



Workshop: Financial, Technological, Social and Political Bubbles

26 March 2015 | Prime Tower Clouds | Maagplatz 5 | Zurich

Registration: Pleaser register electronically at www.event.ethz.ch/ws_erc

Registration closes on 13 March 2015. This event is free of charge.

Organized by:

Chair of Entrepreneurial Risks, ETH Zurich

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Financial, Technological, Social and Political Bubbles

Common thinking holds that bubbles occurring in an economic context are seen as optimistic predictions about the future that prove wrong. In this respect, they are considered to be bad.

In the course of time, bubbles have come to be understood as more complex, yet not necessarily evil. Rather, bubbles defined as collective over-enthusiasm seem a necessary process to foster collective attitude towards risk taking, fighting the inclination of established capital and of society to avoid risks. We have coined the term 'social bubble' in order to identify the types of dynamics that shape societal endeavors in order to suggest that major projects often proceed via a social bubble mechanism.

In our workshop, we discuss the modern relevance of the bubble concept, which is reaching much beyond financial instabilities and crises. By studying its many concrete manifestations in society, one of the workshop's goals is to understand better the interplay between financial, technological, social, and political bubbles. The contributions and discussions with key industry actors in the energy sector will provide concrete examples and foster better integrative understanding for improved entrepreneurial action and risk management. In the discussions following the presentations, we will debate to clarify how the different angles may bring more light.

We will also engage a dialogue between the invited speakers and the audience.

Yours sincerely,

Monika Gisler and Didier Sornette, ETH Zurich
Lukas Gubler, Axpo Trading

Programme

- 08:45 **Didier Sornette**, ETH Zurich
Opening Remarks
- 09:00 **Domenico De Luca**, Axpo Trading
Keynote Address
- 09:20 **Andrew Odlyzko**, University of Minnesota
Technology and Financial Manias
- 10:00 **William Janeway**, INET
The Political and Financial Economics of Innovation
- 10:40 *Coffee Break*
- 11:00 **Moshe Maor**, NYU Wagner & Hebrew University of Jerusalem
Emotion-Driven Negative Policy Bubbles
- 11:40 **Serge Galam**, SciencePo, Paris
Surprising Dynamics of Public Opinion on Sensitive Issues With Incomplete Scientific Data
- 12:20 **Nolan McCarty**, Princeton University
Complexity, Capacity, and Capture
- 13:00 *Lunch*
- 14:00 **Walter Hollenstein**, Alpiq
The 2008 Energy Price Bubble and its Consequences – a Case Study
- 14:30 **Etienne Perron**, BKW
Price Fairness in Thin Markets
- 15:00 *Coffee Break*
- 15:30 **Vlatka Komaric**, Axpo Trading
Renewable Policies: The Rollercoaster of the Energy Market
- 16:00 **Panel Discussion**: Lessons and Prospect for the Future
- 17:00 **End of Workshop**

Abstracts

Andrew Odlyzko: Technology and Financial Manias

The interaction of technology and finance has produced several noteworthy bubbles and has provided important lessons about investment manias. Sometimes, although rarely, even widely speculative and implausible ventures succeed. In other cases, one can demonstrate the existence of convincing quantitative models that show a mania was destined to fail, yet those models were either not discovered in time or else were disregarded by contemporary investors. In light of this evidence, one can speculate that modern society's bias towards tolerating bubbles and gullibility among investors and regulators may be advantageous in the long term in promoting innovation and growth.

William Janeway: The Political and Financial Economics of Innovation

Over some 250 years, economic growth has been driven by successive processes of trial and error and error and error: upstream exercises in research and invention, and downstream experiments in exploiting the new economic space opened by innovation. Each of these activities necessarily generates much waste along the way: dead-end research programs, useless inventions and failed commercial ventures. In between, the innovations that have repeatedly transformed the architecture of the market economy, from canals to the internet, have required massive investment to construct networks whose value in use could not be imagined at the outset of deployment. And so at each stage, the Innovation Economy depends on sources of funding that are decoupled from concern for economic return. Historically, two such sources have played strategic roles in advancing the technological frontier: state programs of investment and procurement in pursuit of politically legitimate emissions and financial speculation. This paper explores the political and financial economics of innovation at the frontier through the lens of the US venture capital industry.

Moshe Maor: Emotion-Driven Negative Policy Bubbles

Existing explanations for systematic policy underreaction revolve around institutional frictions, policy drift, loss aversion and situations when the prospective gains (or losses) are over the very long term. These well-known explanations for policy not to change in accordance with the severity of the policy problem may all lead to a circumstance that is best understood as a negative policy bubble, that is, a real and/or perceived policy underreaction which is propelled by self-reinforcing processes over an extended period of time. There is little work however that appreciates the potential role of emotions in policy-making, and especially, the role of negative emotions in driving negative policy bubbles. This paper develops this relatively unappreciated explanation. The behavioral understanding of the term advanced here points at a possible process by which negative emotions trigger the emergence of negative policy bubbles by affecting various kinds of mental information processing (e.g., time perception, visual processing of emotional stimuli). Self-reinforcing processes interact with the contagion of emotions to reinforce the lack of confidence in the policy, thereby leading to the undersupply of policy. This process may be interrupted following modest endogenous or exogenous perturbations, as well as following the reduction in negativity bias when the information environment becomes predominantly negative.

Nolan McCarty: Complexity, Capacity, and Capture

When setting regulatory policy, policymakers often fail to take into account a variety of risk factors such as poor implementation, interest group subversion, and the preferences of future policymakers. Such neglect can lead to significant policy failures.

Etienne Perron: Price Fairness in Thin Markets

How fair is the Swiss power forward price? A market price for a commodity is considered fair if two rational parties that have knowledge of all relevant information would agree to exchange the commodity at that price. It is well known that prices in highly liquid markets can be temporarily unfair. This is due to herding behavior of market participants and to rule-based trading. But how fair are prices in thin (illiquid) markets? Here, transactions take place rarely and one can assume that market participants are rational and well-informed. Are there other reasons for unfair prices? We discuss these questions for the Swiss power forward market, which is a thin market, and use an example from BKWs daily business to show that price fairness is not always given. One reason for unfair prices is the existence of alternate, hidden means to exchange power forwards. We conclude that when using the Swiss forward price as an index price for power in Switzerland, one should be aware of its limitations.

Vlatka Komaric: Renewable Policies: The Rollercoaster of the Energy Market

Climate and energy targets require that, a certain percentage of total energy consumption is covered by renewable energy. Furthermore, there is an obligation for reduction of greenhouse gas emissions compared to levels observed in 1990. To meet these targets, renewable energy policies have been developed across Europe, creating an amazing rollout of renewable energy resources.

To create more incentives for increasing the share of renewable production in the energy mix, many countries have introduced several subsidy programs. These programs have contributed to the rapid expansion of renewable energy but not without consequences for the energy sector, and the economy as a whole. While, for example, wholesale prices have generally reduced, retail prices to many electricity consumers have increased significantly as subsidies are often paid by the end consumer. Moreover, the overall dynamic of energy prices has changed as they have become more sensitive to weather i.e. does the wind blow or is the sun shining.

As policies are determined at a national level, there is no unique renewable energy support scheme, implying arbitrage opportunities between different markets. In such an environment, both price forecasting and risk management face new challenges related to being able to absorb shocks, coming not only from market and credit risk, but also from sudden regulatory and policy changes.

About the Speakers

Didier Sornette, ETH Risk Center

Professor of Entrepreneurial Risks, Director of the Financial Crisis Observatory, and Member of the Swiss Finance Institute.

Domenico De Luca, Axpo Trading

CEO, Head of Axpo Group's Trading & Sales business area, and Member of Axpo Group Executive Board.

Andrew Odlyzko, University of Minnesota

Professor in the School of Mathematics, founding director of the interdisciplinary Digital Technology Center, and Assistant Vice President for Research.

William Janeway, INET

Senior Advisor at Warburg Pincus, member of the Board of Directors of the Social Science Research Council, the Board of Governors of the Institute for New Economic Thinking and the Board of Science Technology and Economic Policy of the National Academy of Sciences.

Moshe Maor, NYU Wagner & Hebrew University of Jerusalem

Professor of Political Science, and Wolfson Family Chair of Public Administration.

Serge Galam, SciencePo, Paris

Senior researcher at CNRS, and member of CE-VIPOF, Centre for Political Research, SciencePo and CNRS.

Nolan McCarty, Princeton University

Susan Dod Brown Professor of Politics and Public Affairs, Chair of the Department of Politics,

and Research associate, National Bureau of Economic Research.

Walter Hollenstein, Alpiq

Head of Corporate Risk Management.

Etienne Perron, BKW

Head of Risk Management, Market.

Vlatka Komaric, Axpo Trading

Head of Quantitative Risk Management.