1. There are actually four different types of uncertainty

We often talk about uncertainty as if it is a single phenomenon. There are, however, multiple sources and forms of uncertainty that have different implications for how policy makers can and should respond.

First, "Current state" uncertainty

One form of uncertainty that we grapple with all the time is not being completely sure where we are economically. So-called soft data, such as surveys and sentiment indicators, and market signals do not always align with hard official statistics which are generally known with some delay. Statistical techniques exist to try to combine these sources together into a "nowcast" but the error bands around these central estimates are still quite wide. They also cannot deal with one of the most difficult problems: what to make of so-called "idiosyncratic factors"? For instance, to what extent is the recent stutter in the German economy due to the car industry and to the new emissions standards or to the low level of the Rhine and possibly climate change? These are very hard judgements to make.

* Introductory remarks by François Villeroy de Galhau, Governor of the Banque de France at the 34th SUERF Colloquium & Banque de France Symposium on the occasion of the 20th anniversary of the euro "The Euro Area: Staying the Course through Uncertainties" in Paris, on 28 March 2019.
Second, “Future path” uncertainty

If we are unsure about where we are, we are even less certain about where we are going, most obviously because of shocks that we cannot precisely predict. A potential slowdown in China or different choices over Brexit - which you will discuss today - are two such examples.

Economic dynamics are also driven by underlying momentum that is very difficult to gauge. Is the recent growth slowdown temporary or will it persist? A temporary slowdown is, as you know, the base case for the ECB, which recently revised down its staff macroeconomic projections for real GDP growth substantially in 2019 but only slightly in 2020.

Third, “Strategic” uncertainty

In some cases, the uncertainty we face is about what other policy makers will do. This is particularly pernicious when unpredictability is considered a source of strategic advantage. For instance, a seemingly credible threat by one party to take actions that lead to mutual disadvantage can prompt concessions from the other, (or not). A former American President, Richard Nixon, called this his “mad man” theory when applying it to the war in Vietnam and there are echoes of this idea in current international trade disputes. Such behaviour undermines multilateralism which has been an important source of stability and growth over many decades. If strategic uncertainty is a source of unilateral advantage, it will not dissipate but remain a source of latent policy risk.

Last, “Structural change and monetary policy” uncertainty

There are fundamental structural changes occurring, notably in the euro area economy but also elsewhere, that are poorly understood. The ongoing demographic transition, for example, is changing employment, investment and saving decisions, which will probably lower the natural rate of interest.

The monetary policy transmission mechanism also seems to be changing. A sustained period of accommodative monetary policy has boosted growth and employment and is finally showing up in nominal wage growth: this first part of the Phillips curve is at work. But higher nominal wages have not yet been passed through to core inflation. It should eventually, but the more pertinent issues - of when and by how much - are unclear. There is, thus, not a single mechanical relationship between monetary policy instruments and inflation, rather a distribution of likely responses. Furthermore, differences in demographic trends and structural policy choices between countries in the eurozone (or states in the US) may create or perpetuate some heterogeneity across large monetary areas, an issue you will discuss tomorrow morning.

2. How to respond to such uncertainties?

Without pre-empting discussions, let me flag some possible responses.

I will first, address the issue of policy uncertainty between central bankers. So far, it is, fortunately, the simplest one: we are not in a so-called “game of chicken” and clarity about policy intentions between ourselves are beneficial for all. The frequent exchanges we have at the BIS, G7, G20 and even events such as this Symposium, are valuable to create mutual trust and avoid the possibility of large policy surprises. Our monetary policies are independent, and rightly so, but they are concerted and we are committed to avoid currency wars. Clarity about our reaction functions clearly also extends to financial markets and the public at large.
Second, how could we respond to current state and future path uncertainty? The textbook answer, dating back to Theil and Tinbergen, is to work out your best guess and then act as if you are completely sure. This is sometimes described as the certainty-equivalent approach. There are, however, symmetry assumptions in this type of model that do not necessarily hold in the real world. Uncertainty around the central projection may be skewed in one direction.

Applying the certainty-equivalence approach also assumes that upside errors are regarded equally to downside errors. But given that inflation is still below the objective, as are market-based long-term inflation expectations, upside shocks would be more welcome than equivalent downside shocks at present.

Let me at this point add some words on negative rates following my remarks Lisbon last February, and state the obvious: we are in March 2019, and no longer in March 2016 when we cut the DFR to -0.40%. This gap in time has two consequences:

- First, there were, at that time, significant deflationary risks, and we decided accordingly a strong calibration of our monetary answers. As these deflationary risks have now receded, there is obviously no reason to go more negative on interest rates.
- Second, we have three years more evidence on the combined effects of our various unconventional monetary tools, including negative rates, on financial intermediation and their impact on the transmission of our monetary policy – the combined effects of which might have evolved over time. So Mario Draghi rightly stressed that we need to further monitor the bank lending channel and to reflect on possible measures that we can take to preserve the favourable implications of negative rates for the economy, while mitigating their possible side effects.

Knightian uncertainty is different situation, for which assigning probabilities is not feasible, and is a concept that anyone trying to forecast the recent outcomes in the House of Commons would instantly recognise. In such situations, it is usually argued that the best strategy is to try to avoid the worst outcomes, as we have done in preparing for a no-deal Brexit. And sometimes you need to be bold to avoid truly bad outcomes, exactly as Mario Draghi did when he said that the Euro-system would do “whatever it takes”.

Third, how should we respond to uncertainty about structural relationships? Uncertainty about the transmission mechanism is often used to justify acting gradually. Sometimes described as “tiptoeing in a dark room”, a central banker following the Brainard principle attenuates his response to inflationary shocks if he is uncertain about the precise sensitivity of inflation to monetary policy. But the more cautious he is in the first step, the more ready he should be to take several additional steps: gradualism is not inaction.

Structural shifts in the economy are also constantly changing economic dynamics and equilibrium relationships, such as \( r^* \) (the natural rate of interest) and \( u^* \) (the natural rate of unemployment). But as John Williams of the New York Fed has pointed out, these stars are today more a fuzzy blur than a single bright point of light. So whilst they can help with the broad orientation of monetary policy, uncertainty about these stars is too wide to permit precise navigation.

Overall, therefore, the theoretical guidance on how to respond to uncertainty is itself open, to say the least. My understanding of the present debates leads me to the following four pragmatic suggestions that I hope can stimulate your discussions:
1. Remain very clear about your objectives – uncertain times are not the right ones to create additional doubts about, say, your inflation target – and about your capacity and determination to use your tools in a predictable sequence.

2. But, whilst being consistent with your guidance, be very flexible in the precise calendar and calibration of your implementation. In short, be as predictable as possible, but never be precommitted.

3. Act to prevent the worst outcomes occurring but without supplying complete insurance, which would create moral hazard.

4. Never base policy on only one expected path for the economy.

In conclusion, we cannot seek to control, or avoid, uncertainty; instead we must implement strategies that are the most robust to it. The French philosopher Edgar Morin put it nicely: "La connaissance progresse en intégrant l'incertitude, non en l'exorcisant" – "knowledge advances by integrating uncertainty, not by exorcising it".

With that in mind, let me wish you all a very productive symposium with lively and enlightening exchanges of views.

---

**About the author**

François Villeroy de Galhau was born in Strasbourg (France) on 24 February 1959. His family roots are in Lorraine and Saarland. He is an ENA graduate and a former Inspector of Finance. In 1988, he joined the French Treasury, then served as European advisor to the Minister of Finance and the Prime Minister (Pierre Bérégovoy) from 1990 to 1993. He held various posts at the French Treasury, then became financial advisor at the Permanent Representation of France in Brussels. From 1997 to 2000, he was chief of staff of the Minister of the Economy, Finance and Industry (Dominique Strauss-Kahn then Christian Sautter). He was head of the General Tax Directorate from 2000 to 2003.

In 2003, François Villeroy de Galhau became the Chief Executive Officer of Cetelem, then headed the retail banking activities of BNP Paribas in France (2008). He served as Chief Operating Officer of the BNP Paribas group, in charge of domestic markets and of corporate social responsibility, from 1 December 2011 until May 2015, when the French government entrusted him with an assignment on corporate investment financing.

In September 2015, the President of the French Republic put forward his candidacy for the position of Governor of the Banque de France. After being approved by Parliament, he was appointed Governor of the Banque de France at the Cabinet meeting of 30 September 2015 and took office on 1 November 2015.

He has notably published „18 leçons sur la politique économique“ (Seuil, 2003 and 2006) and „L’espérance d’un Européen“ (Odile Jacob, 2014).
SUERF Policy Notes (SPNs)

No 59  New Frontiers in the Euro Debate in Iceland  by Thorsteinn Thorgeirsson

No 60  Fiscal Rules  by Vito Gaspar and David Amaglobeli

No 61  Beyond voluntary disclosure: why a ‘market-shaping’ approach to financial regulation is needed to meet the challenge of climate change  by Josh Ryan-Collins

No 62  Market power: a complex reality  by Peter Praet

No 63  The Euro Area: Creating a Stronger Economic Ecosystem  by Christine Lagarde

SUERF is a network association of central bankers and regulators, academics, and practitioners in the financial sector. The focus of the association is on the analysis, discussion and understanding of financial markets and institutions, the monetary economy, the conduct of regulation, supervision and monetary policy. SUERF’s events and publications provide a unique European network for the analysis and discussion of these and related issues. SUERF Policy Notes focus on current financial, monetary or economic issues, designed for policy makers and financial practitioners, authored by renowned experts.

The views expressed are those of the author(s) and not necessarily those of the institution(s) the author(s) is/are affiliated with.

All rights reserved.

Editorial Board:
Natacha Valla, Chair
Ernest Gnan
Frank Lierman
David T. Llewellyn
Donato Masciandaro

SUERF Secretariat
c/o OeNB
Otto-Wagner-Platz 3
A-1090 Vienna, Austria
Phone: +43-1-40420-7206
www.suerf.org • suerf@oenb.at