2021 has been another year dominated by the pandemic. Zoom teaching, online exams and home office unfortunately remained common practice in our academic life. At least it was possible to have onsite teaching in the fall semester. I hope that we will not have to prominently mention the pandemic again in next year’s report. Turning to the much more pleasing recent development in our academic staff, we are happy to report that two new colleagues joined our department:

In the fall semester 2021, Jean-Michel Benkert started as an assistant professor, tenure track. He holds a PhD from the University of Zurich and is a microeconomic theorist with specialisation in behavioural economics and mechanism design. Before joining our department, he worked at the insurance company Baloise as head of sales development, Switzerland. Formally, Jean-Michel will be the successor of Winand Emons who will retire in 2023. In part thanks to a grant from the University it was possible to fill this position earlier, allowing a fruitful short period of overlap.

In the fall semester as well, Kai Gehrig started as associate professor in political economy and sustainable development. He holds a PhD from the University of Göttingen and has been postdoctoral researcher at the University of Zurich before moving to Bern. Kai has been appointed to a position created at the interdisciplinary Wyss Academy for Nature. This new center is a collaboration between the Wyss Foundation and the University as well as the Canton of Bern. It is headquartered in Bern and has research hubs in Africa, Latin America and Asia.

Another major development has been that Dirk Niepelt, who had a 30% associate professorship at our department, will extend his engagement to 100% and is promoted to full professor. Before this, he headed the Study Center Gerzensee of the Swiss National Bank.

I would like to thank my colleagues and all members of the department for their valuable contributions during the last, difficult year.

Aymo Brunetti
January 2022
Jean-Michel Benkert studied economics at the University of Zurich where he received his PhD in 2017. During that time, he visited Northwestern University via a grant awarded by the Swiss National Science Foundation. His research focuses on (applied) microeconomic theory in the fields of behavioral economics and mechanism design. Before joining our department, Jean-Michel Benkert worked at Baloise Group on strategy and innovation. We wish Jean-Michel Benkert all the best in his new position at the University of Bern.

Interview with Jean-Michel Benkert

Jean-Michel Benkert, we are delighted to welcome you as a new member of the department. You just arrived in October and had some time to settle in. What is your first impression of the department?

I’ve had a great start and can hardly believe how quickly I’ve settled in. People made me feel very welcome and the micro group offers great dynamics and interaction, which reminds me of my time in Zurich. Beyond that, the department has a similar feel to what I’ve experienced in Basel, where I spent a lot of time during my PhD because of my second advisor. I appreciate the familiar atmosphere!

Your research has been published very well with different co-authors. How is your process of developing an idea, and how do you judge whether an idea is worth pursuing?

Honestly, I don’t think I’m very good at developing ideas from scratch. I think I’m better at developing an idea further, especially when having the chance of bouncing it back and forth with somebody, thus trying to judge its potential. For that reason and because it’s more fun, I don’t see myself working on my own often. My work has benefitted tremendously from my co-authors and, obviously, I couldn’t have done it without them.

Prior to your appointment, you have been working in the private sector at Baloise Group. How did you experience the transition from academia to the private sector and back again?

I was surprised and grateful to realize I can also be happy in the private sector when I started at Baloise. That relieved some pressure of trying to get back into academia. At first, however, it was quite difficult as the type of work was completely different from what I did during my PhD and it also required different skills. I guess the most valuable skill I brought with me was my ability to give presentations and to ask questions. Coming back to academia, I was anxious (and still am) that I may have forgotten much and would have to relearn things, if even possible. Luckily, so far, my memory seems to be returning.

What advice would you give PhD students regarding early-career planning, are there specific points that they should take into consideration? Also, how could academia cater more towards the needs of early career researchers?

I’ve been wondering about that and don’t have a clear answer yet. In terms of early career planning, I think keeping an open mind about different alternatives is useful. Towards the end of my PhD, I tried to talk to people who have been in the same situation, trying to understand their motivation. However, if you only talk to people who stayed in academia, there will obviously be a selection bias, so talking to people who left may be valuable. In terms of catering more towards the needs of early career researchers, I believe that having permanent positions besides the professorships could alleviate some of the pressure and (family) planning issues people may face at the age when we typically finish a PhD. Currently, academia is very much “up or out” without a clear outside option.

With your interest in behavioral economics and new courses in that area, you will cover topics that so far haven’t been offered at our department. Does the “Online Experience” of the past two years influence how you design your new courses?

I haven’t experienced remote teaching (yet), so the influence is quite limited so far. I’m wondering, though, how we can improve teaching (for students and lecturers) going forward by combining the best of both worlds. Just going back to how it was before the pandemic seems a bit too easy a solution. I don’t have a good alternative yet, but hope to test some things going forward.

Jean-Michel Benkert, thank you very much for this interview.
mental science, and try to understand some deep relationships, for instance the historical origins of the allocation of power in federal systems or of common identities. Other papers are very applied and study for instance the impact of resource discoveries on election outcomes, of local aid projects on conflict or favoritism in the budget allocation in political processes. However, my more fundamental research is also always related to some questions that are of policy relevance today, and for which we have no satisfactory understanding so far.

In your research, you often combine new data sources with tailored methods uncommon in economics to gain new insights. Could you tell us, on the basis of an example, how you approach a research question such that you end up with novel methods?

As economists, we are always eager to get new or better data to examine some of the questions we are interested in. In that regard, my experience is that we can learn a lot from other disciplines and it pays off to keep an open mind. Over the last decade this has been, for instance, the use of spatial data (geographic information systems, “GIS”), which is often based on the work of geographers, anthropologists and historians. More recently, there have been many advantages in the use of text-as-data and natural language processing, which also opens up many new possibilities. We can learn a lot from linguists and computer scientists, but also from political scientists which have been using these methods more intensively already for some years.

For me, everything starts with a research question, the method and technology should then be chosen according to what is needed to answer that question. That being said, simply viewing data also on a spatial basis instead of just looking at statistical tables can create a completely different perspective when thinking about a particular problem. With text, it is similar to some extent. It enables us to study aspects like sentiment or narratives which we could not do before, but also geographical areas or time periods that we used to have no data on. So technology is a tool that can also broaden your perspective.

Your research is covered regularly by newspapers and blogs. Often, it is economists of some seniority that mostly appear in the media. How did you become so active in outreach at an early stage in your career? Do you have any recommendations for PhD students that aspire to do the same?

In my view, we scientists have some responsibility to make our research insights available to a broader public. In the end, our research is at least partly funded by taxpayer money, so we should try our best that the results are widely communicated. I understand that for some topics this is harder than for more applied work. It also took some active outreach to journalists, and one should not be disappointed if many do not respond. A good strategy seems to be to find journalists for newspa-
papers that have written about a similar topic in the past, or that there is a recent important event that relates to your research. Finally, I can only recommend writing blog entries or twitter threads. You can expect an interested journalist to read those, but not to fight through your 40-page paper with a lot of academic jargon.

Your work is often interdisciplinary and you come into contact with researchers from other fields. Also, in the Wyss Academy for Nature you interact with other members of various academic background. What can economists bring to the table in these collaborations? Conversely, what can we economists learn from other social and natural sciences?

There is a lot we can learn, and I already learn a lot from my colleagues at the Wyss Academy. Maybe the first thing to realize is just how little we often know about other disciplines, even those relatively close to us. I would say I have a relatively good understanding of political science, business and psychology. But there are many disciplines that have interesting insights that can be relevant for economists, like geography, sociology, anthropology or history. It can be very useful to read some papers on your topic from these other disciplines, even if only to get a different perspective.

As economists, I think what we can bring to the table is a better understanding of market processes and trade-offs, our strengths with regard to quantitative methods and the identification of causal effects, and the use of models to consistently think about problems. I have often experienced that, regardless of political preferences, most economists look at issues in a distinct way, quite differently than other scientists. This is not saying we are always right, but I would tend to say for nearly every social problem it helps to also ask an economist about their perspective.

You indicated your interest in teaching a new course at our Department. What topics can we expect?

Starting in fall, I will teach two new courses about which I am very excited. The first one will be political economy at the bachelor level. This will complement the existing course on public economics, which one could say studies market failure and how the state can fix it. Political economy, among others, adds the perspective of government failure and challenges of democratic processes and institutions in general.

The second course will be about long-term development at the master and potentially PhD level. Long-term development is one of the most interesting and strongly growing strands of literature in economics. We now know that the huge differences in income between poor and rich countries today cannot be explained solely by the current tax system or regulation. We need to take into account factors like the slave trade, colonial history, historical investments, technology, religion, democratic reforms, up to genetics. There are many great papers with amazing data work, and the course will focus on the most important of these papers, it will also include drafting a research proposal and some data assignment, so students switch from being consumers of research to taking more the perspective of a researcher.

Kai Gehring, thank you very much for this interview.

Deflations and inflations are monetary phenomena. Despite the complexity of the economic system, the statement should not bring any dispute on the role and responsibility that central banks have in controlling the rate at which prices increase. This research studies liquidity traps – conditions of shortage of aggregate demand at zero nominal interest rates – and ask which type of unconventional policies central banks can undertake to reflate the economy.

Friedman’s helicopter parable is useful to understand the special role of central banks. Imagine one day that a helicopter of the SNB drops Swiss francs from the sky, which are then “hastily” collected by the community. The word “hastily” is key for our understanding, capturing the voracity everyone will have to get the Swiss francs. It is like a gift that no one is going to ask you back. Though the last statement needs to be qualified, it is quite likely everyone is going to spend those Swiss francs at some point in time. And what is going to happen to the price level? If there is no shortage of demand, it will raise facing the supply constraint.

Imagine, now, that the helicopter brings the flag of the Swiss treasury and that treasury’s bill in Swiss francs are dropped from the sky. Will they be “hastily” collected by the community? Yes, indeed, they are claim with a face value in Swiss francs. A promise to receive Swiss francs at maturity. It is, however, unlikely that they will be spent with the same voracity. What the treasury drops from the sky will be taken by other means in the form of taxes. Some effects on spending may still happen but not of the same magnitude as if the flag were that of the SNB.

What to learn from this comparison? The special role of central bank’s liabilities, whether banknotes or reserves. They are issued without any need of backing them with resources, either assets or taxes. And despite this unbacked nature, they are paid back with certainty. None should doubt that a claim of one Swiss franc presented at the central bank will not be paid. They can just print it. Treasuries have instead to find resources: tax, cut spending, rollover debt.

By the virtue of the special properties of its liabilities, central banks then can set at the same time quantity and price of its reserves, and this is nowadays how they conduct policy, in a nutshell. We have not seen them dropping bills from the sky, but to some extent quantitative easing policy can be equivalent to helicopter money. Have the treasury making a transfer to the citizen by issuing debt which is purchased by the central bank. If that is believed to be a permanent or quite prolonged intervention, it is like dropping Swiss francs from the sky. It should not be a surprise that a too accommodative fiscal and monetary policy generates inflation. As the Covid shock brought disruptions in the labor market with high unemployment rate and high natural rate of unemployment, it required some inflation to bring down unemployment at the pre-crisis level, given bottlenecks in the supply markets that kept the natural rate of unemployment high. Any inflation scare can be even more inflationary if the natural rate of unemployment goes even higher.

Does a central bank need assets? Or equity? Or even a balance sheet? Not for the functioning of the monetary system, nor for backing its liabilities. As said, their liabilities, reserves, and cash, are paid with certainty. But, the balance sheet of the central bank, and its components might matter for controlling the value of money, which is the inverse of the price level. They could even matter without any connection with the treasury. First, variations in the net asset position of the central bank are what can be considered as wealth by the consumers, and therefore can push aggregate demand to influence goods prices. Equity and seigniorage can absorb losses on the balance-sheet of the central bank, due to unconventional policy, and if not, the price level is again the mean of adjusting wealth disequilibria across agents. Remittances are also key to rule out inflationary and deflationary spirals.

As some central banks, like the Fed and the ECB, have undertaken review strategies to ameliorate their inflation targeting procedures, following the unprecedented events of the last two decades, our research envisions a future 3.0 review strategy in which balance-sheet considerations will receive the same importance as conventional interest-rate policies in controlling the price level.

Due to its global public good characteristic, the mitigation of anthropogenic climate change can only be addressed by voluntary cooperation of the world’s sovereign nation states, which can be modeled as a coalition formation game: in the first stage, countries decide whether to participate in an international environmental agreement (IEA) and, in the second stage, countries set emission levels depending on their choices in the first stage. Assuming that countries are atomistic players who decide to maximize their own welfare, the literature finds that such IEAs are either ambitious in their effective public good provision but only consist of a small number of participating parties (“narrow-but-deep”), or supported by many or even all involved parties, which comes at a sharp reduction in the effective provision of the public good of each signatory (“broad-but-shallow”).

We review this “narrow-but-deep” versus “broad-but-shallow” trade-off by departing from the assumption that countries are represented by single benevolent decision makers, acting in the best interest of the country. Instead, we account for the hierarchical structure of international policy by considering that every country is populated by a continuum of people, who all experience the same benefits from production – causing domestic GHG emissions – but differ in their (monetarized) damages from anthropogenic climate change – depending on global GHG emissions. Mimicking the political procedures of modern democratic countries, we consider a median voter (the principal) in each country, who elects a government (the agent).

We distinguish two institutional settings, depending on how much decision power the principal surrenders to the agent: in the weak delegation game, the principals in all countries decide on whether to join an IEA, while the choice of the domestic emission level is delegated to the agents.

In the strong delegation game, both the participation and the emission choice are delegated to the agents.

Both in the weak and the strong delegation set-up there are two different motives to strategically delegate, i.e., to delegate to agents who have different preferences than the principals themselves. First, principals of all countries have an incentive to delegate to agents exhibiting a lower evaluation of the environmental damage (“grayer”) than their own, due to the strategic substitutability of emission choices. By choosing an agent with lower evaluation for the environmental damage, the principal can commit her country to high emission levels, to which the best response of all other countries is to – ceteris paribus – reduce their emission levels.

Second, principals of member countries have an incentive to counteract any deviation from a deep agreement by delegating to agents that exhibit a higher evaluation of the environmental damage (“greener”), to increase – from the principal’s point of view – the “effective” fraction of externals that the other member countries internalize.

Ultimately this leads to the outcome that in the weak delegation case any attempt at a shallow agreement is fully crowded out and resulting GHG mitigation levels are even lower than in case of a “narrow-but-deep” agreement without delegation. In case of strong delegation, “broad-and-deep” agreements, in which all countries participate in the agreement and, from the principals’ point of view, the globally efficient level of the public good is provided may arise. This is achieved by delegating to agents for which the IEA is so “shallow” that they all participate and the grand coalition forms, while the agreement is actually “deep” from the principal’s point of view. Yet, the realization of the principal’s first best may be constrained by finding a delegate who is sufficiently green, as agents need an evaluation of environmental damages of three to ten times larger than their principals. This almost resembles a climate denier delegating to an Extinction Rebellion activist.

Yet, there are important insights from our paper: First, in analyzing the possibilities of international climate cooperation, it is important to account for the domestic political institutions of countries. Second, delegation, as a credible commitment device to future GHG emissions, may facilitate international cooperation. Thus, building on our results, we may use delegation strategically in the design of future IAEs.

* The Paris Agreement is a prime example of the “broad-but-shallow” variety: Almost all countries of the world participate but promised emission abatement levels, let alone actual reductions, fall considerably short of the envisioned 2°C target.

Annual Report 2021

Motivation & Contribution

Over the last few decades, central banks have primarily pursued one objective, namely price stability. Price stability is a crucial prerequisite for growth and prosperity within a country. It allows for the allocation of resources – labor and capital – to their most efficient use. After the 2008 global financial crisis, several central banks have missed their price stability targets multiple times. The Swiss National Bank (SNB), for example, has the objective to keep inflation within a range of 0 to 2 percent. However, since the financial crisis, the Swiss inflation rate has dropped repeatedly below 0 percent.

Several economists have made a case for alternative monetary policy targets, which could (partially) replace or complement the conventional inflation target. For instance, some economists have advocated nominal GDP targeting as an effective tool. Although these recommendations have largely been directed at the United States Federal Reserve, they are equally interesting for the SNB. In the light of the sustained low-inflation and low-interest-rate environment in Switzerland, it is worth investigating if alternative definitions of nominal stability could facilitate the conduct of Swiss monetary policy.

My master thesis thus analyzed the question whether the nominal GDP target could represent an alternative to the traditional inflation target in Switzerland. The nominal GDP target could be represented either in the form of a growth rate or a certain level.

Models & Methods

To assess the performance of a nominal GDP target relative to an inflation target, I conducted a counterfactual policy analysis in two types of models: a basic New Keynesian model and a slight modification of the small open economy model proposed by Bäurle and Menz (2008). In both models, I characterized the systematic component of monetary policy for an inflation targeting regime in terms of a Taylor rule and compared it to a nominal GDP growth or level targeting rule. After defining the Taylor rule as the baseline monetary policy rule, I first estimated the model using either maximum-likelihood estimation or Bayesian estimation. Second, based on this model estimate, I computed the counterfactual path of the model economies considering three alternative policy rule specifications. These alternative specifications included the two nominal GDP targeting rules (growth rule and level rule) as well as the optimal Taylor rule. The parameters of the three counterfactual policy rules are equal to optimal values because they were obtained by minimizing a welfare loss function of society.

Results

For the basic New Keynesian model, I found that the optimal Taylor rule is the policy rule, which results in the lowest welfare loss to society. Therefore, it would be optimal for society if the SNB followed this particular rule instead of the current Taylor rule or the nominal GDP targeting rules. Moreover, I showed that the counterfactual interest rate path prescribed by the nominal GDP growth rule is nearly identical to the observed rate. This finding suggests that a nominal GDP growth rule would not have improved upon the performance of the Swiss economy, conditional on the actual monetary policy followed by the SNB. I also demonstrated that the nominal GDP level rule would have performed better than the nominal GDP growth rule but worse than the optimal Taylor rule.

For the small open economy model, the results are more ambiguous. I found that none of the three policy rules significantly outperforms the others. Nevertheless, I could still observe that the expected performance of either the optimal Taylor rule or the nominal GDP growth rule lies above the one for the nominal GDP level rule. Ideally, the SNB would therefore use the optimal Taylor rule or the nominal GDP growth rule to characterize its systematic component of monetary policy.

Overall, the results of this counterfactual analysis showed that the performance of the three monetary policy rules is heavily model dependent. Even though the ideal policy rule choice is not necessarily clear cut, the optimal Taylor rule is expected to deliver the most stable performance.

Publications

Journal Articles


Publications


Publications (3)


**Monographs**


Publications (4)

**Book Chapters**


**Newspaper & Blog Articles**


**Baltensperger, Ernst** (6 Januar 2021). Nicht "die Jungen" gegen "die Alten" ausspielen. *Neue Zürcher Zeitung*

**Baltensperger, Ernst & Dellas, Harris** (26 Januar 2021). SNB in surrealer Situation. *Finanz und Wirtschaft*

**Baltensperger, Ernst & Dellas, Harris** (24 März 2021). Braucht die SNB eine neue Strategie? *Neue Zürcher Zeitung*

**Baltensperger, Ernst** (5 Juli 2021). Die seltsame Symmetrie der neuen Geldpolitik der amerikanischen Zentralbank. *Neue Zürcher Zeitung*

**Baltensperger, Ernst** (29 Juli 2021). Geldpolitik in der Sackgasse. *Die Weltwoche*

**Baltensperger, Ernst & Richli, Paul** (3 September 2021). Warum von einem Staatsfonds unter Mitwirkung der Schweizerischen Nationalbank abzuraten ist. *Neue Zürcher Zeitung*

**Baltensperger, Ernst** (1 Dezember 2021). Die Inflationsgefahr wird unterschätzt – das war schon in den 1970er Jahren so. *Neue Zürcher Zeitung*


**Brunetti, AyMo** (18 Januar 2021). Wirtschaftspolitik nach Coronakrise. *Finanz und Wirtschaft*

**Brunetti, AyMo & Follmi, Reto** (10 Februar 2021). Schweizerische Nationalbank: Dank der Corona-Krise wird eine geldpolitische Nebensache zur politischen Hauptsache. *Neue Zürcher Zeitung*
Publications (5)


**Büchel, Konstantin & Legge, Stefan & Pochon, Vincent & Wegmüller, Philipp** (FEBRUAR 2021). Coronavirus hinterlässt tiefe Spuren im Schweizer Warenhandel. *Ökonomenstimme*


**Lüthi, Samuel & Wolter, Stefan C.** (15 OKTOBER 2021). Ist Kompetitivität in Ausbildungs- und Arbeitsmärkten immer vorteilhaft? *Ökonomenstimme*

**Niepelt, Dirk & González-Eiras, Martín** (11 JANUAR 2021). The pandemic endgame. *VoxEU*


**Niepelt, Dirk** (8 DEZEMBER 2021). Digitales Notenbankgeld - und nun? *Finanz und Wirtschaft*


**Winkler, Ralph** (2021). Drei Fragen an Ralph Winkler. *Iconomix*

**Winkler, Ralph** (2021). Professor für Mikroökonomie Ralph Winkler: „Unternehmen haben den Anreiz in erneuerbare Energien zu investieren, weil eine Nachfrage besteht“. *Hoi Magazin*
Some Working Papers


BERNAET, ANGÉLIQUE & DIOP, BOUBACAR & PELLI, MARTINO & TSCHOPP, JEANNE (2021). The Long-Term Effects of Unexpected Interruptions in Compulsory Schooling. 10.2139/ssrn.3806538

BISCHOF, TAMARA & GERFIN, MICHAEL & MÜLLER, TOBIAS (2021). Attention Please! Health Plan Choice and (In-)Attention. (Discussion Papers). Department of Economics


Visit www.vwi.unibe.ch/research to read the Discussion Paper Series of the Department of Economics.
Grants

**Benigno, PierPaolo:** Grant from the Swiss National Science Foundation. October 2021.

**Büchel, Konstantin:** Competitive funding for early career researchers with Care responsibilities by the Commission for Equality, University of Bern.

**Brunetti, Aymo:** Swiss National Science Foundation grant for “Improving the quality of education in developing countries: An experimental evaluation of teacher training programs in El Salvador”. 2021 - 2024

**Gerfin, Michael:** National Research Programme “Smarter Health Care” (NRP 74) grant extension for “Physician retirement, practice closures and discontinuity of care: how does it affect patients’ healthcare utilization and health-related outcomes?”.

**Gerfin, Michael:** Grant from Innosuisse for “The new Model of Digital Neurorehabilitation along the Continuum of Care”.

**NaguiB, Costanza:** Grant from the Swiss National Science Foundation for the organization of a workshop in May 2022.

**Spycher, Sarah:** Doc. Mobility SNF Fellowship from the Swiss National Science Foundation.

**Tschopp, Jeanne:** Insight grant from the Social Sciences and Humanities Research Council for the project “On the Road to Recovery”. 04/2021–05/2026

**Wolter, C. Stefan:** Grant from the Swiss State Secretariat for Education, Research and Innovation, LH ECON-VPET. 2021-2025

Awards and Honors

**Brunetti, Aymo:** Credit Suisse Award for Best Teaching.

**Emons, Winand & Lenhard, Severin:** Winner 2021 Antitrust Writing Award: Articles, Academic, Private Enforcement for “Rebating Antitrust Fines to Encourage Private Damages Negotiations”.

**Gerfin, Michael:** President of the Swiss Society of Health Economics (SGGOE).

**Niepelt, Dirk:** Member of the Extended Board, Verein für Socialpolitik.


**Schwaller, Larissa:** VWG-Prize for Economics 2021 awarded by the Volkswirtschaftliche Gesellschaft des Kantons Bern.

**Wolter, Stefan C.:** Member of the Swiss COVID-19 Science Task Force and Member of the Scientific Advisory Board of the German Federal Ministry of Education and Research (BMBF) and the Council of Education Ministers (KMK).
Department News

Appointments and Promotions

Avralt-Od Purevjav has been appointed Postdoctoral Researcher in Public Economics.

Juliana Cunha Carneiro Pinto has been appointed Postdoctoral Researcher in Environmental Economics.

Jean-Michel Benkert has been appointed Assistant Professor Tenure Track in Microeconomics.

Moving on...

Armando Naf has left the department and has accepted a job offer as Consultant in Financial Risk Management at PwC.

Jonas Meier has left the department and has accepted an offer as Assistant Professor in Econometrics at the University of Amsterdam.

Nadia Ceschi has left the department and is graduating as High School Teacher at the PH Luzern.

Preetha Kalambaden has left the department and has accepted a job offer as Economist at Fahrländer Partner.

Simon Büchler has left the department and has accepted an offer as Postdoctoral Fellow & Director of the Price Dynamics Platform at the Massachusetts Institute of Technology.

Tamara Bischof has left the department and has accepted a job offer as Project Manager at Interface in Lucerne.

Doctoral Theses

Ceschi, Nadia Jlenia: “Essays in Microeconomics: Opportunities of Competitive Screening and Shortcomings of Labor Market Signaling”. Doctoral Committee: Marc Möller, Heiko Karle, (Frankfurt School of Finance and Management).
