## **Curriculum Vitae** Fabienne Schneider

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## **Major Fields of Concentration**

Financial Intermediation, Monetary Economics, Blockchain Economics, and Macroeconomics

#### Education

Degree	Field	Institution	Year and GPA
Dr. rer. oec	Economics	University of Bern and Study Center Gerzensee (SNB Foundation)	2024 (expected)
1 <sup>st</sup> year program*	Economics	Study Center Gerzensee (SNB Foundation)	2019
Msc	International and Monetary Economics	Universities of Bern and Basel	2017, GPA 5.73/6
Bsc	Economics	University of Bern (incl. exchange semester at the Copenhagen Business School)	2014, GPA 5.61/6

#### Dissertation

#### **Essays on Financial Intermediation and Credit Systems** Advisor: C. Monnet

* "US-style" program:	Macroeconomics (R. Reis, F. Alvarez, J. Galí, S. Rebelo)	GPA 5.78/6
	Microeconomics (K. Schmidt, P. Gottardi, J. Weibull, J. Moore)	GPA 4.83/6
	Econometrics (B. Honoré, M. Watson)	GPA 5.73/6

#### Ph.D. Fellowships

09/2023 – 11/2023	Bank for International Settlements (BIS), Innovation and the Digital Economy Unit, Basel
04/2023 - 08/2023	Norges Bank (Central Bank of Norway), Research Unit, Oslo

#### Research (Link)

On-the-run Premia, Settlement Fails, and Central Bank Access (JMP, abstract)

Anonymity of Credit-Based Payment Systems (WP, abstract) with R. Taudien

Transaction Costs, the Price of Convenience, and the Cross-Section of Safe Asset Returns (draft soon available, abstract), with R. Juelsrud, P. Nenov, and O. Syrstad

One-sided Market Pressure and Interest Earnings: an Explanation for Covered Interest Rate Parity **Deviations** (abstract)

The Economic Limits to Tokenisation (BIS project) with I. Aldasoro, S. Doerr, L. Gambacorta, and P. Koo-Wilkens

#### **Other Projects**

Exercise Manual to Macroeconomic Analysis with D. Niepelt, L. Driussi, and C. Lardy, The MIT Press, 2019

# Data Project: Development of a Methodology to estimate the Country Breakdown of Swiss Tourism Exports and Imports

data is regularly published on the SNB data portal (link), 2018

## The Effects of a Countercyclical Capital Buffer in a DSGE Model for Switzerland master thesis, 2017

Marktanalyse und Abschätzung der Marktentwicklung von nicht-medizinischen genetischen Untersuchungen translated English title: Market Analysis and Estimation of the Market Development of non-medical genetic Testing with M. Frey on behalf of the FOPH, 2015

## **Professional Experience**

08/2018 – present	Study Center Gerzensee (Foundation of the Swiss National Bank), Teaching Assistant, Gerzensee
08/2017 - 07/2018	Swiss National Bank, Statistics Unit, Intern, Zurich
10/2016 – 10/2017	University of Bern, Teaching Assistant, Bern
03/2015 – 08/2015	B,S,S. Volkswirtschaftliche Beratung, Economic Consulting, Intern, Basel
08/2013 - 01/2014	Credit Suisse, Corporate Clients, Intern, Bern

## **Teaching Experience**

University of Bern Macroeconomics I (2016) and Introduction to Macroeconomics (2017)

Study Center Gerzensee Ph.D. Mathematics Review (2019-2022) and Central Banker Courses (2019, 2021, 2022) Homework corrections for B. Honoré (2020-2022), S. Rebelo (2020, 2021), R. Reis (2020-2023), K. Schmidt (2019), and S. Schmitt-Grohé (2023)

## Seminar & Conference Presentations

Macroeconomics Group Seminar University of Bern (2020), Macroeconomics Ph.D. Seminar University of Bern (2021 & 2022), Central Bankers Course on Money Markets, Liquidity, and Payment Systems (2022), European Finance Association Annual Meeting Workshop (2022), Macroeconomics Workshop Hasliberg (2022), Alumni Conference Gerzensee (2022 & 2023), Brown Bag Seminar University of Bern (2022), Macroeconomics Workshop Zinal (2022), 35<sup>st</sup> Australasian Finance & Banking Conference (2022), SGF Conference (2023), Summer Workshop Fed Board - Bank of Canada - Gerzensee (2023), Norges Bank Seminar (2023)

## Software

Python, Dynare, Matlab, Latex, and MS Office (advanced knowledge) EViews, R, Stata, and VBA (basic knowledge)

## Languages

German (native), English (fluent), French (advanced), and Spanish (beginner)

## References

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## **Abstracts**

## On-the-run Premia, Settlement Fails, and Central Bank Access

The premium on "on-the-run" Treasuries is an anomaly. I explain it using a model where primary dealers hold inventories of Treasuries. Primary dealers are more likely to hold large inventories of the most recent issues of Treasuries (i.e. on-the-run Treasuries). Since on-the-run Treasuries are easier to find, they trade at a premium. My theory is consistent with the USD 40 billion of Treasury contracts failing to settle each day, with the median failure rate of off-the-run Treasuries being almost twice as much as the one for on-the-run Treasuries. I use the model to analyze the effects of granting non-banks active in the Treasury market access to central bank facilities. Broad access stimulates trading and reduces the on-the-run premium, but settlement fails increase and, counterintuitively, only primary dealers benefit.

## Anonymity of Credit-Based Payment Systems, with R. Taudien

Payment systems can be broadly categorized into two types: money-based payment systems (such as cash) that depend on the quality of the money exchanged, and credit-based payment systems (such as credit cards) that are based on the threat of punishment in case of default. It is commonly assumed that only money-based systems can provide anonymity because user anonymity prevents punishment. However, this is not necessarily the case. In a pseudonymous environment where agents use accounts (such as wallet addresses) to interact with each other, an account can provide a complete history of past actions without revealing the identity of its owner. Although individuals cannot be punished directly, accounts can face consequences such as loss of reputation. We demonstrate the existence of an anonymous credit-based payment system. However, we show that maintaining anonymity in such systems is costly.

## **Transaction Costs, the Price of Convenience, and the Cross-Section of Safe Asset Returns**, with R. Juelsrud, P. Nenov, and O. Syrstad

We study the cross-section of safe asset returns using a tractable asset pricing model with multiple safe assets, agent heterogeneity, transaction costs, and aggregate risk. The model is stylized but rich enough to accommodate both a demand for convenience (liquidity), as well as standard portfolio choice by investors. We use the model to characterize the equilibrium interactions across safe assets due to asset supply effects as well as the interactions between aggregate risk and the demand for convenience. Changes in the supply or in the transaction costs of a single safe asset affect the liquidity premia on all assets via the aggregate price of convenience. Similarly, in our framework, changes to the *composition* of safe assets also impacts liquidity premia. Therefore, our model can be used to understand the asset pricing effects of central bank interventions such as operation twist or more recently quantitative easing programs. In our framework such interventions impact asset prices (but also welfare) in the economy via the aggregate price of convenience. Finally, we show that increases in aggregate risk or risk aversion affect liquidity premia and the price of convenience via a safety value channel, which ends up *decreasing* liquidity premia. The main channel for this effect is a valuation effect on risk-free (safe) assets from higher aggregate risk due to a flight to safety adjustment in agents' portfolios.

We test the predictions of our model using data on US Treasury yields and changes in Treasury supply. Consistent with our theory, we show that the term premium between longer maturity Treasuries and 3-month Treasury bills increases with the supply of long maturity bonds and decreases with the supply of shorter maturity bonds. It also increases with the MOVE index -- which is closely correlated with illiquidity and transaction costs in the Treasury market. However, it decreases with the VIX, consistent with our safety value channel. Overall, our tractable model can be useful for analyzing the asset pricing effects of central bank market operations as well as unconventional monetary policies.

## One-sided Market Pressure and Interest Earnings: an Explanation for Covered Interest Rate Parity Deviations

Deviations from covered interest rate parity are a puzzling feature of foreign exchange (FX) markets. I present a model of the FX market featuring two components which jointly explain the observed phenomenon: the deviations. The first component is regulatory costs due to one-sided market pressure and the implied accumulation of positions on the providers' balance sheets. They lead to the observed deviations. After accounting for these balance sheet costs, the parity deviations no longer reflect an arbitrage opportunity, but are costs that have not been accounted for. The second component is small interest earnings arising through differences in the commercial paper rate, the Libor rate, and the risk-free investment rate. The interest profits decrease the overall costs.

The model is estimated and tested for the USD/Yen deviations using cross-currency swap data. The fluctuations of the interest earnings are the main driver of the fluctuations of the parity deviations. The measured balance sheet costs are in line with the observed capital costs under the Basel III regulations. In addition, the model results are confirmed on a broad basis by adding the first difference in the interest earnings as an explanatory variable to the multicurrency regression run by Avdjiev et al. (2019).