# Benoît Cœuré: Rethinking economics after the crisis

Introductory remarks by Mr Benoît Cœuré, Member of the Executive Board of the European Central Bank, during the panel discussion at the Third Conference of the ECB Macroprudential Research Network, Frankfurt am Main, 24 June 2014.

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Ladies and gentlemen,

In the short run central banks need quick answers to specific questions, but whether they can be obtained depends largely on research progress made long before. To use a metaphor, central banks are sometimes asked to fix the system, but must prepare their toolbox years in advance. In these short remarks I will discuss why, in my view, economics sometimes failed to give us the necessary tools to address policy challenges during the recent crisis, and underline some paradigmatic changes, or rather extensions to what already exists, which would be welcome in order to build a stronger link between economic policy and economic thinking. In the end, I believe we can overcome the different perspectives by working together.

## **Economic thinking and central banks: some frictions**

Policy-makers and academics live in very different worlds and face different constraints. While ideas born in academia were instrumental in establishing the key tenets of modern monetary policy, they sometimes proved less useful in dealing with some challenges we faced during the crisis. To (mis-)quote John Maynard Keynes, it is then more difficult for central bankers to distil "their frenzy from some academic scribbler of a few years back".

Let me start these remarks by mentioning a few frictions that we should try to overcome for economic research to have even more impact on policy:

#### Different temporalities

Robert Solow famously observed in 1967 that economists are "determined little thinkers". They progress step by step by studying the smaller problems, and gradually get closer to answering the bigger questions. This temporality is well adapted to academia because searching for the truth is a very long-run objective. Policy-makers however do not have the luxury of a long time horizon, and would get much help from more big thinking in academia.

Unfortunately, these different temporalities have an impact on economic thinking. The typical methodology of economic theory is first to consider a frictionless benchmark, corresponding for instance to a long-run steady state equilibrium, and then enrich it with frictions. While this is understandable from a methodological point of view, this approach can easily imply a neglect of the short and medium-term dynamics, drastic adjustments and complexities that are important for central banks.

Another unfortunate outcome is that the typical economics curriculum tends to emphasise the frictionless benchmark more than the realistic variants. Shifting the academic focus to a world with frictions would have a welcome impact on teaching, allowing central banks to hire from a pool of young economists better equipped with methods and tools to address policy challenges.

### Different objectives

The world of policy-makers is not one where it is enough to reject a null hypothesis, but where an actual decision needs to be taken, often on the basis of partial information.

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Economics is used as an input to form disciplined and educated judgements. While it is our task to make the best possible use of economic knowledge, deeper collaboration could be achieved if this constraint were internalised by academics.

Academic research develops according its own internal logic and research questions, which may not always overlap with social priorities. The choice of questions addressed sometimes depends on their intellectual appeal more than on policy relevance. The publication "game" can even generate short-term herding and fads.

The validation of an economic model is typically a backward-looking exercise: is the model able to replicate past observations? In the world of policy-makers, one has to think seriously about what happens if the data-generating process changes. Forecasting such changes is also important, as policy actions often have an impact with a lag. Issues like robustness, non-linearities and parameter instability are key concerns for central banks and have only been taken seriously in academic research relatively recently.

The recent crisis is of course the perfect example of a situation in which more robustness would have been necessary. In crisis conditions many standard results no longer apply, established asset pricing relationships break down, and the transmission mechanism of monetary policy becomes problematic. Let me mention a few elements that in my view have become particularly important, and relate them to economic thinking.

### Answering new policy questions – some examples

#### Insufficient data

Crises are times when new questions are being asked, and when policy-makers have to "open the hood of the car" and understand mechanisms that they would normally not look into, because they are assumed to be well functioning. This typically requires data that are more granular than those needed in normal times. While steering macro policies in normal times typically requires little more than monitoring aggregate prices and quantities, acting in a crisis requires drawing the map of a complex network of interdependencies, and making it available for simulation. Without such data being prepared in advance, policy-makers are bound to rely on anecdotal evidence provided by those very actors which will potentially benefit from their measures. The development of studies bases on Target2 data of intraday payments, which I see as a positive by-product of the MaRs network, is typical of this.

### Financial instability and the macroeconomy

We have to address urgent questions in the still rather new field of financial stability and macro-prudential supervision. Central banks have to rely on the development of new conceptual frameworks, models and tools that allow us to assess the effectiveness and transmission channels of alternative policy instruments (such as loan-to-value ratios, bank capital requirements, leverage caps, liquidity ratios etc.) as well as their interactions with the broader economy.

This requires, for instance, integrating widespread financial instability into aggregate models, accounting for the fundamental role of bank defaults, the design of bankruptcy rules, fire sales and elevated discontinuities that are typical of financial (in)stability. Macro stress-tests, for instance, require integrating complex second-round effects of bank deleveraging after a shock.

In doing so, we have to be aware of potential contagion risks across EU countries and feedback effects that can amplify financial instability.

Policy-making in real time also has to rely on a diversity of forecasting tools and successful early warning indicators that allow us to assess the current level of systemic instability. The MaRs team has worked hard on the development and evaluation of such tools as well as the utilisation of data sources that can be used for these tasks.

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This approach goes beyond understanding macro-prudential policies better. Another important example is analysing the impact of unconventional monetary policies. In this regard, the experience of central banks around the world with various non-standard measures offers a unique opportunity to improve our understanding of the effectiveness of alternative tools.

### Structural changes?

We are also facing important questions about ongoing changes in the structural features underlying our economies. To start with a topical example, we are witnessing a persistent decline in equilibrium real interest rates. Our understanding of this development is still limited. Of course, there is no shortage of opinions, and some commentators, starting with Lawrence Summers, have even proclaimed the emergence of a "new normal" referring to Alvin Hansen's 1939 concept of "secular stagnation" with interest rates staying permanently at lower levels and economic activity remaining subdued. There are many such examples. For instance, our imperfect understanding of the current slope of the Phillips curve and the trends in productivity is one of the reasons why the ECB has been reluctant to complement its forward guidance with numerical triggers.

I do not share this pessimism but I think it is of great importance to understand to what extent this development is driven by long-term forces, such as demographic changes or lower potential growth, and to what extent it is driven by medium-term forces, such as changes in risk aversion and the perceptions of macroeconomic risks in the wake of the recent crisis.

## Frictions and rationality

Institutional details and frictions, both on the side of market participants and regulatory institutions, have an impact which is difficult to detect in normal periods. Interbank markets, for instance, used to be seen by academics as a somewhat dull topic before the crisis, so that little was known about their functioning. Both in Europe and in the United States, they have been at the centre of recent policy debates, generating a welcome crop of new research, to which MaRs has been contributing.

The dominant "rational expectations" modelling paradigm in economic research postulates strong assumptions about human decision-making, implying, for instance, that economic agents are always able to assign sensible probabilities to alternative outcomes. Clearly, this characterisation of human decision-making stands in stark contrast to our own recent experience. We need to understand how panics and bubbles can emerge from psychological biases. The Nobel prize co-awarded to Robert Shiller last year will certainly encourage more research in this direction. While much progress has been made on studying notions such as Knightian uncertainty, sentiment, confidence or sunspots, more work is probably needed before they can be part of our standard modelling toolbox. A challenge is of course to come up with tested and robust behavioural theories.

Another important departure from rationality that is of key practical concern is how simple behavioural rules adopted by market participants in normal times can lead to entirely different outcomes or even to market meltdowns in crisis periods. Agent-based models are a promising way to look at these problems, but they need to be developed in close cooperation with practitioners and policy-makers to take the proper behavioural rules as inputs.

On both issues, what policy-makers need above all is more work integrating these approaches into richer frameworks where the impact of policy tools can be analysed.

A lot of progress has of course already been made on many of these topics, in no small part due to the MaRs efforts. The crisis acted as a wake-up call and spurred a lot of interesting research along the lines I have briefly sketched. But a lot of work is still ahead. Even before the crisis many papers had discussed many of the mechanisms that played a role, but they did not form a consistent body of knowledge that could be used outside academia.

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Let me conclude with some thoughts about the new paradigms we would like to see emerging.

# Making economics more relevant for policy. Towards new paradigms?

From a policy perspective I think it is clear that we need more realistic frictions in our toolbox. Many of the frictions I have mentioned have been studied already, but a key requirement from a policy perspective is that they should not be studied independently, as is often done, but integrated into a general framework. We need to be able to think about behavioural issues, financial frictions and macroeconomics inside a common set-up. Central banks also need economists trained to think along all of these different dimensions and able to tackle the substantial degree of complexity posed by these problems, which should be part of the curriculum.

In line with policy-makers' concerns for robustness, it is essential that several paradigms and approaches can be developed in parallel. The recent economic crisis was also in large part a crisis in economic thinking, paralysing policy institutions when they needed to act. With a more pluralistic approach, it is more likely that new conceptual tools can be found when the standard ones are not helpful. Of course a balance must be found between plurality, which brings robustness, and proliferation, i.e. too many approaches, which would prevent comparability.

The very nature of a crisis invariably means that it is understudied before it unravels. It is not surprising that the period of the "great moderation" did not generate a lot of studies on crises. One way to anticipate potential problems and important topics would be at least to understand crises of the past, working with economic historians. At a minimum, let us hope that a lot of economists will continue working on the latest crisis after it is over, instead of going back to "business as usual".

Because of the frictions I mentioned at the beginning, it may be necessary for central banks to stimulate research on topics and approaches relevant to them. The MaRs network has been very successful at promoting some of the new approaches and tools that we need, in particular by building an aggregate framework incorporating financial instability. We would now find it desirable that this approach takes root in academic circles, and can permeate the development of a new paradigm, influencing research and teaching. In other words, we invite other researchers, both in academia and in policy institutions outside the ESCB, to follow up on the progress already made to establish closer links between current policy challenges and economic thinking.

I thank you for your attention.

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