

**It would come as no surprise to you that my intervention is going to be centered on the role of the central bank in the future.**

**The “future” is a bit an ambiguous term given the length of the crisis and the fact that the timing of the exit is not yet fully certain.**

**However, one lesson learned is that our global financial system, with closely interconnected and highly leveraged financial players, results in more systemic risk and needs to be properly regulated and supervised.**

### **How to prevent, at best, future financial crises, what role for Central Banks?**

- The main issue appears to be how to prevent excessive leverage from building up in the financial system. Indeed, financial crises due to excessive leverage are particularly severe partly because illiquidity feedback loops generate non-linear responses to the shock. In addition, it usually takes a long time for the economy to recover because economic agents must first regain a sustainable level of indebtedness. By deleveraging, they negatively affect their consumption demand, thus weighing on economic growth.
- Crisis prevention thus raises a series of questions:
  - Is there an optimal size of the financial sector relative to the real economy?
  - Is there an optimal structure of the financial system?
  - How to design financial regulation for containing the build-up and concentration of risks in the financial sector?
- On the size of the financial industry : the optimum is rather difficult to establish:
  - On the one hand, a diversified financial system improves economic efficiency, leads to a better capital allocation and increases long-term growth. Moreover financial innovation improves risk-sharing in the economy.
  - On the other hand, a very large financial sector probably leads to excessive risk taking, creates inefficient and too complex financial innovation and generates systemic risk.
- Within the question of the optimal size, the respective contributions of banks and capital markets in funding the economy are also debated, in particular considering the role of SME and new innovative firms, in creating jobs.
- There is a widespread view that the financial sector, whose expansion was partly fuelled by loose monetary policy in the US in the past decade, has probably reached a critical size and partly created the real estate bubble. And this should stimulate our thinking about the acceptable dimension of the financial sector in

Europe. The more so that all risks do not derive from excessive leverage and that the contribution of the financial industry to the real economy is controversial.

The most frequently discussed flaws have to do with :

- The disproportion between the volumes of foreign exchange market activity with non-financial customers trading volumes are very high multiples of trade flows (more than 30 times for UK and more than 10 times for Switzerland) Can this be beneficial to the real economy?
- The reliance on automated computer trading: trading decisions are made in a matter of milliseconds. Is this acceleration a real improvement or is it only symptomatic of excessive investment in trading technologies?
- The level of wages and bonuses in the financial industry before the crisis and even now which to say the least are difficult to rationalise
- The key role played by global institutions in funnelling funds into offshore centres and facilitating tax avoidance
- To complicate the question of the optimal size of the financial sector, it might well be that it is closely related to the structure of the global economy. In a world where global imbalances are particularly pronounced, even if these imbalances have been reduced since 2008, the resulting international flows of capital may amplify the predominant role of the financial sector in globalisation.
- Leaving aside the question of the size, is there an optimal structure for the financial sector, an optimal combination between banks and markets?
- The relative importance of banking varies widely and is evolving. The question is which mix is most conducive to growth and also to job creation. A number of countries have introduced schemes to boost bank credit targeted to SME's.
- Another angle is what's happening in case of a recession. Interestingly, bank based system are more stable in cases where the downturn has to do with the business cycle and there is no financial crisis. But when there is a financial crisis, the banks themselves are handicapped by the effects of the crisis and the economy is more severely hit than those that rely more on bank based channels. It's fair to note also that a banking sector with a modest share in the financial sector may trigger a deep financial crisis.
- How to design financial regulation? It has become apparent that there was a gap between supervision and banks regulation on the one hand and financial stability on the other hand.
- Implicitly financial stability has always been part of the responsibility of CB, as lenders of last resort or in charge of payments and settlements systems. It is more and more explicitly entrusted to Central Banks nowadays either on an exclusive basis or on having a leading role among other authorities or at least as being an active participant in an ad hoc institutional setting.

- The ECB has not only been entrusted with bank supervision but also with macro-prudential responsibilities in cooperation with national authorities. This new development is less in the limelight than the SSM. Yet it's essential to monitor the whole of the financial system through the cycle.

The challenges are high for national Central Banks as well as for the ECB:

- Worldwide, the experience with macro-prudential tools is still limited and their governance appears quite complex as decisions on these new tools may have far-reaching consequences for national supervisors and across countries.
- For example, counter-cyclical loan-to-value ratios would be effective to avoid excessive leverage of households, especially for mortgage loans, but such measures should also recognize local specificities like the legal environment of guarantees attached to the mortgage loans.
- The shadow banking sector remains largely exempt from new regulations and might even benefit from them. How to monitor its evolution, regulate its size and/or activities remain for the time being a largely uncharted territory.

Despite all these question marks, it's fair to say I suppose that Central Banks role is going to extend well beyond the realm of monetary policy.