Ladies and Gentlemen,

I am delighted to welcome you this afternoon to the award ceremony for the Banque de France-Toulouse School of Economics Prizes in Monetary Economics and Finance. The Toulouse School of Economics recently celebrated its tenth anniversary and this award ceremony is an opportunity to further cement the relationship between our two institutions around the common value that economic research and economic policy should go hand-in-hand to deliver the best policy for European citizens.

Today’s papers provide an opportunity to reflect on the links between finance and the real economy. To begin with, I would like to ask a somewhat provocative question: Why are there no GAFA in Europe? Why did the innovators that influence the everyday life of so many people in Europe and around the world emerge in the United States and not in Europe? Since today’s papers discuss the financing of the real economy, one can question the role of the financial sector in nurturing the creation and growth of firms that develop radical/transformative innovations with a global reach.
One of the key roles of the financial sector is to select profitable investment opportunities and ideally for society at large, to allocate resources to the most productive and innovative projects. Another, complementary role of the financial sector is to allow savers to transfer resources into the future, for instance to provide an income when they retire. Savers however may prefer to guarantee the value of their savings, a feature that bank deposits or government bonds can provide better than the stock market.

These are important questions for economists and for policy makers. Let me briefly reflect on the optimal combination of debt and equity, both in terms of financing innovative projects and in offering saving instruments that meet the demand for reasonably safe assets.

1. The role of debt in the economy

"Debt", broadly defined to include all fixed-income instruments, is essential to our contemporary economies. The banking sector is a major provider of such assets, both in the form of deposits, certificates of deposit and bonds. The typical bank uses these resources to invest in a diversified portfolio of loans to businesses and mortgages to households. They thereby finance small and medium-sized enterprises (SMEs) in the medium term and housing in the long run and provide liquid savings instruments simultaneously.

And this is where central banks have a decisive role, as Fahri and Tirole (2017) forcefully remind us in the paper that Jean will present to us today. Central banks’ lending of last resort guarantees banks’ access to liquid resources. Bank runs can thus be neutralised without forcing banks to cut the financing of long-term investments, which, by nature, are illiquid. In turn, banking supervision and regulation limit risk-taking and moral hazard among bankers who may be tempted to pocket the upside of risky investments and discount downside risks because the central bank would be compelled to lend to them in last resort situations.
2. Limits to debt financing

However, debt financing has clear limitations. First, it may fail to finance the most innovative projects; second, it may trigger excessive risk-taking that ends up triggering or amplifying economic recessions.

In the second paper of today's programme, Amir Sufi [Mian, Sufi (Laureate for the Junior Prize) and Verner (2017)] shows that an excessive expansion of credit supply – such as the one triggered by banking deregulation in the United States in the 1980s – can amplify financial cycles, stimulating demand to levels that may become unsustainable.

In addition, in a debt-financed economy, potential losses due to lower-than-expected productivity or demand can seriously and persistently affect the economy. The protracted impact of banking crises, resulting from inefficient credit allocation, was emphasised by Ben Bernanke (1993) in the context of the Great Depression; the recent financial crisis is likewise an example of the long-lasting effects of banking sector crises.

We also learnt from the experience of the emerging markets that external debt financing is subject to “sudden stops” while equity investment is more stable and enhances international risk-sharing. Indeed, the euro area debt crisis can equally be interpreted as the result of excessive cross-border debt flows from the core to the periphery.

Of course equity finance is not immune from fads and periods of excessive optimism. Misallocation of resources can also happen when investment is funded by equity. The ICT (“dot-com”) bubble at the beginning of the 2000s comes to mind. Most of the firms that issued stocks in the atmosphere of financial exuberance that preceded the 2000 stock market collapse did not become unicorns. Equities lost nearly 50% of their value in the United States and 60% in the euro area between 2000 and 2003. Stock market losses of a
similar magnitude also occurred in 2008-2009 but the key difference between the two episodes is that the latter involved a major banking crisis due to actual and prospective debt defaults that completely derailed the financial system.

A preliminary conclusion is that equity financing may actually provide a better hedge to stabilise the economic and financial cycle than debt financing. In the domain of public debt, this is the type of advantages to society that GDP-linked bonds are trying to grasp.

3. **Raising equity to finance riskier projects in Europe**

So today we need a strategy for unlocking Europe’s investment, innovation and growth potential. Economic union should be accelerated with a Financing Union for Investment and Innovation. This Financing Union needs to facilitate access to equity, allowing SMEs to scale up, to promote innovation and digitalisation and to make investment in the green economy and energy transition possible.

The euro area has been experiencing an excess of savings relative to investment of about EUR 350 billion per year (or more than 3% of GDP). A key challenge for Europeans is to create the conditions such that these savings can finance innovative investments in the European Union. This should stimulate growth and innovation. This policy will have succeeded if, after the absence of a single European firm among the GAFA, we see that a new European firm is to artificial intelligence what Airbus has become to the aircraft industry!

Three key initiatives contribute to this Financing Union and already exist: (i) the Capital Markets Union, which promotes the diversification of private financing; (ii) the Juncker Investment Plan, which mixes public and private investment towards the real economy; and (iii) the Banking Union, which addresses persistent financial fragmentation. If you will allow me the
metaphor, the euro is therefore still in its teenage years and it needs to acquire these other features to become an adult monetary system.

These initiatives, however, need to be supplemented and reinforced by others in order to promote equity financing in Europe. More specifically, progress towards a Financing Union for Investment and Innovation is needed in three key areas:

First, the Banking Union needs to be completed by finalising its second pillar, i.e. the single resolution mechanism. In a robust Banking Union, euro area banks will thus be able to engage in cross-border consolidation on a sound basis. This will contribute to further reducing financial fragmentation and improving the resilience of the euro area banking sector to future shocks.

Second, incentives for cross-border investment should be improved, in particular, by promoting greater convergence of accounting rules, taxes, and insolvency laws. Strengthening the free movement of capital within the European Union requires a wide range of legal obstacles to be overcome. We should improve the predictability of bankruptcy frameworks, eliminate tax-related biases that penalise equity and harmonise the accounting rules for small businesses.

Third, pan-European savings products must be more oriented towards long-term investment. This could be done through a variety of savings vehicles: the creation of European venture capital funds, pan-European personal pension products, new market initiatives for green bonds, securitised portfolios that are diversified across Member States, and so on and so forth. FinTechs could take a leading role in accelerating this process as long as investors are sufficiently informed.
Improving our financial systems to achieve a better integrated pan-European financial market is a critical step towards the development of innovations that will shape tomorrow’s world.

**Conclusions**

Let me now conclude. The financial crisis has forced economists to rethink the role of finance for macroeconomic stability and how central banks can contribute to progress towards more efficient and more resilient financial structures. New models are being developed to better understand how to regulate the banking sector. The scholars receiving prizes today and the papers presented this afternoon are prominent examples of such contributions.

Without any doubt, Olivier Blanchard (Laureate for the Senior Prize), who is better known for his seminal papers on monetary economics and macroeconomics more broadly than finance, is nevertheless a paragon of a researcher working at the frontier between research and policy issues.