

15th End-of-Year Conference of Swiss Economists Abroad

December 22, 2020

Virtual

Organizers: Enrico Berkes (Ohio State University), Aline Bütikofer (Norwegian School of Economics), Patrick Gaule (University of Bath).

Supported by the Swiss National Bank and the Swiss Society of Economics and Statistics

Learn more about our network at www.swisseeconomistsabroad.org

15th End-of-Year Conference of Swiss Economists Abroad

Tuesday, December 22

15:00 - 15:15 **Welcome and Instructions** [Bern Room]

15:15 - 16:00 **Parallel Sessions 1, 2, and 3**

1. Monetary [Zurich Room]
2. International [Geneva Room]
3. Applied Micro [Lugano Room]

16:00 - 16:30 **Coffee Break** [Gather]

16:30 - 17:30 **Parallel Sessions 4, 5, and 6**

4. Macro [Zurich Room]
5. Finance [Geneva Room]
6. Applied Micro [Lugano Room]

17:30 - 18:30 **Informal Event** [Gather]

***Times are in European Central Time. Instructions on how to connect to the virtual venue will be added at the end of the document.**

15th End-of-Year Conference of Swiss Economists Abroad

Tuesday, December 22

15:00 - 15:15 **Welcome and Instructions** [Bern Room]

15:15 - 16:00 **Session 1: Monetary** [Zurich Room]

Lukas Altermatt Oligopoly Banking, Risky Investment, and Monetary Policy
Jean-Paul L'Huillier Raising the Inflation Target: How Much Extra Room Does It Really Give?
Laura Gáti Monetary Policy & Anchored Expectations - An Endogenous Gain Learning Model

15:15 - 16:00 **Session 2: International** [Geneva Room]

Barthelemy Bonadio Migrants, Trade and Market Access
Frederic Martenet Inequality and Capital Flows
Alain Naef Responsibility for Emissions: The Case of the Swiss National Bank's Foreign Exchange Reserves and the Norwegian Oil Fund

15:15 - 16:00 **Session 3: Applied Micro** [Lugano Room]

Myriam Marending War and Peace, and Armed Groups: Conflict dynamics in the presence of peace negotiations
Andreas Haller Welfare Effects of Pension Reforms
Aline Bütikofer School Selectivity, Peers, and Mental Health

16:00 - 16:30 **Break** [Gather]

16:30 - 17:30 **Session 4: Macro** [Zurich Room]

Guillaume Sublet Fiscal Rules with Discretion
Yann Koby Low Rates and Bank Loan Supply: Theory and Evidence from Japan
Constantin Bürgi Expectation Formation and the Persistence of Shocks
Lukas B. Freund Unexpected Effects: Uncertainty, Unemployment, and Inflation

16:30 - 17:30 **Session 5: Finance** [Geneva Room]

Matthieu Chavaz Separating retail and investment banking - Evidence from the UK
Gabriel Züllig The extensive and intensive margin of price adjustment to cost shocks: Evidence from Danish multiproduct firms
Piera Bello Gender price discrimination in the Annuity Market: Evidence from Chile
Florian Eugster Business School Education and Stock Market Participation

16:30 - 17:30

Session 6: Applied Micro [Lugano Room]

Sara Signorelli	Too Constrained to Grow. Analysis of Firms' Response to the Alleviation of Skill Shortages
Richard Faltings	Squeezing more juice out of Lime: pricing inefficiencies in dockless vehicle markets
Patrick Gaule	Market Size and Innovation: the Case of Covid-19 and Large Diseases
Enrico Berkes	Lockdowns and Innovation: Evidence from the 1918 Flu Pandemic

17:30 - 18:30

Informal Event [Gather]

15th End-of-Year Conference of Swiss Economists Abroad

Abstracts

[10 minutes per paper + 5 minutes for questions.]

15:15 - 16:00 Session 1: Monetary [Zurich Room]

Lukas Altermatt (University of Essex), Zijian Wang (University of Western Ontario)

Oligopoly Banking, Risky Investment, and Monetary Policy

We study the effects of monetary policy and bank regulation on bank profits, entrepreneurs' risk-taking, and bank default probability in an economy with oligopolistic competition in the banking sector and risky investment. Increasing banking competition lowers the interest rate on loans, reduces defaults by entrepreneurs, and increases the deposit rate for consumers. However, when the risks in entrepreneurs' projects are correlated, increasing banking competition can make banks more likely to fail. In this case, an open-market operation that reduces the supply of government bonds also leads to more bank defaults, while increasing the interest rate on reserves does the opposite. We also show that regulations such as capital and reserve requirements can increase the probability of bank default under some circumstances.

Jean-Paul L'Huillier (Brandeis University), Raphael Schoenle (Brandeis University and Cleveland Fed)

Raising the Inflation Target: How Much Extra Room Does It Really Give?

The return of the zero lower bound on interest rates poses a serious challenge for central banks because it leaves them without their main instrument. This situation is prompting policymakers to consider new strategies to regain policy room, such as adopting a higher inflation target. We identify a novel constraint on this strategy: Higher inflation increases price flexibility, steepening the Phillips curve. This reduces the potency of monetary policy. The implication is that, to get 2 percentage points of room, policymakers would need to raise their target from 2% to 5%. Also, the optimal target is higher under our mechanism.

Laura Gáti (Boston College)

Monetary Policy & Anchored Expectations - An Endogenous Gain Learning Model

This paper analyzes monetary policy in a behavioral model with potential unanchoring of expectations. The extent to which expectations are anchored is determined in an adaptive learning setting by the private sector's endogenously time-varying learning gain. Within the context of an otherwise standard macro model with nominal rigidities and natural-rate and cost-push shocks, I find that optimal policy involves an aggressive interest rate response to any threat of expectations unanchoring. This stabilizes both inflation expectations and inflation, allowing the central bank to accommodate inflation fluctuations when expectations are well anchored. Furthermore, I estimate the model-implied relationship that determines the extent of unanchoring. The data suggest that the expectation process is nonlinear: expectations exhibit a higher sensitivity to large forecast errors than to smaller ones.

15:15 - 16:00 Session 2: International [Geneva Room]

Barthelemy Bonadio (University of Michigan)

Migrants, Trade and Market Access

Migrants shape market access: first, they change the geographical location of demand and second, they reduce trade frictions. This paper shows that both effects are quantitatively relevant. It estimates the sensitivity of exports to immigrant population and uses a model of inter- and intra-national trade and migration calibrated to US states to conduct quantitative exercises. Reducing US migrant population share back to 1980s levels increases export trade costs by 3.2% on average and decreases welfare of US natives by 0.13%. The small aggregate effect of this nationwide policy masks larger heterogeneities across US states, with real wage changes ranging from -0.44% to 0.20%. States with higher exposure to international immigrants demand (both from within the state and from other states) than to international migrant labor supply competition suffer more from the removal of migrants. States with higher export exposure suffer more from the increased trade costs.

Frederic Martenet (Stanford)

Inequality and Capital Flows

Standard theories predict that fast-growing countries, such as China, should see an influx of capital flows, whereas in the data the opposite is true, a phenomenon called the allocation puzzle. I show that, as China developed, its inequality grew quickly and this increase has produced a force for Chinese to save abroad. I use a two-country heterogeneous agents model to show that this force can quantitatively explain a sizable fraction of the allocation puzzle.

Alain Naef (University of Cambridge), Jens van 't Klooster (KU Leuven)

Responsibility for Emissions: The Case of the Swiss National Bank's Foreign Exchange Reserves and the Norwegian Oil Fund

What can large public investors do to mitigate catastrophic climate change? The paper studies that question through a comparative study of two diametrically opposed approaches to public investment: the Swiss National Bank (SNB)'s foreign exchange portfolio and the world's largest sovereign wealth fund, the Norges Bank Investment Management (NBIM), the Norwegian sovereign wealth fund. Although both funds target positive returns, the SNB does this with almost no ethical criteria, whereas the NBIM is one of the world's leading ethical investment vehicle. Comparing their environmental impact provides insight in the powers available to portfolio managers in pursuing environmental objectives. We show that although NBIM does better, both investors generate CO2 emissions which account for at least half of the emissions of their countries.

15:15 - 16:00 Session 3: Applied Micro [Lugano Room]

Myriam Marending (Copenhagen Business School)

War and Peace, and Armed Groups: Conflict dynamics in the presence of peace negotiations

This paper examines the immediate and longer term effect of peace negotiations on violence using data on 17 countries in Africa over the time period of 1998 to 2019. It exploits variation of peace deals and armed group behavior at the cell level and credible threats by third parties at the (inter)national level. Applying event study analysis and spatial discontinuity design we find that peace agreements bring an increase in violent incidences in the medium run.

Andreas Haller (Norwegian School of Economics)

Welfare Effects of Pension Reforms

In almost all developed countries, policy makers have implemented pension reforms by increasing statutory retirement ages, lowering pension levels and/or adjusting pension formulas to address demographic change. This paper provides a novel, unifying framework to evaluate the welfare effects of such pension reforms. I show that the welfare effects of any reform rest crucially on the behavioral fiscal multiplier the total fiscal effect relative to the mechanical fiscal effect (the mechanical effect is the fiscal effect absent any behavioral responses). Empirically, I exploit a series of pension reforms in Austria. I find that increasing the early retirement age has a behavioral multiplier of 1. This finding implies that increasing the Austrian early retirement age is not welfare-enhancing unless one thinks that \$1 in the hands of an early retiree has a lower social value than \$1 in public funds. By contrast, reducing pension levels generates a multiplier of 1.5. This policy induces some workers to stay longer in employment without triggering substitution to other welfare benefits. As a result, reducing pension levels is welfare improving, provided that taking \$1 away from a retiree is associated with a social loss smaller than \$1.5. In a standard calibration of the model, the social loss is smaller than \$1.5 for reasonable values of risk aversion suggesting that reducing pension levels was welfare-improving. My framework can also rank the welfare effects of the two reforms. Based on my estimates, a planner with preferences for redistribution clearly favors reducing pension levels over increasing the early retirement age.

Aline Bütikofer (NHH), Rita Ginja (UiB), Fanny Landaud (NHH), Katrine Løken (NHH)

School Selectivity, Peers, and Mental Health

Although many students suffer from anxiety and depression, and students often identify school pressure and concerns about their futures as the main reasons for their worries, little is known about the consequences of a selective school environment on students' physical and mental health. In this paper, we draw on rich administrative data and the features of the high school assignment system in the largest Norwegian cities to consider the long-term consequences of enrollment in a more selective high school. Using a regression discontinuity analysis, we show that eligibility to enroll in a more selective high school increases the probability of enrollment in higher education and decreases the probability of diagnosis or treatment by a general medical practitioner for psychological symptoms and diseases. We further document that enrolling in a more selective high school has a greater positive impact when there are larger changes in the student-teacher ratio, teachers' age, and the proportion of female teachers. These findings suggest that changes in teacher characteristics are important for better understanding the effects of a more selective school environment.

16:30 - 17:30 Session 4: Macro [Zurich Room]

Guillaume Sublet (Universite de Montreal)

Fiscal Rules with Discretion

What is the optimal degree of discretion for deficit-biased governments facing shocks to their fiscal needs? Fiscal rules trade off giving governments' commitment to a fiscally responsible budget with giving governments the discretion to meet its fiscal needs. This paper studies the optimal design of fiscal rules for economies where some fiscally relevant information is private to the governments and the interest rate is endogenous. A well-designed fiscal rule considers its effect on the interest rate: a lower interest rate exacerbates the governments' deficit bias while redistributing from savers to borrowers. The analysis provides sufficient and easy-to-check conditions under which the optimal fiscal rule takes either of two forms: a cap on deficit or a deficit threshold above which escape clauses with sanctions apply. Escape clauses are used only if the need for discretion is sufficiently high to warrant the associated cost of sanctions.

Yann Koby (Brown University)

Low Rates and Bank Loan Supply: Theory and Evidence from Japan

What are the long-run consequences of low nominal interest rates for credit supply? In this paper we (1) provide panel evidence from Japan of the adverse effects of low rates on long-run bank profitability and loan supply, (2) propose a quantitative macroeconomic model with heterogeneous banks that rationalizes our key empirical findings, and (3) discipline the model using our panel evidence to estimate the aggregate impact on credit supply. Our empirical evidence exploits the differential exposure of banks to nominal rates through their historical liability structure. We show that exposed banks face relatively higher costs of funding, have lower profitability, and decrease loan supply as low rates unfold. In the model, loans are undersupplied in equilibrium due to financial frictions. Market power in deposits helps mitigate these frictions, but is sensitive to nominal rates due to competition from money. This force is stronger for banks with more ex-ante market power, generating heterogeneity that we use to discipline the model. We find that low rates resulted in significantly lower loan growth in Japan. We explore in counterfactuals two commonly discussed policies: tiering bank reserves and taxing cash. Although tiering has a limited effect, both policies alleviate the negative effects of low rates on credit supply.

Constantin Bürgi (St. Mary's College of Maryland)

Expectation Formation and the Persistence of Shocks

This paper introduces a new approach to estimate and decompose the weight forecasters place on past predictions providing key new insights about the expectation formation process. It is found that forecasters put a substantial weight on past predictions even without deviations from rational expectations and that every period, agents receive signals about future periods. Together, this can open a new channel that causes the persistence of nominal shocks as future predictions put positive weights on past signals. Comparing the optimal weight placed on past predictions to information frictions over time for US professional forecasters, it is found that the optimal weights fluctuate substantially and have an inverse relationship with the magnitude of shocks. In turn, frictions can exist over extended periods of more than a decade but they typically tend to be restricted to shorter time periods.

Lukas B. Freund (University of Cambridge), Pontus Rendahl (University of Cambridge, CEPR and CFM)

Unexpected Effects: Uncertainty, Unemployment, and Inflation

This paper studies the role of uncertainty in a search-and-matching framework with risk averse households. Heightened uncertainty about future productivity reduces current economic activity even in the absence of nominal rigidities, although the effect is reinforced by the latter. The reason is that a more uncertain future increases households' precautionary behavior, causing demand to contract. At the same time, future asset prices become more volatile and covary positively with aggregate consumption, which increases the risk premium, puts negative pressure on asset values, and contracts supply. Compared to negative demand shocks, uncertainty shocks are less deflationary and render a flatter Phillips curve.

16:30 - 17:30 Session 5: Finance [Geneva Room]

Matthieu Chavaz (Bank of England)

Separating retail and investment banking - Evidence from the UK

The idea of separating retail and investment banking remains controversial. Exploiting the introduction of UK ring-fencing requirements in 2019, we document novel implications of such separation for credit and liquidity supply, competition, and risk-taking via a funding structure channel. By preventing conglomerates from using retail deposits to fund investment banking activities, this separation leads conglomerates to rebalance their activities towards domestic mortgage lending and away from supplying credit lines and underwriting services to large corporates. By redirecting the benefits of deposit funding towards the retail market, this rebalancing reduces the cost of credit for households, without eroding lending standards. However, the rebalancing also increases mortgage market concentration and risk-taking by smaller banks via indirect competition effects.

Luca Dedola (ECB), Mark Strøm Kristoffersen (Fagbevægelsens Hovedorganisation), Gabriel Züllig (University of Oxford)

The extensive and intensive margin of price adjustment to cost shocks: Evidence from Danish multiproduct firms

This paper studies price adjustment in a novel monthly dataset of individual product prices of multiproduct firms. The theoretical literature on price-setting has pointed out that the interdependence between the decision to whether or not change prices (the extensive margin) and the actual amount by which prices change (the intensive margin) contributes to determine the real effects of monetary policy. We estimate the adjustment to shocks to firm-level import costs and energy costs (due to oil supply shocks) along extensive and intensive margins, modelling them jointly to address endogenous selection bias due to state-dependent pricing. We show that while extensive-margin adjustment is economically sizeable, the resulting selection bias is small. Pass-through of an idiosyncratic shock to the price of imported inputs is very much incomplete. For the energy cost shock with a more common component, we find that pass-through is eventually complete, but much more gradual.

Piera Bello (University of Zurich)

Gender price discrimination in the Annuity Market: Evidence from Chile

Using transaction-level data, I study gender-based price discrimination in the annuity market. I exploit the fact that, in Chile, individuals can access the annuity market through three different channels: an independent financial advisor, a sales agent at a company, or directly. The analysis shows that women who consult sales agents pay higher transaction prices compared to other women, while there is no variation in men's prices across the three channels for market access. Additional evidence shows that this is not driven by differences in negotiation skills but rather by differences in initial prices. Firms charge higher initial prices to women who access the market through one of their sales agents. These results are consistent with an explanation that links the lack of competition between firms to discriminatory behaviour against female customers. Gender differences in financial literacy might explain the results.

Ting Dong (Stockholm School of Economics), Florian Eugster (Stockholm School of Economics)

Business School Education and Stock Market Participation

In this paper, we examine whether business school education increases the stock market participation of students. We use unique stock ownership data of students from a business school in Sweden as our sample. We find a significant increase in stock ownership during and after their studies at the school compared to before entering the school. The marginal effects are 3.8% for the first two years of the core curriculum, 4.4% for the specialization year, and 4.3% for the three years following graduation. The positive effect of business education on stock market participation is mainly driven by students interested in Accounting or Finance subjects, and the effect is more pronounced for females than for male students. The implication of our study should be useful for policymakers in designing financial education programs.

16:30 - 17:30 Session 6: Applied Micro [Lugano Room]

Sara Signorelli (Paris School of Economics)

Too Constrained to Grow. Analysis of Firms' Response to the Alleviation of Skill Shortages

Skill shortages are a growing concern in the context of rapid technological change. However, little evidence exists on what is the actual cost associated with them and on the effectiveness of potential solutions. This paper evaluates whether a French policy encouraging immigration of skilled workers with highly-demanded competencies had a positive effect on the output and productivity of firms that were constrained by the lack of native candidates. The analysis is based on exhaustive administrative data and relies on a difference-in-differences approach. Results show that firms operating in the most constrained local labor markets react to the reform by hiring more workers in tight occupations. This leads to growth in their revenues and value added as well as generating some crowding-in of other types of employment. The effect is stronger in departments with lower job to job mobility, suggesting that high-skill migration can be an effective tool to relax skill constraints in the less dynamic areas of the country, where native workers are reluctant to move.

Richard Faltings (University of Texas at Austin)

Squeezing more juice out of Lime: pricing inefficiencies in dockless vehicle markets

A dockless vehicle user's choice of destination affects the future availability of the vehicle to others. If prices are uniform across origins and destinations, this effect is not internalized by passengers, leading to dynamic inefficiencies. Uniform prices also fail to respond to the price sensitivities that vary by trip origin and destination, potentially causing allocative inefficiencies. This paper investigates both types of inefficiencies in the market for dockless vehicles in Washington, D.C. I use empirical evidence to gauge the size of the inefficiencies and find that the daily revenue of a vehicle can differ by up to \$5, depending on the location it arrives in. I discuss some elements of a structural model to be used for estimation and counterfactual simulation in future work.

Ruchir Agarwal (IMF), Patrick Gaule (University of Bath)

Market Size and Innovation: the Case of Covid-19 and Large Diseases

Based on the pharmaceutical industry's innovation response to COVID-19, this paper studies how the direction, aggregate supply, and composition of R&D effort varies with market size. We find: (1) a highly elastic directed R&D response to fight COVID-19 with 40% of all clinical trials in China directed towards COVID-19 by February 2020 and over 50% of trials of all trials in the rest of the world by April 2020; (2) while other clinical trials were partially crowded out by COVID-19, the aggregate R&D effort increased by 60 percent despite the lockdowns; (3) the private sector remains significantly under-represented in the composition of R&D directed towards COVID-19, accounting for 20% fewer clinical trials than their public sector counterparts; and (4) the public-private gap in the composition of R&D is not unique to COVID-19, as the private sector generally tends to underinvest in diseases with large market size. Our theoretical and empirical results suggest that for a variety of factors - which blunt monetary incentives of private actors - too little private sector research is being directed towards diseases associated with the highest death burden.

Enrico Berkes (Ohio State University), Olivier Deschenes (UC Santa Barbara), Ruben Gaetani (University of Toronto), Jeffrey Lin (Philadelphia Fed), Christopher Severen (Philadelphia Fed)

Lockdowns and Innovation: Evidence from the 1918 Flu Pandemic

Does social distancing harm innovation? We estimate the effect of non-pharmaceutical interventions (NPIs)—policies that restrict interactions in an attempt to slow the spread of disease—on local invention. We construct a panel of issued patents and NPIs adopted by 50 large US cities during the 1918 flu pandemic. Difference-in-differences estimates show that cities adopting longer NPIs did not experience a decline in patenting during the pandemic relative to short-NPI cities, and recorded higher patenting afterward. Rather than reduce local invention by restricting localized knowledge spillovers, NPIs adopted during the pandemic may have better preserved other inventive factors.

General Information

The virtual conference venue is accessible at:

<https://gather.town/app/wh2TUxFOMJdQkpfU/SEA%202020>

Please write us an email (endofyear@swisseconomistsabroad.org) in case you would like to attend the conference and did not receive the password to access the virtual town. When you join the town you will be able to select your avatar and move around with the keyboard arrows. When passing by someone a window will pop up and you will be able to chat with them. Areas with carpets are private areas: only people on the carpet will be able to join the discussion. Your avatar will appear in the main square of the town. From there you will be able to access 5 rooms: 4 conference rooms (Bern, Zurich, Geneva, and Lugano) and a break room. The Bern room will be used for the initial welcome session. People from the podiums will be able to broadcast to everyone in the room. The other three rooms are the seminar rooms. When in one of those rooms press x and you will join a Zoom call where the speakers will give their presentations. To rejoin Gather, just leave the Zoom call and go back to your browser. If you ever get lost press on your name in the lower bar and click on "Reset Position." Your avatar will re-appear in the main square.