Dear reader

I am pleased to present the first edition of the redesigned Econ newsletter, intended to bring our extraordinary department and its ongoing work closer to the public at large. In this edition, you will find current information and updates on the research activities and events of our department. Furthermore, we are pleased to introduce our newest faculty member, Joachim Voth, and to show you the many accomplishments the department and our scientific staff have been able to achieve since the beginning of this year.

New Media is one of the most talked about subjects of this generation. You will find an interesting article on this issue on the next three pages. The article is based on the presentation that Gregory Crawford gave at the advisory board meeting of the Department of Economics last November. Gregory Crawford, Professor of Applied Microeconomics, is a leading expert in this field. He joined our faculty in 2013 and has already proven to be a great asset for the department.

Finally, we would like to give credit, where credit is due. Some of our members have achieved great awards and distinctions this year. Others have been very busy and published various articles in renowned journals. We congratulate all of you for your successes and are proud to have such excellent talents working for the department.

We wish you much interest while reading this newsletter.

Ernst Fehr
Chairman of the Department of Economics
Faculty Research

Understanding New Media

New media has become a part of modern everyday life. It is a global phenomenon, which each of us knows from personal experience, but only a few experts are able to grasp the underlying system in its full complexity. Gregory S. Crawford, Professor of Applied Microeconomics at the Department of Economics, is one such expert.

An empirical economist, Gregory Crawford specializes in the fields of industrial organization, econometrics, and media economics. Much of his work focuses on “evidence-based policymaking”: using data on consumer and firm behavior to understand the mechanisms that generate market outcomes in product – especially media – markets in order to best design public policies in those markets.

What is New Media?
A basic question is of course that of definition. What exactly is new media? It can best be described as media content available on-demand, with access across multiple platforms and devices. This means that news, information, and entertainment can be accessed anytime, in any place, from anywhere, whether through a wired or wireless platform or on a computer, smart phone, tablet, or television.

There are four main economic characteristics of new media that distinguish it from old media: it is (largely) distributed via the internet, it is multi-platform / multi-device, it is social, and it is measurable.

Internet distribution has been growing fast in both the developed and developing world, from 394 million users in 2000 up to 2.497 million in 2012. New media access and use comes across a variety of platforms and uses various new devices, particularly mobile platforms and instruments.

Cisco forecasts that global mobile data traffic will increase from 0.24 exabytes per month in 2010 to 11.20 exabytes in 2017. Sales of mobile devices (smartphones and tablets) recently exceeded sales of computers (PCs and laptops) on an annual basis; these frequently serve as a household’s primary access device.

New media is also social. Social networking sites like Facebook and Pinterest are among the most popular online activities, with high user engagement and expanding mobile possibilities. Finally, this activity, and indeed all internet activity, can be measured, for instance, by page views or click-throughs. With smart set-top boxes and real-time viewing measurement now being used to analyze consumption on both television and mobile devices, it is possible to define unique users and to use location targeting, revolutionizing advertising market measurement and business models.

Understanding Media Markets
A simple three-part economic framework can help understand media markets, both new and old. First, unlike many “conventional” markets, media markets are two-sided. On one side, there is a demand for content by consumers, whether it’s a newspaper, a television show, or a website. When households consume this content, it creates audiences that can then be “sold” to advertisers. Media markets differ in their reliance on revenue from advertisers versus that from households, but the presence of both makes the management of a media business a challenging undertaking.

A second important aspect of media markets is the nature of their production costs. Media content exhibits high “first-copy” costs, but (sometimes very) low “next-copy” costs. Finally, any casual consumer of music, television, or the internet can confirm that there is “infinite variety” of content, but very limited use. In the U.S., the audience measurement company Nielsen estimates that, despite having access to hundreds of television channels
and millions of websites, the typical US household watches only 17 of those channels and regularly visits only 7 of those websites. There is also ever-increasing use of sophisticated search methods to sift through this ever-increasing amount of content.

The typical U.S. household watches 17 television channels and regularly visits 7-11 websites. The Nielsen Company

Effects of New Media on Old Media
This simple three-part framework can, in turn, help us understand the impact of new media on “old media” industries. In general, when thinking of the competitive effects of changes in economic environments – like the rise of new media – it is useful to analyze the effect of these changes on (1) demand, (2) costs, and (3) competition. What effect has new media had on old media demand, costs, and competition?

From a demand perspective, the news is good. New media has more content and is more convenient, increasing consumer demand for content as well as the number of audiences to sell to advertisers. The infinite variety of this content and need to find what one wants has also created a large, new advertising market: the Google (online search) market. From a cost perspective, the news is also good. The digital production and distribution of new media has dramatically lowered “next-copy” costs. A newspaper company doesn’t have to print newspapers and deliver them around the country for a consumer to learn what’s happening in the world – the customers can simply pull up the newspaper’s website and quickly learn the news of the day. If this were the only effect of new media on old media, it would be great for old media firms: higher demand and lower costs makes for a more profitable industry.

Unfortunately, new media has also dramatically impacted the competition among and between old media firms. Before new media, if consumers wanted the news of the day, they had to go to the local shop and pick up the local paper. Now, consumers have access to an infinity of newspapers – often for free – without having to leave their homes. This is similar to the situation for other media products like music and film: the simultaneous growth of digitization of media content and online piracy means many old media firms had to “compete with free.”

While new media has therefore made consumers big winners, the same cannot be said for companies, at least not for all of them. While Google is the greatest success story of new media, some companies, including many newspapers and retail distributors of “old” media like Tower Records and Blockbuster Video, have been driven from business due to new media.

What is the impact of New Media for Non-Media Businesses?
The rise of new media has raised new challenges that are likely to be relevant in non-media industries, too. The fact that new media has changed media markets means that all firms need to adapt their marketing and promotions strategies to these changes. Furthermore, in many industries, the growth of new media data has been paralleled by a similar growth in data for these industries. This has created a tremendous demand for people to analyze this data. Hal Varian, Google Chief Economist, has said “Data … are widely available; what is scarce is the ability to extract wisdom from them.” Here at the University of Zurich economics department, we provide exactly these skills, both at the undergraduate and Master’s levels.

The analysis of this new data is another challenge. Most new media data is “observational,” i.e. it arises from observing market participants. These data can be difficult to study as the sample of people being observed is “self-selected” based on their preferences. Thus measuring the
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click-through rate of an ad for an online brokerage firm for someone who searched for “investing” isn’t likely to give a good estimate of the click-through rate of the same ad for someone who searched for “inventing”. It is far better for firms to run experiments, e.g. varying the timing, content, and search terms over which they run an ad. Running experiments in firms poses its own challenges, however, from having access to the right set of skills, to modifying existing business practices, to the need to enter into a partnership with buyers and/or suppliers. All that said, it is clearly the way forward.

Finally, new media has raised new, challenging research questions that are relevant across all industries. What is the role of information in decision-making of both consumer and firms? What role do dynamics play in consumer and firm behavior? What is the role of social behavior in media and non-media product markets? Answering these questions and those that follow means that there will be no shortage of further analysis in the field of new media.

Gregory S. Crawford
Professor of Applied Microeconomics

Gregory Crawford is a Professor of Economics at the University of Zurich and Research Fellow at the Centre for Economic Policy Research (CEPR). Prior to joining the faculty at Zurich, he held academic positions in the UK and US at the University of Warwick, Duke University, and the University of Arizona. In 2007-2008, he was the Chief Economist at the Federal Communication Commission (FCC), the United States media and communications regulator. In 2014-15, he will begin teaching econometrics to UZH Masters students to help train the next generation of “data scientists” required to analyze the deluge of data available to firms.

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Faculty Research Publications

Selected Publications in Economics


Those who eat poorly as a child are not just shorter physically – they often suffer in terms of intellectual development as well. In this paper, Baten, Crayen and Voth show that numeracy suffered in Britain in years of high food prices. Poor relief – a form of welfare payment – mitigated these negative effects.


This paper shows that a small amount of individual-level money illusion may cause considerable aggregate nominal inertia after a negative nominal shock. In addition, the results indicate that negative and positive nominal shocks have asymmetric effects because of money illusion. While nominal inertia is quite substantial and long lasting after a negative shock, it is rather small after a positive shock.


Europe is unique in developing fertility control long before the arrival of the pill. It took the form of late marriage – German and English girls in the 16th century married in the mid-to-late 20s, as late as today. In this paper, Voigtländer and Voth show that a rise in the employment opportunities for women after the Black Death helped to increase the marriage age, thus lowering fertility. As a result, per capita incomes were permanently higher.

Selected Publications in Neuroeconomics


To investigate neural signatures of value and salience, the authors apply multivariate (pattern-based) analyses to human functional MRI data acquired during a noninstrumental outcome-prediction task involving appetitive and aversive outcomes. The findings reinforce the earlier reports of parietal value signals and reconcile them with the recent salience report. Moreover, the authors find that multivoxel patterns in the orbitofrontal cortex correlate with value.


How does the human brain control compliance with social norms? Are the underlying brain mechanisms mainly concerned with avoiding social punishments, or do they also reflect purely voluntary norm obedience? To what degree does norm compliance depend on knowledge and beliefs about the norm and possible punishments? Can we change and possibly even increase human norm compliance with neuroscientific methods? A new study by Christian Ruff, Giuseppe Ugazio, and Ernst Fehr, which has been published in SCIENCE provides answers to these questions.

Selected Book Publications


Why hasn’t sovereign lending disappeared? The last 500 years are littered with promises broken, defaults declared, and creditors burned. In this book, Mauricio Drelichman and Hans-Joachim Voth look at the first serial defaulter in history – Philip II of Spain. Despite their cries of “wolf”, no lender to the king lost money on average, and all continued to lend even after the worst default episodes. Drelichman and Voth show how defaults formed part of a well-operating system of credit extension and risk-sharing.
Spotlight

Faculty Research

Awards and Distinctions

Further Publications


Laureiro-Martínez, Daniella; Canessa, Nicola; Brusoni, Stefano; Zollo, Maurizio; Hare, Todd A.; Alemanno, Federica & Cappa, Stefano F. (2014). “Frontopolar cortex and decision-making efficiency: comparing brain activity of experts with different professional background during an exploration-exploitation task”, Frontiers in human neuroscience, 7: 927.


Awards and Distinctions

Professor Armin Schmutzler has been appointed Associate Editor of the European Economic Review

Established in 1969, European Economic Review is one of the oldest general-interest economics journals for all of Europe. It is intended as a primary publication for theoretical and empirical research in all areas of economics.

Tenure Track Assistant Professorship for Thorsten Kahnt

Thorsten Kahnt who has been a PostDoc in the field of Neuroeconomics at our department since 2011 has accepted a position as tenure-track Assistant Professor in the Department of Neurology, Feinberg School of Medicine, Northwestern University in Chicago, Illinois.

Tenure Track Assistant Professorship for Tony Williams

Tony Williams who started his doctoral studies at the department in 2010 has accepted a position as tenure-track Assistant Professor at Maastricht University. He will start his position in September 2014.

Research Grant for Professor Joachim Voth

The Institute for New Economic Thinking (INET) has awarded Joachim Voth a USD 131,560 grant for the project “Liquidity and Asset Returns in Times of Turmoil”, from January 1, 2014, to December 31, 2015.

Marie Curie Fellowship for Anjali Raja Beharelle

Anjali Raja Beharelle, PostDoc in the field of Neuroeconomics, received an EU grant amounting to EUR 192,622 for her two-year research project “Cortical Mechanisms of Exploratory Learning”. The project started on February 1, 2014 and will be conducted with Christian Ruff and Todd Hare.
New at the Department
Interview with New Faculty Member

Joachim Voth
Professor of Economics of Development and Emerging Markets

Professor Voth, one of your current research projects focuses on how national debt affects the growth of a country from a historical perspective. What are the main new insights from this research?

Voth: We tend to think that government debt is either bad or neutral – either it crowds out private sector investment, or it doesn’t matter because people react in such a way as to undo the adverse effects. Together with a colleague from my former university in Barcelona, Jaume Ventura, I investigate a setting in which we think government borrowing had positive consequences – the Industrial Revolution in Britain. This was a turning point in world history – the first time that growth accelerated and stayed high for an extended period. Britain in 1690 had a debt-to-GDP ratio of 5%; by 1820, it was 215%. That’s more than the ratio in Greece, or in the US, the UK, or Spain. It is phenomenally high. So how do we explain that the country that borrowed the most industrialized first?

This is a world in which financial frictions were very important – firms couldn’t just go out and borrow to expand. These kinds of frictions are still important in the many countries today, and even in OECD countries, many firms rely on self-financing. In a setting such as this one, introducing massive government borrowing crowds out investments that offer lower rates of return than sovereign bonds – but this can be a good thing. If the most efficient sectors are constrained in their ability to borrow, and they benefit from the crowding-out in the low-productivity sectors, they effectively receive a subsidy. For example, wages will be lower if government debt crowds out investment in traditional industries – entrepreneurs in the new sectors can then hire people for less, their profits grow as a result, and they can invest more. Under the right circumstances, that will accelerate growth, as it did in 18th century England.

Scientists are often very passionate about their work. What motivates you to do economic research?

Voth: I should say that becoming an economist began as an act of opportunism. My first passion was history, and when I started to study, I hedged my bets by doing a double-major in economics and history – you know, so that I could get a private sector job in case the university career in history didn’t pan out. While studying in Germany, these things were just sitting there side-by-side – Lagrange multipliers during the day, the history of European expansion at night. I only realized as a visiting student in Oxford that the two things – economics and history – can be fused in a powerful and intellectually compelling way. I spent a year teaching as a visiting professor in Stanford, in 1997/98, before I understood that the
things that interested me the most in economic history required a lot of graduate-level economics; that’s when I started to attend graduate classes with colleagues. I continued to do that as a visitor at MIT. So it wasn’t really until 2004 or so that I finished my self-made graduate studies program in economics. I started with a passion for understanding the past; now, I am more interested in using historical sources of variation in understanding general problems in economics, such as the nature of bubbles or the role of the financial sector in growth.

And if you hadn’t become an economist, what would you be today?

**Voth:** An easy question to answer – what else could you have become – would be “a historian.” But I am not sure that that’s true. History for history’s sake didn’t hold my interest. If I could chose again, I would probably think about architecture or engineering – I like the no-nonsense practicality of both, and the tangibility of the final product.

What are you most proud of in your academic career?

**Voth:** My graduate students. I have been very fortunate to have good graduate students at my last university, Pompeu Fabra in Barcelona. Three of them got outstanding tenure-track jobs in the US, something that is really hard to do from Europe, and even harder if your specialization is in economic history. I am determined to work hard to continue in the same vein here.

What advice would you give to today’s bright young students and what is your wish for the future generation of scientists?

**Voth:** I just came back from a lunchtime meeting with a highly selected group of students that the department admitted to our PhD program; they are an impressive crowd! Here is some of what I told them: Don’t do humdrum incremental work. Take your time in finding a topic that really speaks to you and don’t be afraid to swing for the fences. You are going to spend an extraordinarily large share of your life on trying to solve a problem in this area; you need to be passionate about it to start, and you need to be convinced that it will matter not just to you, or the profession of economists, but for people in general.
A Highly Selective Application Process

The Zurich Graduate School of Economics (ZurichGSE) was established as a result of the reform of the Doctoral Program in Economics in 2013. The school offers a degree program in economics to graduate students committed to understanding the complex economic processes in an increasingly global society. International collaboration, in particular due to cooperation with other global institutions, makes ZurichGSE a stimulating environment, not only for cutting-edge research, but for individual enhancement as well.

The goal of the program is to produce independent young researchers who can obtain academic jobs in the best universities, central banks, and international organizations.

The Zurich Graduate School of Economics typically admits between 12 and 15 students each year, offering first year scholarships to most of the admitted students and positions as teaching assistants thereafter. In addition, ZurichGSE awards several full scholarships competitively, on the basis of academic merit.

Since the launch of the initial program in 2009, there has been a strong increase in the number of applications.

The growing interest among applicants from all over the world and the excellent qualifications of the accepted students reflect on the success of the program.

Over 350 Applications for the Academic Year 2014/15

ZurichGSE students are characterized by their outstanding academic backgrounds and their commitment to excel in graduate studies. This year, more than 350 students applied to the program. Here are some interesting facts about this years’ applicants for ZurichGSE:

- Nationalities: 36
- Gender: 33% women, 67% men.
- EFZH Scholarship applications: 273
- UBS Center Scholarship applications: 285
- Average age: 28
- Accepted students: 14

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Department Events 2014

The Future of Banking in the Internet Age

CANCELLED: Event with Urs Rohner (15.04.2014)

Unfortunately, we had to cancel the event with Urs Rohner on “The Future of Banking in the Internet Age” from next Tuesday, 15 April, 2014. We apologize for any inconvenience.

Wirtschaftsstandort Schweiz – ein Erfolgsmodell in Gefahr?

23. April 2014 im Hotel Park Hyatt Zürich


www.ubscenter.uzh.ch/de/events/forum/swissforum2014

Der Event ist bereits ausgebucht. Profitieren Sie von unserem Newsdienst und bleiben Sie informiert über kommende Veranstaltungen des UBS Centers:

www.ubscenter.uzh.ch/de/about/newsletter

Zurich Computational Psychiatry Meeting 2014

19/20 May 2014 at the University of Zurich Psychiatric Hospital

Computational Psychiatry is an emerging field at the intersection between Neuroscience and Psychiatry. The aim of this highly interdisciplinary field is to build mathematical models of the neural and cognitive processes that underpin psychiatric disorders. A major challenge of computational psychiatry is to bring together the expertise from different disciplines to create a common language that elucidates the mechanisms of psychiatric disorders. With this conference, we want to initiate an exchange between different disciplines to enhance mutual understanding, inspire re-evaluation of research objectives, and kindle the beginning of novel collaborative projects.

The conference is supported by the Graduate Campus of the University Zurich. We encourage researchers from all fields related to Computational Psychiatry, such as Psychiatry, Neuroeconomics, Neurobiology, Psychology, Neuroinformatics, Neuropharmacology, to actively participate in this conference.

www.computationalpsychiatry.ch
**SNB-UZH Workshop on Asset Prices and Exchange Rates: Macroeconomic and Financial Perspectives**

**May 20/21, 2014 at the University of Zurich (KOL G-212)**

On May 20-21, the group of Mathias Hoffmann is organizing a joint conference with the Swiss National Bank on “Asset prices and exchange rates: macroeconomic and financial perspectives”.

The keynote address will be given by John Cochrane (University of Chicago). Speakers include Alessandro Beber (Cass), Craig Burnside (Duke), Harald Hau (Geneva), Tarek Hassan (U Chicago), Maik Schmeling (Cass), Lukas Menkhoff (Kiel), Angelo Ranaldo (St. Gallen).

Please register with Sonja Verel (sonja.verel@econ.uzh.ch) if you would like to attend the conference.

**Organizers**

Mathias Hoffmann (University of Zurich)
Thomas Nitschka (Swiss National Bank)
Andreas Schrimpf (Bank for International Settlements)

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**SNF Sinergia – CEPR Conference on Economic Inequality, Labor Markets and International Trade**

**June 15-18, 2014 in Ascona**

The conference will bring together leading scholars and young researchers to discuss recent theoretical and empirical research. Presentations will include topics from all areas of international trade, in particular on topics related to inequality and labor markets.

**Keynote speakers**

Costas Arkolakis (Yale University)
James R. Markusen (University of Colorado at Boulder and CEPR)
Kiminori Matsuyama (Northwestern University)
Peter Neary (University of Oxford and CEPR)
Fabrizio Zilibotti (University of Zurich and CEPR)

**Organizers**

Josef Zweimüller (University of Zurich and CEPR)
Peter Egger (ETH Zurich and CEPR)
Reto Föllmi (University of St. Gallen and CEPR)

“Efficiency, Morality, and Freedom” Robert H. Frank

October 21, 2014 at the main auditorium of the University of Zurich

Rober H. Frank is H. J. Louis Professor of Management and Professor of Economics at the Samuel Curtis Johnson Graduate School of Management, Cornell University. He contributes to the «Economic View» column, which appears every fifth Sunday in The New York Times. Please join us to hear Robert H. Frank elaborate on efficiency, morality, and freedom.

Win two front row seats for the event with Robert H. Frank

The Department of Economics is reserving two seats in the front row for the public lecture of Professor Frank. Furthermore, the winner of the prize will receive two invitations to the dinner following the event and will be seated at the table of honour together with Robert H. Frank and Ernst Fehr.

Information on how to take part in a prize draw:

www.econ.uzh.ch/frank