



## DEBATE

### Thierry DE MONTBRIAL

I will ask you one question myself. My question is the following. As you said, the worst seldom happens in fact. I can give multiple examples as far as I remember from when I was a young director on the policy planning staff in the French foreign ministry. Everybody was talking about thieves or terrorists using plutonium in the Hudson river and these kinds of horrible scenarios, which never happened. We could multiply scenarios like this.

It seems to me that the problem is that today, the degree of uncertainty is probably higher than at any time I can remember before, because of the complexity of the world. Playing with all these considerable possible scenarios creates this degree of uncertainty and therefore, the degree of anxiety. Hence the pessimism you mentioned at the end of your presentation in Bali. From a theoretical viewpoint, the link between the real economy and the monetary financial economy is through some measurement of uncertainty to formalise this kind of situation. I do not want to push you to be pessimistic. On the contrary, your rational analysis is extremely precious. Nevertheless, if you integrate some measure of uncertainty in your implicit equations, what is the outcome? How do you modify your relatively optimistic description and your real economy in the first part of your speech?

### Olivier BLANCHARD

I will make two points. The first one is that it is now clear that this is not the highest uncertainty that we have faced in a long time. I can tell you that in 2009, I was more than a bit confused as to where we would be in 2010. Both in 2009 and today, it is a different type of uncertainty from the traditional economic/statistical uncertainty. Sometimes you have statistical uncertainty. Today you have subjective or Knightian uncertainty. This means that you know that things can happen, but you cannot quite get your hands around it and you do not know which much confidence what the effect is. The financial crisis was an example of that, and this is even more so, in the sense that we have a very hard time thinking about all the implications of a trade war. We are probably missing a number of them, so that is the first part of my answer.

The second is, you are completely right, and I am going to give you a nerdy answer, showing that I am still an academic. We used to think of our decisions depended on our expectations of what would happen. We have learned that it depends a lot not just on these expectations, but our degree of uncertainty around these expectations. It does so in complicated ways. However, there is a case in which it is completely clear, which is investment. Here, the question is whether you think the uncertainty is going to resolve itself at some stage. Trump will be out in the US, or there will be an agreement on Brexit, or something like this. Then you know that if you wait until then, you will be able to take a better decision. You take the decision to wait which to you is a minor decision. Instead of spending the funds this year, we are going to wait two years. For an individual firm, it is not an enormous deal, as you are just putting money aside. However, for the economy, it means less investment this year, and it can lead to a very big decrease in investment and a recession. These uncertainty effects are clearly essential to understanding the world today.

### Thierry DE MONTBRIAL

Thank you very much, Olivier. We will stop here. Thank you very much again. Tomorrow, we will have a session on the future of the euro, and I am sure that we will have a rich session in terms of uncertainty as well.