Vítor Constâncio: Thomas Philippon's contribution to macro-finance

Speech by Mr Vítor Constâncio, Vice-President of the European Central Bank, at the ceremony awarding the Germán Bernácer Prize for Promoting Economic Research in Europe to Thomas Philippon, Madrid, 3 November 2014.

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Ladies and Gentlemen,

I am delighted to be here today to award the 2013 Germán Bernácer Prize to Thomas Philippon, Professor of Finance at the Stern School of Business at New York University. Thomas Philippon is a renowned scholar with a wide-ranging research agenda, both theoretical and empirical. The numerous prizes he has won throughout his career, including "best paper" awards in several top journals, speak loudly about the academic quality of his contributions. Thomas's research – being right at the intersection between macroeconomics and finance – is also highly policy-relevant, not least from a central banker's perspective, as I will try to highlight today.

In fact, many central banks and the ECB in particular have devoted considerable attention and actively contributed to the burgeoning literature on macro-finance. The financial crisis underscored the need for a better understanding of the linkages between the health of the financial sector and the performance of the real economy. Promoting economic research in this field is an essential step in the process of developing effective policies to ensure the stability of the financial sector and, ultimately, to foster economic growth. A prime example of this has been the Macro-prudential Research Network (MaRs), where researchers from the European System of Central Banks closely collaborated with experts from academia. The MaRs network was launched to develop core conceptual frameworks, models and tools providing research support to improve macro-prudential supervision in the EU. Its work, which was formally concluded last June, is summarised in a public report and represents a fine example of policy-relevant research.[1] To foster a constant communication with academics, the ECB also regularly organises seminars, conferences and workshops. These enable researchers, policy-makers and practitioners to meet and discuss the latest research findings and their implications for policy. In addition, to stimulate research at the highest academic standards, the ECB invites leading scholars to visit and conduct their research at the ECB, for example via the Wim Duisenberg Fellowship, and offers support to young researchers by funding five Lamfalussy Fellowships every year.

Thomas Philippon's contributions represent an excellent example of policy-relevant research. I will consider two main areas of his research which I find particularly interesting: the design of optimal interventions and the efficiency of the financial sector.

In his 2012 paper, published as the lead article in the American Economic Review, Thomas and his co-author Vasiliki Skreta study the design of optimal public interventions in debt markets. The intervention aims at restoring an efficient level of investment when productive investments are forgone because firms face unfairly high interest rates due to adverse selection.[2] The topic of the paper was – and still is – very timely since asymmetric information played a crucial role in the collapse of the financial markets in the autumn of

[1] Available at https://www.ecb.europa.eu/events/pdf/conferences/140623/MaRs_report.pdf.

[2] Philippon, T., and V. Skreta, (2012) "Optimal Interventions in Markets with Adverse Selection", *American Economic Review*, *102(1), 1–28*.

2008.[3] Thomas Philippon's paper identifies some of the key issues associated with the intervention. In particular, he analyses the interaction between the intervention and the conditions that firms face in the market. Decisions by firms to participate in a support programme are influenced by these conditions – how difficult it is to raise funds from the market. At the same time, a firm's acceptance of public assistance may be perceived as a "bad" signal, thus limiting its incentive to participate. This is the problem of the stigma attached to support programmes.

The paper spells out two clear implications for policy. First, it provides robust conceptual support to the idea that the choice of intervention depends crucially on the nature of the frictions and that it should resemble the contract used by market participants. For example, in the case of a freeze in a debt market due to adverse selection, the optimal intervention requires debt instruments, such as direct lending or debt guarantees. Second, it highlights that the stigma associated with the intervention can be a relevant issue and the design of a programme should take this into account. The ECB had to deal with this issue, for example, in the context of the first two longer-term refinancing operations announced in December 2011. When some bankers raised concerns that there might be stigma attached to the ECB's programme, we said that the decision to accept long-term loans from the ECB should have been seen as a rational business decision and not as a sign of bank distress.[4]

The importance of clearly identifying the nature of the frictions leading to the market failures before designing the intervention is also emphasised in another contribution by Thomas Philippon. In his 2013 paper in the Journal of Finance written with Philipp Schnabl, he characterises the optimal intervention in a financial industry plagued by the debt overhang problem.[5] When banks are financed with too much debt, they forgo productive investments, i.e. lending, because in the event of bankruptcy the debt holders would appropriate most of the cash flows. Thomas Philippon and his co-author show that in this case the optimal intervention consists of capital injections against preferred stock (plus warrants) and it is conditional on sufficient bank participation.

This design makes it possible to restore the efficient level of lending by providing capital to banks, and at the same time minimises the cost of intervention by controlling for the potential opportunistic behaviours of banks. In particular, the authors highlight two types of opportunistic behaviours induced by the intervention. First, since banks that do not directly participate may benefit from the overall improvement in the market conditions, a free rider problem arises. Therefore, intervention should be conditional on the participation of a critical mass of banks. Second, if the conditions are very favourable, banks may choose strategically to participate in the programme, thus increasing its overall cost. Hence, it is paramount that the intervention entails some costs for the current shareholders.

I don't need to stress how relevant these issues became, especially in the aftermath of the financial crisis, when massive intervention in the banking industry had imposed very large costs on Europe's taxpayers and had significant consequences for the sovereigns. Indeed, a key concern for policy-makers is that the large support offered to the financial sector may spur opportunistic behaviour and generally distort financial institutions' risk-taking incentive, possibly magnifying the costs of the intervention while reducing its effectiveness. Thomas Philippon's analysis is timely and tackles a very relevant issue as new rules for intervention and resolution of banks are currently being implemented. The new EU rules surrounding

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3 See, for example, Heider, F., M. Hoerova, and C. Holthausen, (2009) "Liquidity hoarding and interbank market spreads: the role of counterparty risk", *ECB Working Paper No 1126* on the role of asymmetric information in the interbank market freeze during the recent financial crisis. Moreover, the de Larosière report pointed to the lack of transparency as being one of the causes of the financial crisis (EU Commission, 2009).

4 See the Financial Times article "Draghi attacks bankers over ECB fears" from 9 February 2012.

5 Philippon, T., and P. Schnabl, (2013) "Efficient Recapitalization", *Journal of Finance, 68(1), 1–42*.

bank resolution, which are founded on a strong change of culture – from easy public bailouts to a new culture of private bailing-in[6] – clearly go in the direction of preventing these distortions, while retaining the possibility of direct recapitalisation to safeguard financial stability.[7]

The new resolution framework that is going to be implemented in Europe will help to support a sustainable growth of the financial sector by inducing financial institutions to internalise the negative spillovers originating from their failures. Thomas Philippon and his co-authors – among whom is the winner of the 2011 Germán Bernácer Prize, Lasse Heje Pedersen – have also contributed to the literature on systemic risk, a topic of particular policy relevance in which the ECB has also invested considerable research efforts.[8] In this paper, the authors argue that a financial institution's contribution to systemic risk might be measured by its propensity to be undercapitalised when the system as a whole is undercapitalised – the "systemic expected shortfall". They also advocate the introduction of a "tax" proportionate to each bank's systemic expected shortfall which should cover losses in the event of a crisis.

Let me now turn to Thomas's second research area, namely dealing with the efficiency of the financial sector. The crisis revived the debate about the optimal size of the financial industry and the finance-growth nexus. Often, and especially at the beginning of the recent crisis, public opinion has blamed the excessive growth of the financial industry and the extremely advantageous remuneration packages in the sector. One argument in the debate against the traditional finance-growth paradigm is that the high wages may draw talent away from other productive sectors in the economy since financial and non-financial sectors compete for the same scarce supply of human capital.[9] Thus, an excessive growth of the financial sector may not be fully desirable. Thomas Philippon formally analyses this trade-off in his (2010) AEJ Macro paper and discusses the implementation of corrective taxes and subsidies to guarantee the optimal allocation of resources between the financial and the productive sectors.[10]

Thomas Philippon's paper published in the Quarterly Journal of Economics in 2012[11] analyses the allocation and compensation of human capital in the financial industry. Together with his co-author Ariell Reshef, he documents the pattern in wages and skill intensity in the financial industry in the US between 1909 and 2006. The authors show that this pattern is non-monotonic. High compensations in banking and the ability of the financial industry to attract the most skilled workers are not permanent features of this industry. As the paper shows, changes in financial regulation are important determinants of these patterns. Tighter regulation tends to lead to an outflow of resources from the financial sector.

This line of research points to the wide range of subjects that interest Thomas Philippon already shown in his 2007 book "Un capitalisme d´héritiers: la crise française du travail"[12]

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6 See speech by Vítor Constâncio: Banking Union: meaning and implications for the future of banking at the *Banking Union Conference*, Navarra University, Madrid 24 April 2014.

7 See the opening speech entitled "The implications of bail-in rules for bank activity and stability" by Benoît Cœuré at the conference "*Financing the recovery after the crisis – the roles of bank profitability, stability and regulation*", held at Bocconi University on 30 September 2013.

8 Acharya, V., L. H. Pedersen, T. Philippon and M. Richardson, (2010) "Measuring Systemic Risk," working paper.

9 See, for example, the Vox article entitled "Finance and growth: Too much of a good thing?" by Thorsten Beck, 27 October 2013.

10 Philippon, T., (2010), "Financiers versus Engineers: Should the Financial Sector be Taxed or Subsidized?", *American Economic Journal: Macroeconomics, 2(3), 158–182*.

11 Philippon, T. and A. Reshef, (2012) "Wages and Human Capital in the U.S. Finance Industry: 1909–2006", *Quarterly Journal of Economics, 127(4), 1551–1609*.

12 Philippon, T., (2007) "Un capitalisme d´héritiers: la crise française du travail", Éditions Seuil.

where he musters a lot of empirical evidence to show that the labour crisis in France stems from bad employers-employees relations associated with a system that "preserves inheritance, direct or sociological".

This capacity to link serious economic research with practical social problems is yet another sign of the excellence achieved by Thomas in his body of work. I am confident that Thomas Philippon will continue making extraordinary contributions to this and other research areas in the coming years. I extend my sincerest congratulations to him for winning the 2013 Germán Bernácer Prize.