



## editorial

### 20 YEARS AT GERZENSEE

Gerzensee near Berne may be the most famous Swiss village in the world of central bankers and academic economists. This is obviously due to the presence of the Study Center. This worldwide reputation is a recent phenomenon since the institute was opened 20 years ago, in May 1986. The Swiss National Bank created



the foundation Study Center Gerzensee on the occasion of its 75th anniversary, after purchasing the estate "Neues Schloss".

It is true that Gerzensee was already known to Napoléon, but for other reasons. One of his lieutenants, Franz von Graffenried, was the owner of the old castle ("Altes Schloss") of Gerzensee. The story goes that, since Napoléon could not remember the name of this officer, he called him "Gerzensee". Nowadays, the name of Gerzensee has obviously a totally different meaning. For central banks from all around the world, Gerzensee means high level courses with internationally renown lecturers; and this in an idyllic environment with unsurpassed hospitality. More than 155 central banks have sent candidates to our courses. About 2300 participants have attended the 85 courses we have organized in the last 20 years. Most of these central bankers were delighted with their stay in Gerzensee and

contributed to spread the excellent reputation of the Study Center within their institutions.

For doctoral students at Swiss universities, Gerzensee is often the first step before writing a doctoral thesis. The Study Center has organized the one-year "Swiss Program for Beginning Doctoral Students in Economics" since 1992. Taught by an outstanding faculty from the best universities in the US and in Europe, this program makes doctoral studies in economics in Switzerland much more attractive. Since the beginning of this program, 150 students have graduated from the full program while 115 students have attended partially. Many of these students have completed their doctoral dissertation and are now working in the public or private sector in Switzerland or abroad. Some of them are pursuing an academic career in Europe or in the US. The Study Center has also organized 90 one-week advanced cour-

ses taught by the most famous economists.

Gerzensee is also well known in economics and finance departments of most academic institutions throughout the world thanks to the academic conferences we organize. Hundreds of researchers have attended the European Summer Symposia in Economic Theory and in Financial Markets (ESSET and ESSFM). Both two-week events have been organized jointly with the Centre for Economic Policy Research (CEPR) since 1992 and 1990 respectively. Another important series is the bi-annual conference organized jointly with the Journal of Monetary Economics and published in that journal. The Study Center has been organizing or hosting many other conferences, several of which have been published in international journals or in books.

**Prof. Philippe Bacchetta**  
Director

## INTERVIEW WITH JORDI GALI

*Professor Galí, you are among the leading experts in monetary economics. What are the global trends with respect to inflation, central banking and monetary policy?*

There is a surprising convergence in views about how monetary policy should be conducted and what its objectives should be, as well as in terms of the outcomes of that policy. If you just check the back pages of the Economist with the statistics of both industrial and developing countries and look at the inflation numbers, with very few exceptions, all countries have rates of inflation below 10%.

This may have no precedent in recent history. The reason is simple: in most countries monetary policy is focusing on stabilizing inflation, and succeeding at it.

*What are the reasons for this convergence? Did the developments in monetary economics contribute to this outcome?*

Previously most central banks were directly dependent on their respective governments and hence subject to their whims - largely driven by electoral needs. That is not the case anymore in most countries. As a result the macroeconomic environment is much more stable than possibly in any time in recent history. I believe monetary economics has helped, direct-



ly or indirectly, by providing a framework that emphasizes the benefits of policies that focus on price stability.

Even when we agree on the role of price stability, modern monetary theory has an important role to play in how monetary policy is formulated in practice.

### CONTENTS

- 20 years at Gerzensee
- Interview with Jordi Galí
- European Summer Symposium in Financial Markets (ESSFM)
- European Summer Symposium in Economic Theory (ESSET)
- Doctoral courses
- Academic Agenda 2006
- Working papers / Publications

**INTERVIEW** from cover

In fact, for better or worse, most of the recent models that have been developed analyze the kind of economies that are relatively stable and with relatively low inflation rates. Central bankers still need to know what variables they should be looking at and how aggressively they should respond to some of the variables that we may decide are relevant. So there are still many open issues and questions to be answered. I think we now have the right tools to address these questions.

*What did monetary economists learn from central bankers?*

We have learned a lot by looking at the empirical evidence on how central banks have conducted policy in different historical periods and in different countries. With this experience we have also obtained some confirmation about the validity of our models. I think a very interesting example is the evidence associated with an important change in the way monetary policy was conducted in the US, before and after Volcker became chairman of the Fed in 1979. By identifying differences in the way monetary policy was conducted and by looking at the different outcomes - and errors - we can test the predictions of some of our models. Our models predict that the US economy in the period before Volcker should have been characterized by larger fluctuations in output and inflation than under the Volcker-Greenspan era. That is exactly what happened.

To the extent that there are variations over time and across countries in the way monetary policy is conducted, we can keep learning about the fit of our models and whether our

models have to be modified, one way or another. The paradox here is that there seems to be a convergence worldwide in the way monetary policy is conducted. Most countries and certainly industrialized countries are converging towards a framework that, with small differences, is essentially (explicitly or implicitly) an inflation targeting framework with similar characteristics: independence of the central bank, emphasis on transparency, and so on. As empirical macroeconomists we will certainly lose from that convergence, since we will not be able to learn from the diversity of experiences.

*How do you see ideas being exchanged between central bankers and macroeconomists?*

As macroeconomic theorists we are stimulated by the issues that are continuously raised in the policy debate. I think this is good. We should not lock ourselves up in our offices and ignore what is going on. I think much of the research in monetary economics - and in other areas of economics - is motivated by the debates taking place in policy circles. Let me give you an example: asset prices. Many countries have experienced huge fluctuations in the prices of some assets such as housing. A natural question has been raised among policy makers and market participants as to whether central banks should be doing something about those fluctuations. This is a question largely motivated by a debate out there that theorists should be able to address using models.

On the other hand, sometimes theory makes predictions, or has implications in terms of policy, that may seem surprising, but which (I hope) should also stimulate the policy debate. I think it should go both ways.



**Professor Jordi Galí is the Director and Senior Researcher at Centre de Recerca en Economia Internacional (CREI) and Professor of Economics at Universitat Pompeu Fabra in Barcelona. He is also a Visiting Professor of Economics at MIT for the academic year 2005-06. He has published his research on monetary economics, business cycles and macroeconometrics in many academic journals. After completing his Ph.D. in economics at MIT he held positions at NYU, Columbia University, and Yale University. He is a fellow of the Econometrics Society and a co-director of the International Macroeconomics Programme at CEPR. Since 2003 he is serving in the Euro Area Business Cycle Dating Committee. Professor Galí has been on the editorial board of many academic journals, such as the Journal of the European Economic Association or the American Economic Review. Recently he received the Yrjo Jahnsson Award by the European Economic Association for his contributions in theoretical and applied research significant to economics in Europe.**

Let me also mention one example from the monetary economics area. Take the new generation of monetary models (the so called New Keynesian models)

that are widely used for monetary policy analysis. A key feature of those models is the presence of nominal rigidities. Once you recognize that both nominal wages and prices may be subject to those rigidities, an interesting implication emerges, namely that central banks should focus on stabilizing some weighted average of price and wage inflation. In other words, price inflation should not be the only concern; wage inflation should be relevant in itself, too. However, central banks all over the world do not seem to care much about wage inflation. They do care, but only to the extent that they think wage inflation may be a good predictor of what may happen to price inflation. Our models imply that they should also be concerned about wage inflation. Maybe that is something they will start to look at in the future. Here is another example. Our models imply that one simple way to overcome the difficulties in committing to a certain monetary policy in the future would be to give the central banker a mandate to stabilize the price level. Again at this point no central bank in the world, as far as I know, has an explicit objective that takes the form of price level stabilization, a price level target to which you would return to. Our theories imply that there might be some advantages in doing that. Now we can only hope that some of these predictions will start stimulating a debate.

*You mentioned price rigidities. How important are they empirically? Should we expect to see them even in high-inflation environments?*

In an economy with hyperinflation, it will be completely nonsensical to even think that there could be some kind of nominal

rigidity. Models with nominal rigidities are completely irrelevant to analyze such high inflationary economies. They are very relevant though to analyze the sort of environment with very low and stable inflation in which most industrialized economies currently operate. The costs for firms of not adjusting their prices continuously may be relatively small, but still the fact that they do not adjust prices continuously in response to variations in their marginal costs or demand conditions, may have important implications for how the economy as a whole responds to shocks. In particular, it implies that monetary policy may potentially have very strong effects on real variables and that monetary policy can influence decisively the way the economy responds to different real shocks.

It is also crucial to try to characterize the nominal rigidities better and I think we should welcome the efforts made in recent years. Especially the work that has been coordinated by the ECB over the past three years, known as the "inflation persistence network", has brought together researchers from different national central banks with privileged access to the data underlying the CPIs of their countries and who have been able to characterize the price movements of individual goods.

The message that arises from looking at the micro level price data is that the real world, for better or worse, is very far from the kind of environment described by neo-classical models where prices and wages adjust immediately to all sorts of shocks. Prices for many goods - though not for all goods - remain constant for substantial periods of time, quite often longer than a year or even two years in the case of services. Again this

observation is for low inflation economies, such as those in the euro area.

*Is there also evidence that the production costs of firms are constant over time?*

We wish we had access to cost data but it is much harder to get. However, there are two things that we know from theory: first, under standard assumptions about technology we would expect marginal costs to be fluctuating with the quantity of output produced, with wages paid, and so on. Second, even if a firm is not subject to any shocks you would expect its price to keep up continuously with the aggregate price level, so that the relative price does not change. But we do not see that: the aggregate price level changes continuously, but the prices of individual goods remain constant for a long time and then, occasionally, they experience a discrete jump, much larger than current inflation. So this stickiness, that is very pervasive at the level of individual goods, also gets translated into aggregate prices and aggregate wages.

*Vector Auto Regressions are widely used among central banks. How reliable are their results?*

VARs are among the most useful empirical tools that macroeconomists have at their disposal, both for testing the ability of their models to match the data and to help improve those models.

In the earlier RBC literature there was too much emphasis on the idea that economic fluctuations may have been driven by a single force. In such a world, looking at the ability of a model to match unconditional second moments may be the right way to proceed. But in a world in

which there are many different shocks (different in nature), the correlations implied by each of those shocks may differ from those implied by other shocks. It is perfectly possible that a model may be able to match the unconditional co-movements (at least qualitatively) but still may be wrong in the sense that the predictions of the model regarding the effects of each shock are very different from the actual effects of those shocks. Structural VARs are aimed precisely at evaluating these conditional correlations. This requires making some assumptions in order to identify the effects of those shocks in the data. These assumptions are subject to debate, but at least they are made very explicitly; someone may challenge them and come up with alternative assumptions. One very useful thing about structural VARs, to the extent that they are well understood and properly used, is that everything is put on the table.

Of course there are dangers in using VARs - this we have known for a long time - but they are not specific to VARs, and are present in any econometric model. First, the model has to be correctly specified and identified. If some of the identifying restrictions assumed by the researcher are incorrect, some of the results obtained may be misleading in important ways. That is why many economists try to look for identification schemes that are consistent with a broad view of the world, and not with a narrow one. From that point of view, I think that VARs with long run restrictions may be particularly useful. We agree - as economists - much more about the long run implications of different shocks than the short run implications. That's why I find VARs with long run restrictions attractive.



There are questions that are fully legitimate and have been addressed in several papers about the sensitivity of the results that one obtains in VARs. I find that these exercises - when properly conducted which is not always the case - are very useful because they give us an idea of how sensitive the impulse responses are. My own reading of that research suggests that VARs are indeed useful tools. There are some caveats that have to do with the degree of precision of some of the estimates. Especially this applies to VARs based on long run restrictions given the relatively short time series that we can use. We can do little about that.

continues on page 4

**INTERVIEW** from page 3

Take a recent paper by Erceg, Guerrieri and Gust, in which artificial series from both a real business cycle model and a New Keynesian model are generated. These models have very different predictions in how the economy responds to different shocks in the short run, but very similar predictions in the long run. The conclusion from the simulation of those models is that, at least qualitatively, the estimated VARs captures well the predictions of the models but there is still significant imprecision in the estimates.

One should be careful about using any tool in economics. It is important to understand what the tool can be useful for and things that the tool can deliver and the ones it cannot

*You mentioned that monetary policy often used to be dominated by fiscal concerns. Can you give an example?*

In the late 1970s there was a lot of macroeconomic turmoil in Spain with an inflation rate above 20% and very high unemployment rates. A complicated political transition combined with the very unstable macroeconomic environment was the centre of the political debate. As a teenager, I remember listening to some of the debates in parliament. There were arguments - something that would be completely unthinkable now - between different political parties and the government about what fraction of the budget deficit should be financed by printing money. There was some understanding that this would have inflationary consequences, however, those

were traded off with the difficulties that the government had in issuing debt. One of the central items in the debate was whether the growth of the monetary aggregates that the government was targeting was in line with these financial needs. Now this sort of debate in any industrialized country would be unthinkable.

*What made you become an economist?*

I became fascinated with the workings of the macroeconomy during the economic crisis of the seventies in Spain. There were huge numbers of businesses that were closing down, a lot of people becoming unemployed. People could lose their job as a result of forces that seemed completely outside their control. At the same time, there were suggestions that

the government could do something about it. This in fact made me want to study economics. The first time I took a macroeconomics class, I wondered why governments were not using more actively the tools they had at their disposal to end all the suffering that I could see around me. Obviously those undergraduate textbooks also made it look like it was very easy!

*Professor Galí, thank you very much for this interview!*



This edited interview was conducted by Pinar Yesin

**EUROPEAN SUMMER SYMPOSIUM IN ECONOMIC THEORY (ESSET)**

From July 4 to 15, the Study Center once more hosted the annual European Summer Symposium in Economic Theory (ESSET), co-organized with CEPR. Patrick Rey (University of Toulouse) and Xavier Vives (INSEAD and ICREA-UPF) organized the program. The meeting's purpose was to bring together established scholars and promising young researchers who share an interest in

microeconomic theory and its applications. Almost 40 papers were presented during the Symposium in morning or evening sessions. In the first week, Wouter Dessein (University of Chicago) organized a focus session on Organizations; Jean-Charles Rochet and Bruno Jullien (Université des Sciences Sociales de Toulouse) organized a session on Two-Sided Markets. In the second week, Xavier Vives organized two focus sessions on Strategic Complementarities, the first dealing with the theory and the second with the empi-



Kiminori Matsuyama, Xavier Vives, and Christian Hellwig.

rics of the topic. The full program of ESSET, as well as the program of the European Summer Symposium

in Financial Markets (ESSFM) is available on our homepage at [www.szgerzensee.ch/conferences](http://www.szgerzensee.ch/conferences).