Finance Watch

Making finance serve society

How can safer banks hurt the EU economy?

A critical analysis of the report on the EU implementation of the final Basel III framework by Copenhagen Economics for the European Banking Federation

December 2019

Foreword

On November 22nd, Copenhagen Economics came out with a report written for the European Banking Federation on the EU implementation of the final Basel III framework.[1]

This short memo summarises Finance Watch's reaction to the report of Copenhagen Economics. It is written as a series of interrogations. While we do not pretend to hold the ultimate truth on each element of the discussion, we ask a number of questions which lead us to consider as 'not very serious' the claim that finalising Basel III will hurt the EU economy.

Finance Watch would be happy to engage with the European Banking Federation in a debate about the fundamental questions raised in the report of Copenhagen Economics. This, we believe, is important for the quality of the public debate and for sound policy-making. It goes without saying that Finance Watch will be happy to recognise, as the case may be, that it was simply slow to understand.

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1 Copenhagen Economics, *EU Implementation of the final Basel III framework – Impact on the banking market and on the real economy*, November 2019; URL: https://www.ebf.eu/ebf-media-centre/copenhagen-economics-presents-its-impact-analysis-of-proposed-basel-iii-finalisation-in-eu/.

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Structure of this memo

The report produced by Copenhagen Economics for the European Banking Federation deals with the finalisation of the Basel III framework and its economic consequences. In a nutshell, it follows a logical line that attempts first to show that the finalisation of the Basel III process will lead to sharply higher capital requirements for European banks in a context of distortion of the level playing field between US and European banks. The report proceeds subsequently to affirm that the new capital requirements will be harmful for European banks, for their customers and for the economy, and it recommends that policy-makers water down significantly, or cancel altogether, their plan to finalise Basel III.

We structured our memo in response around the four main themes that we saw as the common thread of the report written by Copenhagen Economics for the European Banking Federation (CE/EBF report):

1. **The output floor as the main culprit: does Basel III create a distortion in the trans-atlantic level playing field?** **(page 4)**
2. **How much capital will need to be raised by banks due to the finalisation of the Basel III process? How and at what speed will that capital be raised?** **(page 6)**
3. **What is the impact of higher bank capital requirements on customers and on the economy?** **(page 8)**
4. **What is the cost of a financial crisis?** **(page 11)**

Finally, we raise an important question that, in our view, remains unresolved in the CE/EBF report and we point out a major breakthrough that will, undoubtedly, deserve further debates:

- **Question: does the European Banking Federation adhere to the Modigliani-Miller irrelevance of capital structure theorem?** **(page 12)**
- **Breakthrough: recognition by the European Banking Federation of the existence of too-big-to-fail and of the funding subsidy that banks derive from it** **(page 14)**

Note: throughout this memo, we will refer to the report made by Copenhagen Economics for the European Banking Federation as "the CE/EBF report".

Theme No. 1
The output floor as the main culprit: does Basel III create a distortion in the transatlantic level playing field?

Quotes from CE/EBF report:

Page 12:

"An additional increase of core equity of 24% must be considered a significant increase that is also very high in an international context. For example, in the Americas, the average increase in capital requirements is 1.5%, i.e. some 1/15 of the impact in the EU.

The major difference reflects the fact that US banks are much less susceptible to limitations in the risk sensitivity of capital requirements. There are several reasons for this, for example that most mortgages in US banks are sold to Government Sponsored Entities, while they remain on the balance sheet of European banks, significantly pulling down the average risk weights.

Thus, it is not clear that the harder impact in the EU is a result of a more initial misalignment between actual risks and assumed risks in banks' internal models. It is notable that losses on e.g. mortgages were orders of magnitude higher in the US during the crisis than for the EU banks.

The large difference between the EU and the US illustrates that when implementing the framework, it is important to take into consideration the structures of the banking sector as they can be very important in the overall impact."

Page 16:

"Output floor is perhaps the most crucial aspect of the implementation. Implemented as in EBA's main scenario, the output floor can alone – i.e. disregarding all other initiatives – lead to a substantial increase in capital requirements."

Page 27:

"US banks have fewer capital buffers in their capital requirements, making them less sensitive to output floors."

Page 44:

"A high impact of the output floor is one of the main reasons, why the Final Basel III Framework affects the European banking sector much stronger than other jurisdictions. Thus, an appropriate implementation of the output floors is a key task in achieving an increase in capital requirements more in line with the global average."

Points of interrogation:

1. After years of discussions, negotiations and consultations, the Basel Committee on Banking Supervision (BCBS) published in December 2017 (hardly yesterday!) a document called "*Basel III: Finalising post-crisis reforms*"[2] This document introduced the so-called output floor that sets a floor for capital requirements calculated under internal models at 72.5% of those required under standardised approaches.

2. The rationale of the output floor is, as expressed by BCBS "t*o reduce excessive variability of risk-weighted assets and to enhance the comparability of risk-weighted capital ratios*"[3]. This came after numerous research papers coming from economists, regulators, think tanks, academics and NGOs expressing concern that, in some cases, internal models made possible for banks to come up with risk-weighted assets not reflecting fully the real nature of the risks taken, with the consequence of putting at risk the significance and the credibility of the Basel III capital requirement framework and the level playing field between large banks using internal models and small to medium size banks using standardised approaches.

3. Interestingly, a range comprised between 70% and 90% was discussed extensively between regulators and banks to fix the level of the output floor, and the fact that it was fixed at 72.5%, i.e. so close to the lowest boundary of the range discussed, tells us an interesting story on the effectiveness of the advocacy developed by the bank lobby throughout those years. It is therefore somewhat surprising to see emerge today the argument that 72.5% would be unbearable.

4. The CE/EBF report focuses on the fact that the output floor penalises European banks as they carry low-risk mortgages on their balance sheets, which is not the case of US institutions given the fact that the majority of mortgages are carried in the US by Government-Sponsored Enterprises.

5. Finance Watch has no data to confirm or infirm the assertion that the actual risk carried by mortgages in Europe is particularly low, but the history of the past 30 years would tend to make us want to investigate this point further, at least for some of the countries of the European Union. Having said that, even if we agreed with this assertion, it reflects, at best, only part of the reality. Indeed, the CE/EBF report seems to ignore that US banking institutions are, under the Collins Amendment to the Dodd–Frank Act, effectively subject to an output floor at 100%. As a result, the standard approach and internal models are similar with respect to consumed capital for the largest US banks using internal models.

6. Starting from a situation with an output floor at 100% in the US, it is not surprising that the introduction of an output floor at 72.5% has no, or very little, impact on US banks' capital requirements. Conversely, the fact that it has a significant impact on the capital requirements of European banks tells us the importance of introducing this floor in the EU if we want capital ratios to be meaningful and protect society against the potentially disastrous consequences of large banks failures.

7. If anything, the European output floor at 72.5% goes some way, if obviously not all the way, in the direction given by the G20 mandate towards reducing the uneven level playing fieldbetween banks at international level. If a transatlantic level playing field issue is to be found in the implementation of the output floor, it goes in the direction opposite to the direction indicated by the CE/EBF report: the introduction of an output floor at 72.5% will reduce the current uneven playing field playing against US banks and in favour of European banks.

8. It must also be remembered that internal models are, to a very large extent, used in Europe by large banks whilst small and medium size banks use the standardised approach. One of the dimensions behind the debate on the output floor is therefore also the level playing field between banks of different sizes within the EU, not only between US and EU banks.

2 Basel Committee on Banking Supervision, *Basel III: Finalising post-crisis reforms*, Dec 2017; URL: https://www.bis.org/bcbs/publ/d424.pdf

3 ibid, p. 137

Theme No. 2

How much capital will need to be raised by banks due to the finalisation of the Basel III process? How and at what speed will that capital be raised?

What is behind a number: EUR 91 bn. or EUR 400 bn.?

Quotes from CE/EBF report:

Page 10:

"In their main scenario, EBA estimates that the package would increase minimum capital requirements by some 24% for the EU average, equivalent to a shortfall of core equity (CET1) of EUR 91 bn. EBA also provides some options for implementation that would lead to a lower impact on capital requirements.

The actual increase in capital that would be needed to maintain current levels of financing following the framework can be expected to be substantially higher than the EUR 91 bn. Banks typically operate with capital buffers, e.g. as capital ratios fluctuate as part of the daily business and due to expectations from supervisors as well as investors. If banks kept their current level of capital buffers, it would require additional capital of up to EUR 400 bn. – a much larger sum. This is an upper estimate, as banks to a certain degree have started to raise capital in anticipation of the framework. Nonetheless, it seems safe to say that the amount of additional capital needed would be significantly larger than what EBA expects."

Page 22:

"The above estimate assumes that banks sustain their current balance sheet, i.e. no deleveraging (the so-called static balance sheet assumption). The other end of the scale is that banks do not increase capitalisation at all and adjust to the Final Basel III Framework by reducing assets (while keeping their current capital ratios). In that extreme case, we estimate a required decrease in total assets of around EUR 4,600 bn. Looking at lending to private customers, it will lead to a reduction in credit of EUR 2,900 bn.

As we will outline in the next two chapters, we expect the actual impact on capitalisation to be somewhere in the middle of the two cases; the higher capital requirements will increase the cost of lending, which will decrease credit demand, thus reducing assets and therefore the required increase in capitalisation."

Points of interrogation:

1. As previously explained, the additional capital requirements come from the output floor introduced when calculating capital requirements using internal models. This, mechanically, will have an impact both on the level of CET1 as well as on the total capital required of banks. We are therefore confused about the debate on the quantification of the impact: apart from saying that EUR 400 bn. is a "*much larger sum*" than EUR 91 bn., something difficult to argue against, CE/EBF seem to make a confusion between banks' CET1 and total capital requirements.

2. Interestingly, we tend to understand behind the assertion "*banks to a certain degree have started to raise capital in anticipation of the framework*" that the exercise is not as impossible as inferred elsewhere in the report, but that does not seem completely coherent with the general message conveyed by CE/EBF.

3. In order to feed the debate on the possibility or impossibility for banks to comply in a smooth manner with the requirements linked to the finalisation of Basel III, we would like to remind CE/EBF of the following schedule of implementation of the output floor[4]: 1 January 2022: 50%, 1 January 2023: 55%, 1 January 2024: 60%, 1 January 2025: 65%, 1 January 2026: 70%, 1 January 2027: 72.5%.

4. This extremely gradual schedule (understatement) will have two consequences:

    4.1. Banks will be, in all likelihood and in the vast majority of cases, able to raise their level of capital through retained earnings as opposed to having to make capital increases or reduce their assets as stated page 22 of the CE/EBF report.

    4.2. The finalisation of the Basel III package will be finalised twenty years after the start of the financial crisis to which it is meant to respond: hardly a precipitous implementation if one looks at the issue from a financial stability or a public interest standpoint.

5. In Finance Watch's view, the debate on a possible reduction of banking assets in the EU has to be put in perspective with the fact that, with banking assets standing around 300% of GDP, the European banking landscape is characterised, if anything, by too many banking assets, not too few. In a context where only 12% to 15% of European banks balance sheets is dedicated to lending to non-financial enterprises, there is clearly room for reducing banking assets without impacting the real economy whilst reducing financial stability risk.

6. We would very much like to see the assumptions behind the figure quoted by CE/EBF of a reduction in credit of EUR 2,900 bn. in case of a decrease of total banking assets of EUR 4,600 bn. We can only assume that such a high proportion (63% = 2,900/4,600) of banking assets devoted to lending must include, on top of lending to non-financial enterprises, i.e. to the productive economy, very different activities such as lending to other financial institutions, lending to hedge funds, consumer credit and mortgage lending, among others. We would not be surprised if that number included also the purchase of sovereign bonds (which, in passing, carry a zero risk-weight and therefore trigger no capital requirements), but we may be wrong on this point as we lack the information necessary to interpret. The main point we are making here is that not all reductions in lending would necessarily be detrimental to the economy. In any case, Finance Watch would be very interested to see the breakdown of activities financed behind the numbers provided.

4 This schedule can be found on page 2 of the BCBS paper "*Basel III: Finalising post-crisis reforms*" of December 2017

Theme No. 3

What is the impact of higher bank capital requirements on customers and on the economy?

Quotes from CE/EBF report:

Page 12:
"Macroeconomic costs: We estimate that higher capitalisation will increase the annual cost for European banking customers by around EUR 40-45 bn, in form of higher lending rates and fees. When looking at lending rates for typical credit customers, we estimate an average increase between 0.12-0.16 percentage points, corresponding to a price increase of 5-7%, cf. Figure 2. On a portfolio level, the impact corresponds to price increases of around 11% for corporates, 7% for SMEs and 4% for mortgages. Note, these are estimations of permanent changes in the cost of borrowing, which will endure across business cycles, and are thus not comparable to the effects of ordinary interest rate hikes."

Page 13:
"To illustrate the impact of the Final Basel III Framework, we have constructed two cases regarding the impact on interest expenditures:

- *For a typical new homeowner in Europe, the package could increase annual interest expenditures by around EUR 190. In the most affected countries, interest expenditures for a new homeowner family could increase by up to EUR 340 – through the lifetime of a typical mortgage, this amounts to some EUR 4,400.*
- *For a typical SME with a bank loan of around EUR 2.5 million, we find higher annual interest expenditures of around EUR 4,750, based on the average EU impact. In the most affected countries interest expenditures could increase up to around EUR 12,500 per year."*

Page 35:
"To estimate the costs, we implement the increase in capital requirements resulting from the EBAs preferred implementation (estimated in chapter 1) in a structural macroeconomic model of the European economy (a so-called DSGE model). The model has been calibrated to the most recent average EU macroeconomic and financial data, allowing us to estimate the impact on investments and GDP.

The causality of the real-economy impact goes as follows; higher capital requirements increase the funding costs of Europeans banks (as equity is a more expensive source of funding than debt). The higher capital costs are passed on to customers through higher interest rates, which reduces credit demand. This curbs investment activity, causing a decline in overall productivity that eventually contracts GDP."

Page 43: (Box 10 / Main takeaways from Chapter 3):

- *The higher interest rates will lead to a decline in private investments of around 70 bn per year, ten years after the implementation. The lower level of investments will contract GDP permanently by around 0.5%, corresponding to around EUR 90 bn.*
- *The benefit in terms of a lower risk of a new financial crisis are limited; the post-crisis reforms increase capitalisation of the European banking sector to a level where there are limited marginal benefits of further increases. Concretely, we assess that the benefit corresponds to around 0.1% of GDP.*
- *This means the framework, as laid out in the EBA's main scenario, gives rise to a net reduction in welfare of 0.4% of GDP.*
- *In general, the capitalisation of the European banking sector is on aggregate a bit above the optimal level.*

Points of amusement:

We particularly enjoyed:

1. The inevitable reference to SMEs and households in an attempt to scare policy-makers (nice try, if with a sense of déjà vu!).
2. The use of % of so-called "price rise" that looks much more spectacular than interest rate differences expressed in basis points (cf. quote page 12).
3. The surprise of a cost to the economy (0.5%) higher than the benefit of lowering financial crises (0.1%) coming to a net negative cost of 0.4%.

Points of interrogation:

1. What are the factors that make a bank's cost of capital? Does more equity capital mean a higher weighted average cost of capital for banks? The CE/EBF report answers that, as the cost of equity is higher than the cost of debt, asking banks to raise more equity will mean a higher weighted average cost of capital for them, and this will then translate into a higher cost of funding for the economy, and consequently a shrinking GDP coupled with higher unemployment. As this apparently logical chain is one of politicians' and policy-makers' worst nightmare, we see the importance of determining with certainty what factors make a bank's cost of capital.

2. The underlying theoretical debate is linked to the Modigliani-Miller theorem that we will discuss later in this memo.

3. For the time being we will simply affirm that a bank's cost of capital is linked, from a practitioner's standpoint, to the level of risk taken on the asset side of the balance sheet. In other words, the cost of the liability side of the balance sheet of a bank is a direct function of the level and quality of the risks taken on the asset side, and it has nothing to do with the debt/equity mix of its funding structure. This result, which is not fundamentally different from the conclusions reached by Modigliani-Miller, notwithstanding theoretical *assumptions that can always be debated, comes from a long experience of the banking industry and numerous discussions with banking analysts and practitioners.*

4. Appendix B (p. 59) gives the explanation of how CE / EBF come up with those results. CE / EBF use a so-called dynamic stochastic general equilibrium (DSGE) model developed by Meh and Moran in 2010 and they give the reasons why this model "i*s (their) preferred macro model". In a nutshell this model has been developed with the following assumptions / logical links: "When higher capital requirements are introduced, this increases lending costs, which reduces investments and hereby compresses GDP. This, in turn, decreases asset values making lending even more costly, which reduces investments and thereby GDP further. This cycle continues until the economy has reached a new equilibrium. This is the so-called financial accelerator mechanism.*"

5. In other words, the so-called scientific result produced by running the model developed by Meh and Moran gives the result is was programmed to give and, given its premises, it is CE / EBF's favourite model. No surprise there.

6. Whether economic modelling is considered through traditional macroeconomic models or their alternative called dynamic stochastic general equilibrium models (DSGE), models share an invariable characteristic of being a formalisation of hypotheses and logical links of the type "if A, then B". DSGE models are effectively models built on microeconomic principles and, as their name indicates, on a Walrassian-founded logic of general equilibrium, instead of purely macroeconomic links assumed by Keynesian theory.

7. DSGE models were developed in the wake of the so-called Lucas critique formulated in 1976[5] that claims that the effects of an economic policy cannot be predicted using data from a period when that policy was not

5 Lucas, Robert (1976), "*Econometric Policy Evaluation : a critique*".

in place. This critique is relevant, but we would argue that the adoption of DSGE models does not solve the issue highlighted by the Lucas critique. At the root of the Lucas critique is not only the fact that an economic policy deriving from an economic theory is necessarily the fruit of a certain historical period, but also that modelling, being based by construction on a method, leads necessarily to a conclusion that has been determined (programmed) from the start. The mere fact of choosing a method when writing a model creates a straightjacket that no model, whether static or dynamic, macro-founded or micro-founded, will ever be able to escape from. Once a method and its underlying hypotheses have been chosen, there remains no degree of latitude for a model to add anything: it will only spit out what it was programmed to spit out.

8. The critique of economic modelling can get complex and abstruse, it may lead to strong oppositions and sometimes to violent debates between economists, but one essential point should never be forgotten when it comes to economic modelling: models are by definition built on a method and method can only take you from the same to the same. The CE/EBF report and the use it makes of economic modelling is a perfect illustration of that principle: a model built on an arbitrary, undemonstrated and pre-conceived logical link (higher capital requirements ➔ higher lending rates ➔ less investment ➔ lower GDP) produces the result it was programmed to produce. Where is the rigour, not to talk about the science, in this approach?

9. Beyond the question of the validity of DSGE modelling and its tautological logic, we do not understand the calculation of a 0.16% GDP decline for one percentage point increase of CET1 ratio (p.36: *"Concretely, we estimate that structural GDP declines some 0.16% for every percentage point increase in the CET1 ratio."),* leading to a 0.5% impact on GDP. CE/EBF apply the 0.16% impact on a 24% increase of capital requirements, which, from a pure arithmetical standpoint, should give a result of 3.84%, not 0.5%. What are we missing?

10. The CE/EBF report asserts (p. 36) that *"Assuming capital requirements will increase by some 24% as described in chapter 1, we estimate that the total EU GDP will permanently decline by just above 0.5% from implementation of the Final Basel III Framework, corresponding to around EUR 90 bn. (2018-level)".* On top of not understanding how 0.5% is calculated (see point above), we do not see how 0.5% of EU GDP can represent EUR 90 bn. given that EU GDP stood at EUR 15,900 bn. in 2018 (source: Eurostat): 0.5% x 15,900 = 79.5.

11. How can, conceptually, a capitalisation of banks increased by EUR 91 bn. lead to a permanent decrease of GDP of EUR 90 bn.? Are CE/EBF saying that when banks raise equity or retain earnings (as a one-time event), GDP decreases by an amount equivalent to the capital increase each year forever? This looks like a very creative new piece of financial theory to us.

12. A 0.5% decrease of GDP (i.e. EUR 79.5 bn. but EUR 90 bn. for CE/EBF) would also imply in CE/EBF logic a multiplier effect roughly equal to 2 between the variation in the cost of funding (EUR 40 – 45 bn.) of the economy[6] and GDP impact (90 bn.). Surely, this cannot be correct given the fact that the hypothetical EUR 40-45 bn. increase in banking costs would be *"recuperated through higher fees and lending rates"* (in other words it would increase their revenues) as kindly admitted by the CE/EBF report in Box 8 (Main takeaways from Chapter 2) page 34. Given this "compensation effect", we seriously doubt that the multiplier, if any, can be greater than 1, let alone be equal to 2, from a national accounting standpoint.

13. Moreover, in the current environment characterised by very low and even negative interest rates, a significant proportion of the economic literature argues today that higher interest rates could be beneficial to the economy, not to mention to the banking system itself.

14. Finally, the CE/EBF report concludes to an annual decline of investment in the EU of EUR 70 bn. This is also a mystery to us as we are given no indication of how this number is derived (the report explains only that a decline of EUR 70 bn. per annum will represent EUR 700 bn. over the course of 10 years (p.37) … At least, this is a number that we can understand).

6 Assuming the link between capital requirements and cost of funding is correct, which Finance Watch does not believe.

Theme No. 4

What is the cost of a financial crisis?

Quotes from CE/EBF report:

Page 63 / Appendix B 3:
"The estimated benefits of reducing the risk of a financial crisis depend largely on the assumptions made about the long-run effects on productivity. Standard macroeconomic theory suggests that shocks to the economy only have temporary effects and that the economy will eventually recover to its structural long-run level (i.e. that there is a "steady-state" path unaffected by financial crises)."

"In our estimations documented in chapter 3, we have assumed that financial crises have moderate permanent effects on the output (estimate of 0.6%). This entails that after a crisis, GDP will at some point pick up the pre-crisis growth rate but at a lower level. The permanent loss in output stems partly from a lower level of business innovation during the crisis due to an elevated number of bankruptcies and a deteriorated credit transmission impairing investment infrastructure."

Points of interrogation:

1. Does the EC/EBF report consider that financial crises have temporary effects or permanent effects (see the two quotes above from page 63 of the report)?

2. The EC/EBF report considers that the cost of a financial crisis is a "moderate" (sic!) 0.6% of GDP. We would encourage EC/EBF to read, among many others, the following reports in order to get a more complete view of the subject:
   a. IMF, The social impact of financial crises, Inci Ötker-Robe and Anca Maria Podpiera, 2013
   b. Pew, The Impact of the September 2008 Economic Collapse, Philipp Swagel, 2010
   c. OECD, The effect of the global financial crisis on OECD potential output, Patrice Ollivaud and David Turner, 2014
   d. Better Markets, The cost of the crisis, 2015
   e. Bank of England, Rethinking Financial Stability, Andrew Haldane, 2017

3. Do CE/EBF have any comment about the 50 million people who lost their job worldwide because of the financial crisis of 2007-2009?

4. Beyond the issue of the economic and social effects of financial crises, the question of their impact on public budgets cannot be avoided, given the magnitude and the many implications of the phenomenon. European taxpayers are still paying for the crisis of – 2009, which has led, among other consequences, to the widespread deployment of austerity policies. For instance, according to the European Commission, "*in the period between 1 October 2008 and 1 October 2011, the Commission approved aid to the financial sector for an overall amount of € 4.5 trillion (36.7% of EU GDP)*"[7], and, according to Eurostat data, more than €1.5 trillion in taxpayer money was used to rescue ailing banks in Europe, and €213 billion of taxpayers' money was permanently lost as a result of the various bailout packages in the EU[8].

7 European Commission, *Tackling the financial crisis*, Last update: 16 April 2012; URL: https://ec.europa.eu/competition/recovery/financial_sector.html

8 Euractiv, *The bailout business in the EU*, Sol Trumbo Vila, 23 February 2017; URL: https://www.euractiv.com/section/economy-jobs/opinion/the-bailout-business-in-the-eu/

Question

Does the European Banking Federation adhere to the Modigliani-Miller irrelevance of capital structure theorem?

1. The CE/EBF report recognises the importance of the principle established by the Modigliani-Miller theorem[9] that the value of a firm's asset is indifferent to its capital structure. In other words, that the debt-equity mix of a firm's funding has no impact on its value. Applied to a bank's value, this means that the only thing that matters is the assets it owns, their yield and their quality but not whether the bank's funding relies more on debt or on equity.

2. But the CE/EBF report explains (Box B.1, page 61) that "*when tested empirically*" (we would very much like to see the empirical test), Modigliani-Miller does not hold because of four reasons:

    2.1. The existence of a tax shield: two points on this: 1 - CE/EBF seem to ignore the correction brought by Modigliani and Miller themselves in 1963 to their original paper of 1958, which takes the tax shield into account[10]; 2 - do CE/EBF suggest that the interest paid by banks on their debt should no longer be tax deductible?

    2.2. The existence of explicit deposit guarantees: does not this recognition by itself confirm the age-old suspicion that deposit 'insurance' implies an element of risk transfer/subsidy that benefits individual banks, in particular ones which chose to pursue a riskier business model, at the expense of their lower-risk peers who provide the insurance?

    2.3. The existence of implicit guarantees by public authorities: in other words the fact that banks benefit from a lower cost of funding thanks to the public safety net they benefit from in a too-big-to-fail environment. We note that CE/EBF consider that the so-called 'too big to fail subsidy' is robust enough to be formally factored in to a methodological rebuttal of the Modigliani-Miller theorem. In Finance Watch's view, this point gives also a very strong argument to public authorities to make sure that banks are as safe as possible, i.e. sufficiently equity-funded.

    2.4. Very much in line with the previous point, the observation that "Creditors value bank debt highly" is, once again, a clear recognition that being 'too-big-to-fail' provides a funding subsidy to banks which, without doubt, could also be considered as an economic rent extracted by banks from society and taxpayers.

3. All in all, Box B.1 of the CE/EBF report seems to tell us that Modigliani-Miller would be correct (the cost of funding of banks is indifferent to their debt-equity mix), were it not for the economic rent extracted by banks – and banks with a high risk profile, in particular – on society and on public budgets via the different public guarantees and insurance arrangements they benefit from. This is quite an extraordinary recognition coming from the European Banking Federation and Finance Watch is delighted to be in agreement with this analysis even if the converging analyses seem to lead to different conclusions.

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9 Modigliani, F.; Miller, M., "*The Cost of Capital, Corporation Finance and the Theory of Investment*". American Economic Review, 1958.

10 Modigliani, F.; Miller, M., "*Corporate income taxes and the cost of capital: a correction*". American Economic Review, 1963.

4. Incidentally, CE/EBF give through point 2, 3 and 4 of Box B.1 an extremely strong justification for public authorities to impose higher equity capital requirements to banks, if anything to protect public budgets from the cost of bailing banks out. We are therefore slightly confused as to the main message delivered by the CE/EBF report.

5. But, beyond Box B.1 page 61, the question of knowing whether Copenhagen Economics and the European banking Federation adhere or not to the Modigliani Miller theorem is definitely difficult to decrypt reading the report, witness the following extracts which give examples of statements that we found difficult to reconcile:

    5.1. Page 37: "*Another debated question is whether a higher level of equity will reduce the required return on equity (and the riskiest parts of debt funding). In other words, if banks are more well-capitalised then the expected loss by investing in the bank should fall and hence also the required rate of return (the so-called Modigliani-Miller effect). However, it is by no means obvious that banks that are already well-capitalised, as is the case for the banks with the largest capital shortfalls, will in reality be able to get lower funding costs in the different funding classes. In this respect, we also note that some large international studies of the real-economy impact of capital requirements, e.g. BIS (2010) did not include the Modigliani-Miller effect. We discuss this in more detail in appendix B.*" Rejection of Modigliani-Miller?

    5.2. Page 58: "*In our estimation, we also account for so-called "Modigliani-Miller" effects. We assume that when the capital ratio increases by 1 percentage point, the cost of equity decreases by around 0.15 percentage points. The impact on interest rates from an increase in capital is thus mitigated by MM- effects.*" Endorsement of Modigliani-Miller?

    5.3. And, as mentioned above, Box B1 on page 61 finally rejects Modigliani-Miller not so much on its fundamental logic but on the ground that banks benefit from an economic rent extracted from society that lowers artificially their cost of debt funding.

Breakthrough

Recognition by the European Banking Federation of the existence of too-big-to-fail and of the benefits it provides to banks

As mentioned in the question raised earlier in this memo, the CE/EBF report describes in Box B.1 page 61, how banks benefit from a substantial advantage in the form of a funding subsidy derived from the implicit and explicit guarantees provided by public authorities and, therefore, from the too-big-to-fail syndrome.

This is quite an extraordinary moment as it is the first time, to our knowledge, that a banking federation recognises the importance of a phenomenon that Finance Watch, along with numerous other voices emanating from academia, think tanks and various research groups, has been describing for many years.

As the CE/EBF report recognises the existence of the benefit derived by the banking sector from the funding subsidy linked to the implicit as well as explicit public guarantees it benefits from, it now seems essential to quantify the level of this benefit. This will be important to conduct a much-needed cost/benefit analysis of the relationship between the banking sector and society at large.

Given the various points developed above, Finance Watch would suggest to policy-makers to look into reforming banking structure as a way of ensuring that Modigiani-Miller becomes functional in the logic developed by Copenhagen Economics and the European Banking Federation.