Annual Report 2023
Department of Economics
2023 has fortunately not been a year of major economic crises; however – again – a considerable number of events kept the professional life of economists interesting. Let me just mention the significant global ups and downs of inflation which are a constant challenge for monetary policy and – specifically for Switzerland – the fact that only fifteen years after the bailout of UBS, emergency legislation had again to be used to deal with problems of the other Swiss banking giant. The constant emergence of major economic events or even global crises in the last decades keeps economists busy and constantly demonstrates the importance of the science we teach and are doing research on.

Our department has seen some major changes this year. In particular, we had the retirement of two long serving and well-known colleagues. On the one hand, Winand Emons who had served as professor of microeconomics since 1992. In addition to doing research and having educated generations of students, Winand has been involved in economic policy as a member of the Competition Commission and had served as department head and as dean. His successor is Jean-Michel Benkert who had already started as assistant professor tenure track in 2021. On the other hand, Harris Dellas who had been professor of macroeconomics since 1998. He is an internationally well-known researcher in monetary macroeconomics and has among other in our department promoted the establishment of the successful specialised master program in monetary and international economics. He was replaced by Anastasia Burya who this year joined our department as assistant professor tenure track. She has studied economics in Moscow and holds a PhD from Columbia University. You find short reviews on the careers of Winand and Harris as well as an interview with Anastasia in this report.

As after almost ten years I have recently resigned as department head, this is my last “letter of the director”. Starting next semester, Blaise Melly, professor of econometrics, will be the new department head.

I would, also this year, like to thank all members of the department for their various valuable contributions to research, teaching and outreach.

Aymo Brunetti
December 2023
Anastasia Burya studied economics at the Lomonosov Moscow State University and Columbia University, where she received her PhD in Economics in 2023. Her research focuses on macroeconomics, in particular on questions related to market power, labor market dynamics and household finance. We wish Anastasia Burya all the best in her new position at the University of Bern.

Interview with Anastasia Burya

Anastasia Burya, thank you for being part of our team. How are you settling into your new role at the University of Bern?

Thank you, it has been amazing! I like the view from the lawn in front of the main building.

Before joining the Economics Department, you pursued your PhD in the US at the Columbia University. What do you consider, after your first few months in Bern, to be the main differences between the two institutions?

The economic departments are very similar, the atmosphere is very friendly, and everybody is focused on doing the best research. Columbia is a larger university with more PhD students and professors, more courses offered, and more weekly seminars. In Bern, however, PhD students work much closer with their advisors; most would be coauthoring a paper with their advisor or assisting with research.

Can you tell us about your current research projects?

My research focuses on macroeconomics, with special emphasis on market power, labor market dynamics, and household finance. I combine quantitative theoretical models and granular microdata to identify the effects of agent heterogeneity in the economy. I am finishing my paper about mortgages in the US and how they create unequal gains from monetary policy. I am also working on a paper about labor market power and how it determines the effects of macroeconomic expansions on employment and wages and creates a disconnect between the two, making the trade-off between inflation and unemployment more unfavorable.

Your research integrates both theoretical models and granular microdata to analyze agent heterogeneity. What is your motivation to combine both theoretical and empirical approaches in your work?

Do you believe that this approach will become increasingly important in future (macroeconomic) research?

Macroeconomics has been experiencing a boom in empirical research in recent years. More detailed datasets have become available, and more econometric tools are being developed. To my mind, this is one of the promising ways forward. Decision-making is becoming more data-driven, and macroeconomic research needs to keep up.

Which courses are you currently teaching, and (if you already know) which ones do you plan to offer to students in the next semesters?

Next semester, I am teaching a master’s course on Quantitative Macroeconomics. It will focus on heterogeneous agent models and quantitative solution methods.

Anastasia Burya, thank you very much for this interview.
Research Bit: Fast algorithms for the quantile regression process

Blaise Melly (in joint work with Victor Chernozhukov and Iván Fernández-Val) - In the realm of econometrics, devising effective algorithms is as crucial as developing innovative estimators. An estimator that takes an inordinate amount of time to compute is unlikely to find practical applications. Our work introduces exact and approximate algorithms that reduce the computational time for quantile regression by factors of 30 and several hundreds, respectively. This computing gain makes quantile regression a viable method for a wider range of applications, rendering it accessible to a broader audience of researchers and practitioners.

Most econometric methods rely on minimizing sums of squared errors, leading to closed-form solutions that simplify computations. However, these methods only provide estimates of average policy effects. In many real-world applications, we are particularly interested in understanding the impact of policies on the distribution of outcomes, especially their implications for inequality. For instance, we may be interested in examining how the introduction of a minimum wage affects the income distribution, how school vouchers influence the distribution of test scores, or how smoking impacts the distribution of birthweights. Quantile regression methods have been developed specifically to address these issues.

Computing quantile regression involves minimizing sums of (weighted) absolute errors, which lack closed-form solutions and necessitate iterative algorithms that can be notoriously slow. This computational burden becomes particularly pronounced when dealing with large datasets, a common occurrence in modern econometric research. Additionally, we often need to compute a sequence of quantile regressions to obtain the entire distribution of the outcome. To further complicate matters, the most robust method for inference involves simulating new samples and repeatedly applying the estimator to these new data. Consequently, we may end up estimating thousands of different quantile regressions. Even if the computational time for a single regression is reasonable, the overall procedure becomes unwieldy and impractical for practitioners.

In our work we propose two novel algorithms that leverage previously estimated regressions at one quantile to estimate the regression at a neighboring quantile. The first method is exact and exploits a mathematical property of quantile regression: The fitted quantile regression line interpolates k data points, where k is the number of regressors. Only the sign of the residuals of the other observations matters for the determination of the quantile regression coefficients. If one can guess the sign of some residuals, then these observations can be ignored. This reduces the effective sample size by focusing only on observations for which we are uncertain. The second method offers even faster computation but is not numerically equivalent to the original algorithm. It approximates the difference between quantile regression coefficient vectors at two close quantiles using a first-order Taylor expansion. This algorithm starts from a quantile regression estimated using one of the existing algorithms and then obtains sequentially all remaining quantile regressions using one-step approximations.

Our motivation for this project was specifically to make an estimator that we developed previously more competitive and accessible. Researchers often opted for a simpler but less accurate alternative instead of our estimator. With our algorithms, computations that previously took two months can now be completed in just 30 minutes on a laptop. We hope this will encourage applied researchers to adopt quantile regression based methods, enabling them to gain deeper insights into the distributional effects of policies and other interventions. To facilitate the use of these new algorithms, they have been implemented in the Stata package qrprocess and in the R package quantreg of Roger Koenker.

**Kai Gehring** (in joint work with Sirus Dehdari) - Modern nation states needed to establish a sufficiently strong common identity to enable public good provision and economic cooperation. Creating such a common identity with initially diverse regions within the states could be achieved using positive incentives, but also repressive policies against minority regions. This research shows how repressive policies by a nation state can backfire and even strengthen regional identities and the demand for more decentralized political decision-making.

The modern nation state provides many important public goods, such as defense, infrastructure, and social insurances. However, the willingness to contribute to the financing of these public goods through taxes and social security payments rests on identifying with and trusting other members of the same nation state. A lack of trust and common identity makes enforcing taxes and agreeing politically on public goods provision much more challenging and costly. As many low-income countries demonstrate, this ultimately leads to weak state capacity and reduced growth and development.

However, establishing a common identity is a challenging task. Most modern nation states are artificial constructs that include various regions with initially strongly differing cultures and often different languages. It is estimated that at the time of the French Revolution in 1789, only about half of the population of France could speak French. Napoleon started a process of nation-building in Europe, partly motivated by creating a strong joint army for defense and partly by improving tax morale and state capacity. This nation-building process included better provision of infrastructure, particularly in remote regions, but also more intrusive measures like forced conscription and the banning of local languages, political parties, or organizations.

The French-German border region of Alsace-Lorraine provides a unique historical context for studying the effect of exposure to different types of nation-building policies. The region was divided between France and Germany following the Franco-Prussian War in 1871 in a way that ignored prior linguistic or cultural differences. The part of the region that belonged to Germany for about 50 years was exposed to more intrusive German nation-building policies. After it returned to France following World War I, it was again subject to intrusive policies, now by the French central state. These policies included bans on the use local language, limited political representation, fewer political rights, and arbitrary closures of political parties and newspapers.

Based on the arbitrary division, the study employs a geographical regression discontinuity design to methodically explore the region’s identity dynamics. This methodology allows for a clear analysis of the impact of historical nation-state policies on regional identity. The findings reveal a significant correlation between negative historical experiences and a strong regional identity in Alsace-Lorraine. The effects are persistent even decades after the historical events themselves, and show that beyond within-family transmission of culture, more prevalent civic organizations and a higher readership of regional newspapers are important mechanisms.

The study also delves into the implications of a strong regional identity on political and social structures. It suggests that a deeply ingrained regional identity can influence political preferences, such as support for regionalist parties. Furthermore, this identity can drive demands for greater regional autonomy and the willingness to contribute to both national and regional public goods.

The research contributes to a rapidly growing literature on both the origins and consequences of identities in economics. These studies highlight that a long-term perspective is required to understand the origins of common identities, and that through their effect on identities, historical events still influence economic and political decisions today.

The Department of Economics has to bid Farewell to Winand Emons

Igor Letina and Jean-Michel Benkert – Professor Winand Emons has retired this summer. Igor Letina and Jean-Michel Benkert, as his respective successors at the Swiss Competition Commission and the Department of Economics, take a moment to appreciate Winand’s contribution and career. The department wishes him all the best for the future.

Winand spent his formative years at the University of Bonn, where he studied economics and obtained his Diplom Volkswirt in 1982. Four years later, he completed his PhD in Economics in Bonn under the umbrella of the European Doctoral Programme, enabling him to spend a year at the London School of Economics. Having completed his education, he started his academic career as an assistant to Martin Hellwig at the University of Basel, eventually completing his Habilitation in 1990.

In was during his time in Basel that he visited the University of California, San Diego, from which a fruitful collaboration with Joel Sobel resulted. Arguably, this proved to be the steppingstone to becoming a full professor at our department in Bern in 1992 at the remarkably young age of 34, leading to a three-decade long tenure, during which he witnessed and enabled the transformation of the department from a handful of professors to what it is today.

Winand's fields of research covered industrial organization, the economics of uncertainty and information as well as law and economics. While his research spans many topics, one issue plays a particularly prominent role in his academic output: the one of credence goods. What characterizes a credence good is that consumers do not know whether these goods are necessary or not. The consumers must instead rely on the advice of self-interested experts, who not only determine if the good is necessary but also sell the goods themselves. Important examples of a credence good are medical treatments. A patient in general does not know if a treatment is necessary or not and has to rely on a doctor’s recommendation. Of course, a doctor who also performs the treatment might choose to treat for financial rather than medical reasons. In several papers, Winand shows that if consumers rationally interpret ex ante available information, a market can function even in the face of such severe frictions.

Beyond being an active researcher, he also devoted his time to training the next generations of economists, advising many PhD students in Bern. We were able to count fifteen PhD students who graduated under Winand’s supervision. Winand managed to give his students the freedom they needed to develop on their own while looking after them and playing his part in placing them in jobs in academia, the public and the private sector.

Standard economic theory predicts the underprovision of public goods. Lucky for us in Bern and the profession overall, this prediction did not apply to Winand. Over the course of his career, he contributed to the editorial process in various journals, helped organize numerous conferences and was member of many committees. Notably, these efforts were not restricted to the academic world, as proves his membership in the Swiss Competition Commission from 2012 to 2023. This outreach and transfer of expertise from academia to the society more broadly is hard to understate, given its limited incentives to do so from a purely academic perspective.

Finally, Winand did not shy away from taking responsibility both at the department and faculty level. He acted twice as chairman of the department, vice dean and dean of the faculty, meaning that he held these roles for almost half of his entire tenure in Bern. He thus invested a lot of time in the management and advancement of our department. Of particular note is his leadership of the faculty during the unprecedented Covid pandemic. It is especially in the light of this public servanthip that Winand will be missed going forward.

We wish Winand all the best going forward and hope he will now be able to spend his energy with his family and, especially, grandchildren.
When Professor Harris Dellas retired at the end of August 2023, he looked back on a 25-year long career as a professor at the Department of Economics of the University of Bern. After completing his PhD in Economics at the University of Rochester in 1985 under the supervision of Alan Stockman - a world-renowned expert in the field of International Economics - Harris taught for several years in the United States, first at Boston College, then at Vanderbilt University, and finally at the University of Maryland. He then moved to Europe, first to the Catholic University of Louvain and then to Bonn. In 1998 he moved to Bern, where he was also the director of the Institute of Political Economy, and had a teaching appointment at the Study Center Gerzensee.

Harris has had a profound impact on the Department of Economics, in terms of teaching, research, advising, organization of international conferences, development and management of the Master in International and Monetary Economics (MIME), and the formation of the group of macroeconomists working at the Department.

In particular, in terms of research, Harris has developed a long-standing collaboration with one of the intellectual leaders in the field of Macroeconomics, Northwestern University's George-Marios Angeletos, which has culminated in major publications in some of the top journals in the field, such as the American Economic Review and Econometrica.

When Harris joined the Department in 1998 it was organized by chairs. Together with some of his colleagues at the time Harris supported the transition towards a department-like structure with groups organized by field to foster the quality of teaching and research and to exploit synergies. For many years, he led the group of macroeconomists and managed MIME, one of the Department’s flagship MA programs for students interested in a career in academia, finance or central banking.

Since 2003 Harris has organized annual ‘Hydra Workshops on Dynamic Macroeconomics’, which over the years have featured presentations by leading researchers such as the future Nobel Prize winner Thomas Sargent. He has also co-organized conferences with the Study Center Gerzensee, the St Louis Fed and other institutions, and in 2022 he initiated the conference ‘The SNB and its Watchers’ under the auspices of the Karl Brunner Institute, which he co-founded together with Ernst Baltensperger and Claudio Loderer. Modeled after the conference ‘The ECB and Its Watchers’, the event gathers academics, market participants, media representatives and policymakers to discuss policy issues relevant for Switzerland.

Over the years Harris has been a consultant to many international organizations and central banks, including the International Monetary Fund, the European Central Bank, the Banks of Finland, France and Greece, and the Hong Kong Monetary Authority. For the Swiss National Bank he helped develop a Dynamic Stochastic General Equilibrium model of the Swiss economy.

As a supervisor, Harris advised and guided generations of students. Well-read and curious he gave a lot of freedom to them as evidenced by a broad set of thesis topics, ranging (e.g.) from various issues in international economics to the role played by economic sentiment and intangibles.

Not surprisingly, retirement is not what Harris seeks: He will continue to do research and teach in Europe and overseas. We wish him all the best for the future.
VWG-Prize 2023: Master's Thesis "Inflation targeting impact on transmission of economic shocks"

Marvin Truffer was awarded the VWG-Prize 2023 for his excellent Master's thesis on the question "Has inflation targeting changed the transmission of the shocks to the economy?" that he wrote under the supervision of Prof. Luca Benati. In what follows, Marvin gives a short summary of his prizewinning Master's thesis.

Motivation and Contribution

After the failure of money-growth and exchange-rate targeting in providing low and stable inflation in many countries, the search for a new nominal anchor to achieve price stability gained urgency in the early 1990s. Many central banks thereafter adopted a new monetary policy framework called ‘inflation targeting’ along with floating exchange rates.

Average inflation rates among inflation targeting, as well as non-targeting economies, dropped sharply in the 1990s and remained stable until the most recent turbulent episode. This raises the question of whether it was the merit of inflation targeting to bring down and stabilize inflation. Empirical evidence is broadly supportive of the effectiveness of inflation targeting in delivering low and stable inflation as well as anchoring inflation expectations.

Considering the more turbulent last few years, my Master’s thesis further examines whether the transmission of economic shocks to the economy has changed with the introduction of inflation targeting and if this monetary policy framework is better suited to deal with crises and shocks.

Methods

My Master’s thesis investigates seven countries that adopted inflation targeting or a similar monetary policy framework that features many of its characteristics in detail. I use a Bayesian fixed-coefficients VAR(p) model estimated by sub-sample to examine the possibly different behavior of the economy after major macroeconomic disturbances under inflation targeting compared to previous monetary policy frameworks. As a preliminary analysis, I examine the response of the economy after a single permanent GDP shock and a transitory shock to output. A combination of the long-run restriction approach introduced by Blanchard and Quah (1989) and Uhlig’s (2003, 2004) maximum forecast error variance methodology serves to identify and disentangle the two shocks. In a second step, as proposed by Arias et al. (2018), I use zero long-run restrictions and short-run sign restrictions to jointly identify a single permanent GDP shock and four distinct transitory supply and demand-side disturbances.

Results and Motivation

I find that inflation targeting has proved remarkably successful in mitigating the deflationary impact of the permanent output shock. However, this is not generally the case for the various temporary shocks since several economies experience enhanced price movements subsequent to some of the transitory shocks under inflation targeting compared to the previous monetary policy epoch. Moreover, empirical evidence reveals that inflation targeting has not universally reduced the impact of the shocks on real GDP and the unemployment rate. Hence, this finding suggests that inflation targeting does not necessarily provide monetary authorities with greater flexibility to stabilize the real economy, as theory and advocates of this monetary policy framework suggest.

Overall, evidence shows that the introduction of inflation targeting has not only substantially changed economies’ responses to disturbances, but has also led to occasional differences in the relevance of the shocks in explaining the dynamics of key macroeconomic variables. However, it is still unclear whether these substantial changes in the transmission of the shocks to the economy are due solely to the adoption of inflation targeting. Its introduction was typically accompanied by economic, fiscal, and political reforms. Thus, the modifications in the response of the economy to shocks may partly be attributable to improved economic policy conduct in a broader sense or other factors that my study did not control for.

Truffer, Marvin (2023). Has inflation targeting changed the transmission of the shocks to the economy?
Publications

Journal Articles


Ciullo, Alessio; Strobl, Eric; Meiler, Simona; Martius, Olivia; Bresch, David N. (2023). Increasing Countries’ Financial Resilience through Global Catastrophe Risk Pooling. *Nature Communications*, 14(1). DOI: 10.1038/s41467-023-36539-4


Publications (2)


**Huesler, Joel**; Strobl, Eric (2023). Predicting the Number of Fatalities in Extreme Civil Aviation Accidents. *Journal of Air Transportation*, 31(4). DOI: 10.2514/1.D0357


Pelli, Martino; Tschopp, Jeannne; Bezmaternykh, Natalia; Eklou, Kojdovi M. (2023). In the Eye of the Storm: Firms and Capital Destruction in India. *Journal of Urban Economics*, 134. DOI: 10.1016/j.jue.2022.103529


Publications (3)

Monographs


Book Chapters


Brunetti, Aymo (2023). Herausforderungen für die Unabhängigkeit der SNB. In: Baltensperger, Ernst; Roth, Jean-Pierre (eds.) Schweizer Geldpolitik – quo vadis? (pp. 77-86). Schulthess Juristische Medien


Newspaper Articles and other Publications


Büchler, Simon; Hauck, Lukas; Hofstetter, Joël; Scognamiglio, Donato; Stalder, Nicola; v. Ehrlich, Maximilian (2023). Ursachen für steigende Wohnkosten in der Schweiz mit Fokus auf die Raumplanung Bundesamt für Wohnungswesen. BWO.

Gschwendt, Christian (April 2023). Wie wirkt sich die Digitalisierung auf den Schweizer Arbeitsmarkt aus? Transfer DWG.


Monnet, Cyril; Niepelt, Dirk (2023). Will the digital euro be dead on arrival? The Banker.


Niepelt, Dirk (June 2023). Retail central bank digital currency and the social costs of liquidity provision. VoxEu.

Publications (4)


Some Working Papers

Benati, Luca; Benigno, Pierpaolo (2023). Gibson’s Paradox and The Natural Rate of Interest (CEPR discussion paper series 17959).


Lamersdorf, Nora; Linzert, Tobias; Monnet, Cyril (2023). CBDC, Monetary Policy Implementation, and The Interbank Market.

Monnet, Cyril; Chiu, Jonathan (2023). Money Creation for Distributed Ledgers: Stablecoins, Tokenized Deposits, or Central Bank Digital Currencies?

Nagui, Costanza; Robert-Nicoud, Frédéric; De Giorgi, Giacomo (2023). The impact of natural disasters on the local economy.


Pelli, Martino; Tschopp, Jeanne (March 2023). Storms, Early Education and Human Capital 10.2139/SSRN.4409857


Grants & Awards

Grants


Monnet, Cyril & Niepelt, Dirk: “Money and Debt in the 21st Century and Beyond: Liquidity, Safety, and Redistribution”

Schilter, Claudio: SBFI Projektförderung

v. Ehrlich, Maximilian: Grant from the Federal Office for Housing: “Ursachen für steigende Wohnkosten”

Awards and Honors

Brunetti, Aymo: Election in the Assembly (Board of Directors) of the International Committee of the Red Cross

Letina, Igor: Member of the Swiss Competition Commission

Niepelt, Dirk: Visiting Professor at the University of Vienna

Niepelt, Dirk: Bank of England, Member of Academic Advisory Committee

Truffer, Marvin: VWG-Prize awarded by the Volkswirtschaftliche Gesellschaft des Kantons Bern.

Appointments & Promotions

Anastasia Burya has been appointed Assistant Professor (Tenure Track) in Macroeconomics.

Dino Collalti has been promoted to Postdoctoral Research Fellow at the Center for Regional Economic Development (CRED)

Doctoral Theses


Hobi, Lukas Christian: “Essays on poverty and labor market integration for refugees”. Doctoral Committee: Michael Gerfin, Zachary J. Parolin (Bocconi University)

Collalti, Dino: “Danger from Above – The Economic Impacts of Floods”. Doctoral Committee: Eric Strobl, Luisito Bertinelli (Luxemburg University)

Kyriacou, Lucas: “Essays in Macroeconomics”. Doctoral Committee: Harris Dellas, Luca Benati, Fabrice Collard (Toulouse School of Economics)

Spycher, Sarah: “Political Economy Factors in International Environmental Cooperation”. Doctoral Committee: Ralph Winkler, Andreas Lange (Hamburg University)
Department News

Moving on...

Guido Baldi has left the department and has accepted a position as Research Associate of the Macroeconomics Department at the German Institute for Economic Research.

Lucas Kyriacou has left the department and has accepted a position as Economist at the State Secretariat for Economic Affairs.

Marcus Roller has left the department and has accepted a position as Director and Head of Social Research at intervista AG.

Maurizio Strazzeri has left the department and has accepted a position as Scientific Assistant at the Bern University of Applied Sciences.

Oleg Muratov has left the department and has accepted a position as Lecturer at Yale University.

Pierre Magontier has left the department and has accepted a position as Postdoctoral Research Fellow at the Universitat Autònoma de Barcelona.

Sarah Spycher has left the department and has accepted a position as Postdoctoral Researcher at the University of Bologna on a SNSF Postdoc.Mobility Fellowship.

Severin Lenhard has left the department and has accepted a position as Postdoctoral Researcher at the University of St. Gallen.

Vilane Gonçalves Sales has left the department and has accepted a position as Marie Curie Fellow at Ca'Foscari University in Venice.