfeld Regulierung: Eine Studie zu direkten und indirekten Folgen der Regulierung mit Bezug zur Schweiz. *KPM Schriftenreihe* Nr. 64.


Discussion Papers: www.vwi.unibe.ch/forschung/diskussionsschriften


**CHERNOZHUKOV, VICTOR, IVAN FERNANDEZ-VAL, BLAISE MELLY & KASPAR WÜTHRICH.** 2016. Generic Inference on Quantile and Quantile Effect Functions for Discrete Outcomes, *DP1607*.


**EMONS, WINAND & CLAUDE FLUET.** 2016. Strategic Communication with Reporting Costs, *DP1605*.

**MELLY, BLAISE & KASPAR WÜTHRICH.** 2016. Local Quantile Treatment Effects, *DP1605*.


Other Working Papers


* An asterik indicates publications that were listed as forthcoming in the Newsletter 2016.

Grants

von Ehrlich, Maximilian: Grant from the Economic and Social Research Council (ESRC) for the project “UK in a changing Europe”.

Gerfin, Michael: Grant from the Swiss National Science Foundation (SNF) for the project “Physician retirement, practice closures and discontinuity of care: how does it affect patients’ healthcare utilization and health-related outcomes?”.

Koubi, Vally: Grant from the Swiss National Science Foundation (SNF) for the project “Democratic quality and legitimacy in international environmental governance”.

Radulescu, Doina: Grant from the Swiss National Science Foundation (SNF) for the project “Energy demand elasticities, financing of energy infrastructure networks and income redistribution”.

Walter, Stefan: Prolongation of the grant from the Staatssekretariat für Bildung, Forschung und Innovation (SBFI) for the project “Swiss Leading House Economics of Education, Firm Behaviour and Training Policies”. Grant from the Bertelsmann Stiftung for cost-benefit simulations. Grant from the Staatssekretariat für Bildung, Forschung und Innovation (SBFI) for a project on social prestige ranking by education type.

Awards and Honors

Baltensperger, Ernst: Thünen Lecture 2016 honors academic achievements of members of the Verein für Socialpolitik - Gesellschaft für Wirtschafts- und Sozialwissenschaften.

Canet, Fabio: VBW Excellence Award Bronze 2016 awarded by the VBW - Vereinigung Berner Wirtschaftswissenschaftler.

Kanzig, Diego: VBW Excellence Award Silver 2016 awarded by the VBW - Vereinigung Berner Wirtschaftswissenschaftler.

Wirth, Lea: Schmeller-Prize for Economics 2016 awarded by the Volkswirtschaftliche Gesellschaft des Kantons Bern.

Wütrich, Kaspar: Haller Medal 2016 awarded by the fund Hallersche Preismedaille.
Department News

Appointment

MONIKA BANDI TANNER has been appointed permanent lecturer (Dozentin II).

Moving on...

OLIVIER BOCHET has left the department and has been appointed associate professor of economics at New York University, Abu Dhabi.

DANIEL BURKHARD has left the department and has accepted a job offer at CONCORDIA Versicherungen AG.

STEPHAN KYBURZ has left the department and is now research associate at the London School of Economics and Political Science.

PHILIPP WEGMÜLLER has left the department and has accepted a job offer at the State Secretariat for Economic Affairs SECO.

KASPAR WÜTHRICH has left the department and has been appointed assistant professor at the Department of Economics at UC San Diego.

Doctoral Theses

BURKHARD, DANIEL: "The cost of widowhood, consumption at retirement, and physician prescription behavior. Three essays in applied microeconometrics". Doctoral Committee: Michael Gerfin, Stefan Boes (University of Lucerne).


INDERGAND, RONALD: "Four Essays in Macroeconomics". Doctoral Committee: Klaus Neusser, Ulrich Woitek (University of Zurich).

KYBURZ, STEPHAN DANIEL: "Essays in Development and Political Economics. Infrastructure, the Political Resource Curse, and Technology Spillovers". Doctoral Committee: Aymo Brunetti, Roland Hodler (University of St. Gallen).

MÜLLER, BARBARA: "Four Essays on the Economics of Vocational Education and Training". Doctoral Committee: Stefan Wolter, Stefan Boes (University of Lucerne).

NUKIC, SENADA: "Essays in Macroeconomics". Doctoral Committee: Luca Benati, James R. Malley (University of Glasgow).

WEGMÜLLER, PHILIPP: "Essays in International and Monetary Macroeconomics". Doctoral Committee: Fabrice Collard, Patrick Fève (Toulouse School of Economics).