This Newsletter briefly reports about the Study Center’s activities in the past year and the agenda for the months ahead. It also contains an interview with Roger E.A. Farmer who taught one of the advanced doctoral courses in the summer, and informs about other developments at the Center.

Looking back to 2017, the Study Center organized and hosted numerous academic activities. Hundreds of central bank practitioners, academics and Ph.D. students from around the world came to Gerzensee. Conference highlights included the event with the Journal of Economic Dynamics and Control, co-organized with the Federal Reserve Bank of St. Louis, the Swiss National Bank and the University of Bern, and featuring papers on “Fiscal and Monetary Policies”; a conference with the Council on Economic Policies and the Swiss National Bank on “Aggregate and Distributive Effects of Unconventional Monetary Policies”; as well as the traditional meetings co-organized with the Swiss Finance Institute and the Centre for Economic Policy Research. Six central bankers’ courses and many doctoral course weeks completed the academic program. The Center’s “Open Course Ware” website continues to make the teaching material of selected courses publicly available.

Looking ahead, we plan a series of events in 2018. These include the bi-annual conference with the Journal of Monetary Economics, co-organized with the Swiss Finance Institute and the Centre for Economic Policy Research; six central bankers’ courses; a new instance of the Swiss Program for Beginning Doctoral Students; five advanced courses in economics; and two law and economics courses. Moreover, the Study Center offers for the first time a seminar for board members of Swiss financial institutions.

I would like to warmly thank our partner institutions and everybody who contributes to the Center’s activities. We very much appreciate the support and collaboration. We are looking forward to welcoming some of this Newsletter’s readers as well as many new course and conference participants to the Study Center in the near future.

With best wishes,
Dirk Niepelt, Director
INTERVIEW WITH ROGER E. A. FARMER

You describe yourself as being an “old Keynesian”. What does this mean?

In the 1920s, Pigou wrote a book called Industrial Fluctuations, which I take to be the state of the art of business cycle theory in the 1920s. This book contains a very rich picture of the possible causes of business cycles. These causes involve what we would today call productivity shocks, taste shocks, monetary shocks, animal spirits or confidence shocks. The vision in Pigou is what Wicksell had earlier formalized, in thinking about the economy as a “rocking horse.”

With the rocking horse metaphor, Wicksell introduced the idea of a child, hitting the rocking horse with a club. The dynamics of the rocking horse would be a combination of the internal propagation dynamics of the rocker and the random impulses of the club. According to this metaphor, the economy is buffeted by shocks but always returns to the same point. That I take to be the essence of what was mainstream thought up until the 1920s.

And the great depression changed that view?

Following the 1929 stock market crash, it was difficult to still conceive of the economy as self-stabilizing, particularly when there was a decade of unemployment that never dropped below 15% and sometimes got as high as 25% in the U.S. Keynes’ General Theory dropped the idea that the economy is self-stabilizing. In my book How the Economy Works, I introduce a metaphor that is different from Wicksell’s rocking horse: the economy is a boat on the ocean with a broken rudder. In what I call the “windy boat” metaphor, the child with a club is replaced by the winds on the ocean and the boat is blown in one way or another. In the windy boat metaphor, the boat has no tendency to return to a particular point. In modern language, we would describe that as a dynamical system with multiple steady state equilibria.

The mathematics of the windy boat metaphor is a property called hysteresis, which means that instead of an economy converging to a unique point no matter where it starts from, the economy converges to a different point from every different starting point. That is the essence of what was new in Keynes’ General Theory and it was dropped at some point in the 1950s when Samuelson tried to reconcile ideas from Keynes’ General Theory with Classical Economics.

I describe myself as an “old Keynesian” because my work maintains the idea that the economy is not self-stabilising.

What is the economics of Keynes?

The first “old-Keynesian” idea that the economy is not self-stabilizing was preserved by Post Keynesians, but dropped by the New Keynesians. The second old-Keynesian idea is that the economy is driven by psychology, by animal spirits. That was also kept by the Post Keynesians and was dropped once we introduced rational expectations into macroeconomics in the 1970s. Expectations were now endogenous objects to be determined by the rational expectations assumption instead of exogenous independent fundamental forces that drive the economy from one equilibrium to another.

Can you define what animal spirits are?

Keynes called animal spirits something like the “spontaneous urge to action”. This is connected with another important theme in Keynesian economics that was lost. That is Frank Knight’s distinction between risk and uncertainty. For Knight, risk is a situation where you know the probability distribution of the outcome. Keynes would have been horrified at an attempt to characterize the world as a situation of Knightian risk. His notion was that the future is both unknown and unknowable and this is much closer to Knightian uncertainty than the assumption of Keynes’ followers who model the future as governed by risk.

In my work, I allow the economy to be driven by animal spirits which I model as an independent force. Although animal spirits might be characterized as governed by known probability distributions, it is also possible to model them as independent forces that change in unknown ways over time. People sometimes feel good about themselves and when they feel good, they act.

My current research agenda is to marry notions of multiple equilibria with theories developed by psychologists who try to explain how ideas spread spontaneously in networks. The spread of ideas governs the way people make economic decisions based on their beliefs of what might happen.

You wrote “Animal spirits are fundamentals that should be granted the same methodological status as technologies, preferences, and endowments.” Assuming agents form rational expectations is a way to discipline expectations. Do we lose this discipline when we treat animal spirits as a new fundamental?

You could ask the same thing about any shock in a model. There are two parts to this program. One is understanding what the random disturbances are. The other is understanding the properties of the rocking horse. How you think of a belief shock depends very much on how you think of the structural equation that is hit by that shock. In a conventional New Keynesian economic model, a belief shock is the difference between what happens today and what you thought would happen today. In a conventional model, that surprise is not an independent force in any sense. It has to be connected with some other shock that you will observe somewhere else. In the models I work with, that surprise can end up being a new shock. I operationalize that idea by assuming that the belief shock is drawn from a known probability distribution with parameters. I ask if that way of understanding the world enables me to find stable relationships between estimates of those parameters over time that help me to not only explain what happened in the past, but also help me understand what might happen in the future.

So you would work with an estimated belief or expectation function with stochastic parameters?

Yes. The models I write down are closer to my windy boat metaphor than to the Wicksellian rocking horse metaphor. The difference has to do with the propagation mechanism. In response to a shock, does the economy converge back to the point it was at or not? When I look at data, it looks to me as if the unemployment rate, as an example, is almost a random walk. There are formal tests for that and you cannot reject in data the assumption that the unemployment rate is a random walk. Unemployment is very persistent.

The other thing I find in the data is that the stock market when measured in real terms is also incredibly persistent and is well described as a random walk. The stock market and the unemployment rate are related in a way that econometricians call co-integration. An example I have used as a way to think about co-integration, is that unemployment and the stock market are comparable to two drunks walking down the
nominal income growth. I call that a belief function. People need to estimate their future wealth in order to act today. The way they do this is by looking at how their wealth changed between last period and this period and projecting that same change into the future. When the researcher solves for the steady state of a model, closed with a belief function of that form, the same variable, income growth, appears on the left side and the right side of the belief function. When solving for the steady state, these variables drop out and there are not enough steady-state equations to solve for the steady state values of all of the variables. That fact has important consequences for the reduced form of the Farmer monetary model. It leads to a reduced form, which is a co-integrated vector error correction model. This goes back to the idea of the two drunks. It tells you why they can wander and how they are tied together.

What are the different policy recommendations you get from these three equations? Much of modern monetary policy, to the extent that it is guided by monetary theory, has intellectual roots going back to Friedman. In Friedman’s 1968 presidential address, he reacted very strongly to Keynesian attempts to stabilize real economic activity. Essentially Friedman’s view was that the real economy is self-stabilizing. In his view, you can do a lot of damage with monetary policy and the best thing to do is to set a stable monetary rule. Friedman favoured money growth rate rules and he counselled that central banks should not worry about the real economy. The real economy will take care of itself. That view is probably most strongly held in Bundesbank policy circles and it is an idea that was inherited by the European Central Bank. Other central banks, the Fed in particular, have retained a secondary objective to stabilize economic activity. They see that secondary objective as helping the economy to return to the steady state a little more quickly than the market would do on its own.

In my view, there is a role for policy not just to help things get back more quickly to the steady state, but to make sure they ever get back. I believe there should be two policy goals. One is to stabilize prices. The other is to maintain full employment. Rather than use fiscal policy to stabilize full employment, I would use a second kind of asset market intervention much like monetary policy that is concerned about stabilizing the volatility in asset markets; in particular, the low frequency movements in asset markets that are highly correlated with movements in unemployment rates.

How would this intervention work? Would the central bank have to buy stocks then? And if so what stocks? In my book, Prosperity for All, I explain how to do this. There I advocate setting up a value weighted index fund, defined over the entire stock market. The central bank or the national treasury would trade the fund counter-cyclically by offering to buy or sell shares in the fund at a pre-announced price. The goal of these trades would be to maintain full employment. The trades would be carried out by a Financial Policy Committee (FPC) modelled on the Monetary Policy Committee or the Financial Policy Committee in the UK.

For example, imagine that the FPC decides that the current unemployment rate is too high and the Index Fund is currently trading at 100. The FPC would announce that, as of one week from the announcement, the Fund would trade at 120 and grow at 3% annually for three months. The committee, backed by future tax revenues, would implement its decision by actively trading the Fund for short-term treasury debt. If the policy is credible, the FPC may never need to actually carry out the trades.

Professor Farmer, thank you very much for this interview.

Cyril Monnet conducted this interview.
ACADEMIC CONFERENCES

CONFERENCE ON AGGREGATE AND DISTRIBUTIVE EFFECTS OF UNCONVENTIONAL MONETARY POLICIES

Welfare-Enhancing Distributional Effects of Central Bank Asset Purchases
Author: Andreas Schabert, University of Cologne
Discussant: Annukka Ristiniemi, Sveriges Riksbank

Non-Neutrality of Open Market Operations
Authors: Pierpaolo Benigno, LUISS Guido Carli, and Salvatore Nistico, Sapienza University of Rome
Discussant: Cédric Tille, Graduate Institute of International and Development Studies

Forward Guidance without Common Knowledge
Authors: George-Marios Angeletos and Chen Lian, Massachusetts Institute of Technology
Discussant: Paul Pichler, Oesterreichische Nationalbank

The Risk Channel of Unconventional Monetary Policy
Author: Dejanir Silva, University of Illinois
Discussant: Christoph Meinerding, Deutsche Bundesbank

Optimal Monetary Policy and Liquidity with Heterogeneous Households
Authors: Florin Bilbiie, Paris School of Economics, and Xavier Ragot, Sciences Po
Discussant: Tobias Cwik, Swiss National Bank

Inside Money, Investment, and Unconventional Monetary Policy
Author: Lukas Altermatt, University of Basel
Discussant: Federico Signoretti, Banca d’Italia

The Redistributive Effects of Monetary Policy
Authors: Daniel Andrei and Bernard Herskovic, UCLA, and Olivier Ledoit, University of Zurich
Discussant: Lorenzo Burlon, Banca d’Italia

Misallocation Costs of Digging Deeper into the Central Bank Toolkit
Authors: Robert Kurtzman, Federal Reserve Board of Governors, and David Zeke, University of Southern California
Discussant: Oreste Tristani, European Central Bank

Did Quantitative Easing Increase Income Inequality
Authors: Juan Antonio Montecino, Columbia University, and Gerald Epstein, University of Massachusetts Amherst
Discussant: Maarten Dossche, European Central Bank

Effects of Monetary Policy Shocks on Inequality in Japan
Authors: Masayuki Inui and Nao Sudo, Bank of Japan, and Tomoaki Yamada, Meiji University
Discussant: Jean-Stéphane Mésonnier, Banque de France

EUROPEAN SUMMER SYMPOSIUM IN ECONOMIC THEORY
July 3 – 14, 2017, jointly with CEPR

Focus Sessions:
Coordination, Communication, and Attention
Experimental Design

EUROPEAN SUMMER SYMPOSIUM IN FINANCIAL MARKETS
July 17 – 28, 2017, jointly with CEPR

Focus Sessions:
Mortgages and Housing in Household Finance
Politics and Finance
Behavioral Corporate Finance and Beyond
New Theoretical Issues in Corporate Finance and Beyond
CONFERENCE WITH THE JOURNAL OF ECONOMIC DYNAMICS AND CONTROL ON FISCAL AND MONETARY POLICIES

October 20 – 21, 2017, jointly with the Journal of Economic Dynamics and Control, the Federal Reserve Bank of St. Louis, the Swiss National Bank, and the University of Bern

The Fiscal Theory of the Price Level in a World of Low Interest Rates
Authors: Marco Bassetto, Federal Reserve Bank of Chicago, and Wei Cui, University College London
Discussant: Steve Williamson, University of Western Ontario

Anticipated Fiscal Policy and Monetary Policy Normalization
Authors: Behzad Diba, Matthew B. Canzoneri, Dan Cao, and Robert E. Cumby, Georgetown University, and Wenlan Luo, Tsinghua University
Discussant: Vincent Sterk, University College London

Monitoring Money for Price Stability
Authors: Constantine Hevia, Universidad Torcuato Di Tella, and Juan Pablo Nicolini, Federal Reserve Bank of Minneapolis
Discussant: Pedro Teles, Banco de Portugal

The Performance of Policy Rules in Heterogeneous-Agent Models with Aggregate Shocks
Authors: Timo Boppart, Per Krusell, and Kurt Mitman, IIES, Stockholm University
Discussant: Michael Reiter, Institut für Höhere Studien and New York University Abu Dhabi

Capital Investment, Reallocation, and Economic Policy
Authors: Randall Wright and Sylvia Xiaolin Xiao, University of Wisconsin, and Yu Zhu, Bank of Canada
Discussant: Aleksander Berentsen, University of Basel

Learning to Live in a Liquidity Trap
Authors: Jasmina Arifovic, Simon Fraser University, Stephanie Schmitt-Grohé and Martin Uribe, Columbia University
Discussant: Juan Pablo Nicolini, Federal Reserve Bank of Minneapolis

Keynesian Economics without the Phillips Curve
Authors: Roger Farmer, University of Warwick, and Giovanni Nicoló, UCLA
Discussant: Martin Ellison, University of Oxford

RESEARCH DAYS AND SWISS DOCTORAL WORKSHOP IN FINANCE
June 11 – 13, 2017, jointly with Swiss Finance Institute

Plenary Session:
An Explanation of Negative Swap Spreads: Demand for Duration from Underfunded Pension Plans

Academic Sessions
Ph.D. Parallel Sessions

OTHER EVENTS
April 27, 2017
Graduation Ceremony for the participants of the Swiss Program for Beginning Doctoral Students in Economics 2016

November 16 – 17, 2017
Alumni Conference
COURSES

CENTRAL BANKERS COURSES 2017

Advanced Topics in Empirical Finance
External lecturers: Casper de Vries, Thierry Foucault, Michael Rockinger
Monetary Policy, Exchange Rates and Capital Flows
External lecturers: Philippe Bacchetta, Giancarlo Corsetti, Philipp Harms, SNB staff
Banking Regulation and Supervision
External lecturers: Philippe Bacchetta, Martín Gonzalez-Eiras, Jean-Charles Rochet, Anthony Saunders, Heinz Zimmermann, Finma- and UBS staff
Macroeconomic Forecasting
External lecturers: Daniel Kaufmann, Massimiliano Marcellino, Barbara Rossi, SNB- and Riksbank staff
Advanced Topics in Monetary Economics
External lecturers: Lawrence Christiano, Stephanie Schmitt-Grohé, SNB staff
Instruments of Financial Markets
External lecturers: Philippe Bacchetta, Amit Goyal, Michel Habib, Erwan Morelec, Michael Rockinger, SNB staff

SWISS PROGRAM FOR BEGINNING DOCTORAL STUDENTS IN ECONOMICS 2016/17 AND 2017/18

Microeconomics
Lecturers: Piero Gottardi, John Moore, Klaus Schmidt, Jörgen Weibull
Macroeconomics
Lecturers: Fernando Alvarez, Jordi Galí, Sérgio Rebelo, Ricardo Reis
Econometrics
Lecturers: Bo Honoré, Mark Watson

ADVANCED COURSES IN ECONOMICS FOR DOCTORAL STUDENTS AND FACULTY MEMBERS 2017

Sovereign Debt and Current Account Dynamics
Lecturer: Mark Aguiar
Machine Learning for Treatment Effects and Structural Equation Models
Lecturer: Victor Chernozhukov
Equilibrium Search Models – Theory and Estimation
Lecturer: Jean-Marc Robin
Using the Belief Function to Resolve Indeterminacy in Macroeconomics
Lecturer: Roger Farmer
Banking and Financial Institutions: Theory and Evidence, jointly with Swiss Finance Institute
Lecturer: Zhiguo He
Computational Economics
Lecturer: Felix Kübler

LAW AND ECONOMICS COURSES FOR DOCTORAL STUDENTS AND FACULTY MEMBERS 2017

The Law and Economics of Law and Corporate Finance
Lecturer: Eric Talley
Economic Analysis of Corporate Law
Lecturer: Robert Daines
AGENDA

CONFERENCES 2018

Research Day and Swiss Doctoral Workshop in Finance, jointly with Swiss Finance Institute
European Summer Symposium in Economic Theory, ESSET, jointly with CEPR
European Summer Symposium in Financial Markets, ESSFM, jointly with CEPR
Conference with the Journal of Monetary Economics, jointly with the Swiss National Bank

CENTRAL BANKERS COURSES 2018

Inflation Forecasting and Monetary Policy
External lecturers: Gianluca Benigno, Carlo Favero, Daniel Kaufmann, SNB staff

Monetary Policy, Exchange Rates and Capital Flows
External lecturers: Philippe Bacchetta, Giancarlo Corsetti, Philipp Harms, SNB staff

Financial Stability
External lecturers: Philippe Bacchetta, Martin Gonzalez-Eiras, Michael Rockinger, Ernst-Ludwig von Thadden, SNB staff

Monetary Theory and Policy
External lecturers: Roberto Chang, Behzad Diba, Charles Goodhart, Philipp Harms, Sarah Lein

Advanced Topics in Monetary Economics
External lecturers: Lawrence Christiano, Stephanie Schmitt-Grohé, SNB staff

Instruments of Financial Markets
External lecturers: Philippe Bacchetta, Amit Goyal, Michel Habib, Erwan Morelec, Michael Rockinger, SNB staff

SWISS PROGRAM FOR BEGINNING DOCTORAL STUDENTS IN ECONOMICS 2017/18 AND 2018/19

Microeconomics
Lecturers: Piero Gottardi, John Moore, Klaus Schmidt, Jörgen Weibull

Macroeconomics
Lecturers: Fernando Alvarez, Jordi Galí, Sérgio Rebelo, Ricardo Reis

Econometrics
Lecturers: Bo Honoré, Mark Watson

ADVANCED COURSES IN ECONOMICS FOR DOCTORAL STUDENTS AND FACULTY MEMBERS 2018

Volatility Modeling
Lecturer: Victor Bollerslev

Quantitative Models for International Trade
Lecturer: Samuel Kortum

Financial Frictions and Incomplete Markets, jointly with Swiss Finance Institute
Lecturer: Yuliy Sannikov

Long-Run, Global Macroeconomics
Lecturer: Per Krusell

Disciplining or Protecting Banks? Theory and Evidence
Lecturer: Charles Calomiris

LAW AND ECONOMICS COURSES FOR DOCTORAL STUDENTS AND FACULTY MEMBERS 2018

Law and Economics of Taxation
Lecturer: Dhammika Dharmapala

Behaviorally Informed Regulation
Lecturer: Ryan Bubb

SEMINAR FOR BOARD MEMBERS OF SWISS FINANCIAL INSTITUTIONS

Monetary and Regulatory Policy: Theory and Implementation in Switzerland
Lecturers: Jean-Pierre Danthine, Xavier Vives
WORKING PAPERS

2017

17.01 Nils Herger
"An Empirical Assessment of the Swedish Bullionist Controversy"

17.02 Nicole Aregger and Jessica Leutert
"Policy Evaluation by the Synthetic Control Approach: The Case of the Swiss Franc"

17.03 Nicole Aregger and Jessica Leutert
"Unconventional Monetary Policy under Appreciation Pressure - The Role of Financial Frictions"

17.04 Nils Herger
"Testing the Interest Parity Condition with Irving Fisher's Example of Indian Rupee and Sterling Bonds in the London Financial Market (1869–1906)"

VISITORS’ PROGRAM

George-Marios Angeletos, MIT, visited in March. Martin Gonzalez-Eiras, University of Copenhagen, visited the Study Center in April and October to collaborate with Dirk Niepelt.

Christian Schumacher, Deutsche Bundesbank, visited in May to collaborate with Sylvia Kaufmann.

Plamen Nenov, Norwegian Business School, visited in March to collaborate with Cyril Monnet.

STAFF NEWS

Among the teaching assistants, Nicole Aregger obtained her doctoral degree from the University of Bern and left the Study Center at the end of August. Maria Bolboaca also obtained her doctoral degree from the University of Bern, and accepted a position at the University of St. Gallen.

Lukas Voellmy, a Ph.D. Student at the University of Bern, joined the Center as teaching assistant with the objective to complete his doctoral thesis.

Jacqueline Rothacher, administrative manager accounting and Teodora Ruiz Sanchos, administrative manager doctoral courses (BDP) celebrated their 10 year-jubilees. Manfred Roth, IT-support celebrated his 15 year-jubilee.