



**Finance Watch**

Making finance serve society

# To end all crises?

Implementing Basel III in the European Union

**A position paper on CRD IV/CRR**



**February 2012**

---

‘The architecture of our future is not only unfinished; the scaffolding has hardly gone up.’

– George Lamming, novelist and poet

---

**Author:** Frédéric Hache

**Editors:** Thierry Philipponnat, Greg Ford, Emily McCaffrey

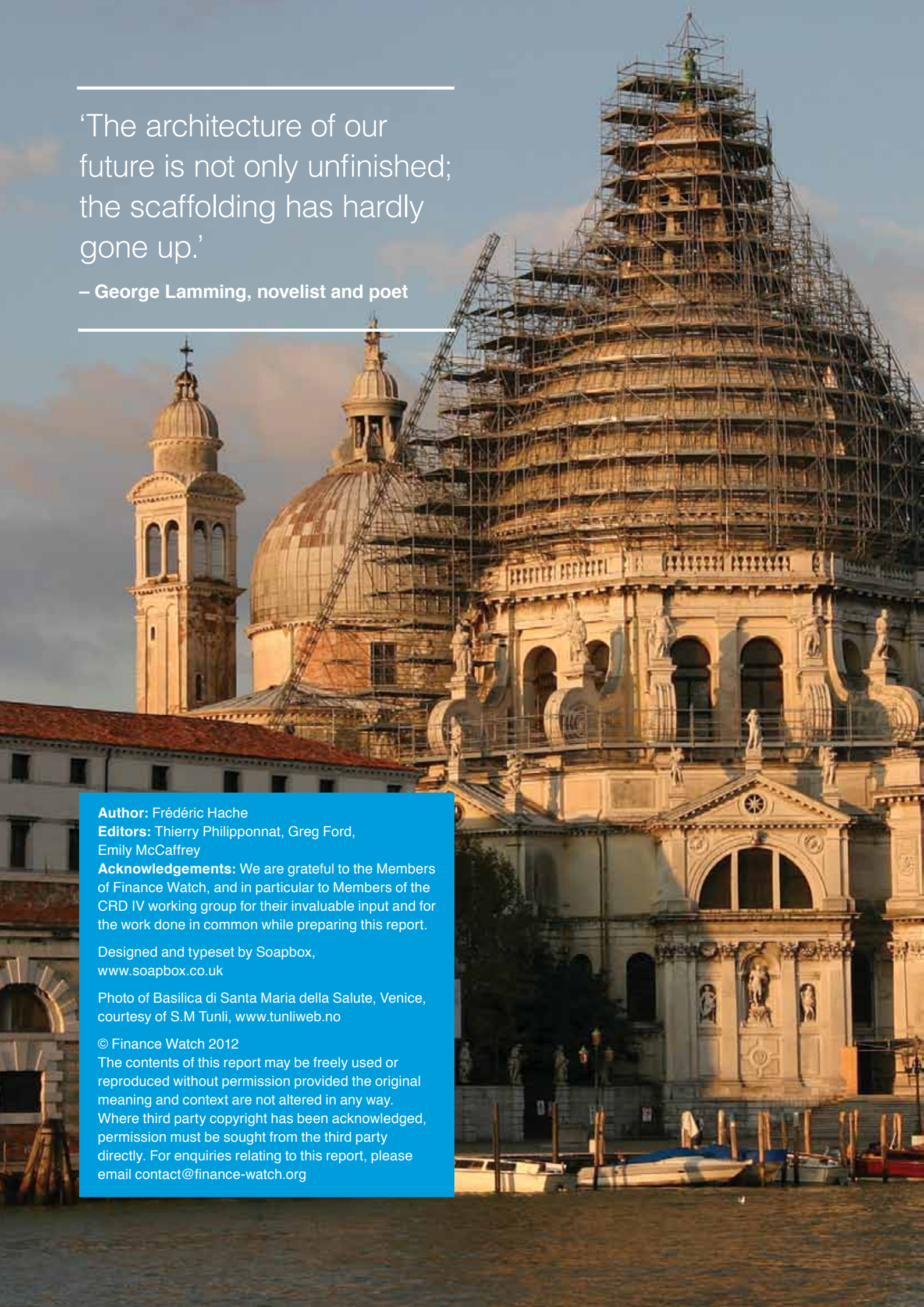
**Acknowledgements:** We are grateful to the Members of Finance Watch, and in particular to Members of the CRD IV working group for their invaluable input and for the work done in common while preparing this report.

Designed and typeset by Soapbox,  
[www.soapbox.co.uk](http://www.soapbox.co.uk)

Photo of Basilica di Santa Maria della Salute, Venice,  
courtesy of S.M Tunli, [www.tunliweb.no](http://www.tunliweb.no)

© Finance Watch 2012

The contents of this report may be freely used or reproduced without permission provided the original meaning and context are not altered in any way. Where third party copyright has been acknowledged, permission must be sought from the third party directly. For enquiries relating to this report, please email [contact@finance-watch.org](mailto:contact@finance-watch.org)



# Contents

Executive Summary	2
Introduction	3
I. A step in the right direction, albeit a small one	4
A. Higher capital requirements - a low enough waterline?	4
B. Risk weight approach	12
C. Liquidity requirements	15
D. Leverage ratio - is leverage the right tool?	18
E. Governance	23
F. Overreliance on CRAs	24
II. How likely is the package to meet its ambitious objectives?	25
A. Enhancing financial stability and reducing procyclicality	25
B. Enhancing the safeguarding of depositors' interests	27
C. On maintaining the international competitiveness of the EU banking sector	27
III. Potential unintended consequences to address and monitor	30
A. Excessive deleveraging	30
B. Risk of excessive risk transfer to consumers through innovative products	31
C. Transition period: won't the market make it shorter anyway?	31
Conclusion	34
Annex I: Definitions	35
References	37

---

Box 1. ROE versus ROA: should return on assets be the focus of investors?	9
Box 2. GDP: a simple rule to prevent future banking crises	15
Box 3. Debt interest tax subsidy – giving the wrong incentive	21
Box 4. Structural reform - is ring-fencing the alternative to micromanagement?	28
Box 5. Shadow banking system – the reckless Siamese twin	32



# Executive summary

The Capital Requirements Directive 4/Capital Requirements Regulation (CRD IV/CRR) package that aims to implement the Basel III agreements in the European Union is an ambitious reform that addresses some of the issues of its predecessor, and from a micro prudential perspective will meaningfully enhance individual banks' resilience, even though it could be argued that it should go further in that direction.

From a macro prudential perspective, however, procyclicality is tackled but much work remains to be done on systemic risk and moral hazard, and whilst we welcome the promising work done on systemic risk by the Financial Stability Board (FSB) and Commissioner Michel Barnier's initiative to convene a *High Level Expert Group on reforming the structure of the EU banking sector*, we feel that more could be achieved within the CRD IV framework.

We suggest the following adjustments to the CRD IV/CRR package that would, in our view, enable it to better achieve its stated objectives:

1. Increase Total Capital<sup>1</sup> requirements to 15% of RWA, Tier 1 capital to 10% of RWA and common equity Tier 1 to 7.5% of RWA which, including the capital conservation buffer, translate respectively into 17.5%, 12.5% and 10% of RWA. It must be noted that Tier 1 is the most useful aggregate in our view and that our recommendations are calibrated under a maximum harmonisation assumption.
2. Increase the leverage ratio to a flexible cap of 5%-3% under IFRS, and include it in pillar 1 from 2015.
3. Remove all zero risk weights, replace the flat risk weight for non-rated corporate exposures under the standardised approach by country averages of IRB risk weights for non-rated corporate exposures, and lower the risk weight for retail exposures.
4. In order to curb excessive risk transfer, we propose the introduction of a residual risk weight requirement for transferred exposures of 25% of the original risk weight.
5. Benchmark banks' internal models against a standard portfolio.
6. Introduce the mandatory disclosure of the return on assets of credit institutions in the key indicators as even though it is already available, it would increase the focus on this measure.

The CRD IV/CRR package, including the proposed changes, together with the work of the Financial Stability Board and of the *High Level Expert Group on reforming the structure of the EU banking sector*, should, in our opinion, be a far reaching and comprehensive reform with a significant impact on restoring trust in the financial system, enhancing its stability and refocusing banks on their core mission to serve the real economy.

---

<sup>1</sup> See Annex 1 for definitions

*'Banking crises are not rare events. According to the Basel Committee on Banking Supervision, there have been thirty banking crises since 1985, each time leading to very high costs for society.'*

## Introduction

The European Union finds itself currently in the middle of a crisis that rivals that of 1929. Even though the origins of this perfect storm are many and the nature of the crisis has changed over the past three years, several trends in the financial sector have contributed to dramatically amplify its impact and to weaken the stability of the financial system. These include increased leverage and maturity mismatches, increased interconnectedness between financial institutions, increased diversification and reduced diversity of banks, the growing use of credit derivatives and securitisation, the widespread use of market and model-based risk measures, and the development of the shadow banking sector.

### The crisis

Banking crises are not rare events. According to the Basel Committee on Banking Supervision, there have been thirty banking crises since 1985, each time leading to very high costs for society.

Previous Basel regulation did not prevent the crisis from happening, and some would argue in fact that it created the incentives for the emergence of the originate-and-distribute model and led to an increase of systemic risk through the dispersion and shift of credit risk and leverage towards less regulated parts of the financial system.

Basel III and the CRD IV/CRR proposal is therefore a much needed reform to address the shortcomings of the current regulation and reduce the probability and severity of futures crises. To this end, we can only agree with its stated objectives of enhancing financial stability and the safeguarding of depositors' interests, while ensuring the international competitiveness of the EU financial sector.

### No reason to delay reform

Some voices in the industry argue that the reform is ill-timed as the current crisis makes it dangerous to require banks to increase their capital at a time when stress in bank funding markets has gone back to very high levels. We would argue to the contrary: the fact that the economy is currently under stress is no reason to avoid or delay reforms, quite the opposite in fact, as it merely reinforces the need to improve the resilience of the financial system, to have sounder and safer banks and to restore confidence. If anything, the financial crisis is evidence that the market has tougher expectations than the regulator.

Contrary to what some critics claim, stronger regulation will not penalise banks, but rather promote a much needed return to sustainable long term shareholder value creation, as opposed to a shortsighted focus on short term profits. And if you ask shareholders and customers these days, it is likely that a significant proportion of them would rather have strong banks that are profitable over the long run.

If regulation can also ensure that finance refocuses on its core purpose of allocating capital to productive use in the real economy, it should be beneficial to everyone, from financial system stakeholders to society at large.

This report is organised into three sections. In Section I we look in detail at the main proposals in the draft legislation, namely capital requirements, risk weights, liquidity, leverage ratios, governance and the use of ratings agencies. In Section II we ask how likely the package is to meet its overall objectives; and in Section III we examine possible unintended consequences of the legislation.

*'33% of banks with a common equity Tier 1 / risk weighted assets ratio below 6.5% experienced distress during the crisis.'*

## **I. A step in the right direction, albeit a small one**

The CRD IV/CRR package addresses some of the shortcomings of Basel II, and is a significant improvement in terms of micro prudential regulation, particularly on strengthening banks on a standalone basis. However more should be done to achieve the desirable effect of making banks stronger.

### **A. Higher capital requirements – a low enough waterline?**

#### **1. On why we need higher capital requirements:**

The banking crisis of 2007 / 2008 had enormous consequences for society in terms of wealth destruction, rising unemployment and increase in levels of public debt. It also showed evidence of a double failure in bank capital: equity was too low and debt was not allowed to play its loss absorbing role because banks were not allowed to fail.

Several analyses of bank losses during the crisis show cumulative peak losses on Risk Weighted Assets (RWA) during the crisis to be on average 5%,<sup>2</sup> one concluding that 16% of RWA of loss absorbing capacity would have been sufficient to absorb the losses of all banks except Anglo Irish Bank during 2007-2010 (chart 1).

Looking at it from a different angle, another study<sup>3</sup> pointed out that 33% of banks with a common equity Tier 1 / risk weighted assets ratio below 6.5% experienced distress during the crisis (chart 2).

Finally, standing back further, an analysis by Bank of International Settlements of the history of cumulative peak losses suffered by banks during a number of crises since the 1980s suggests that loss absorbing capacity of 24% of RWAs would have been needed to absorb the losses of 95% of the banks in every one of the crises analysed (chart 1a).<sup>4</sup>

Together, all these figures put into perspective both the weakness of the current requirements and the order of magnitude of the proposed changes. Comparing them to Basel II's current Tier 1 capital requirement of 4% of risk weighted assets shows an obvious need for significantly higher capital requirements and loss absorbing capital.

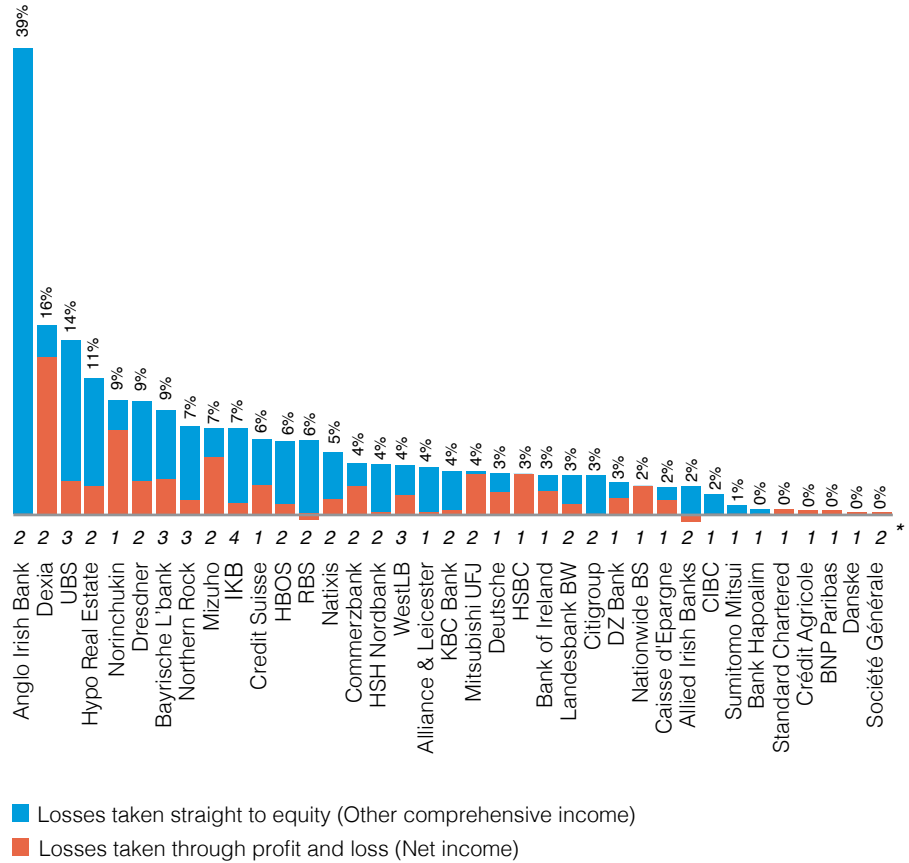
#### **Counting the losses from the 2008 crisis**

2 ICB (2011), European Commission (2011), BIS (2010) 'Calibrating regulatory minimum capital requirements and capital buffers: a top-down approach'

3 McKinsey (2009)

4 BIS (2010) 'Calibrating regulatory minimum capital requirements and capital buffers: a top-down approach'

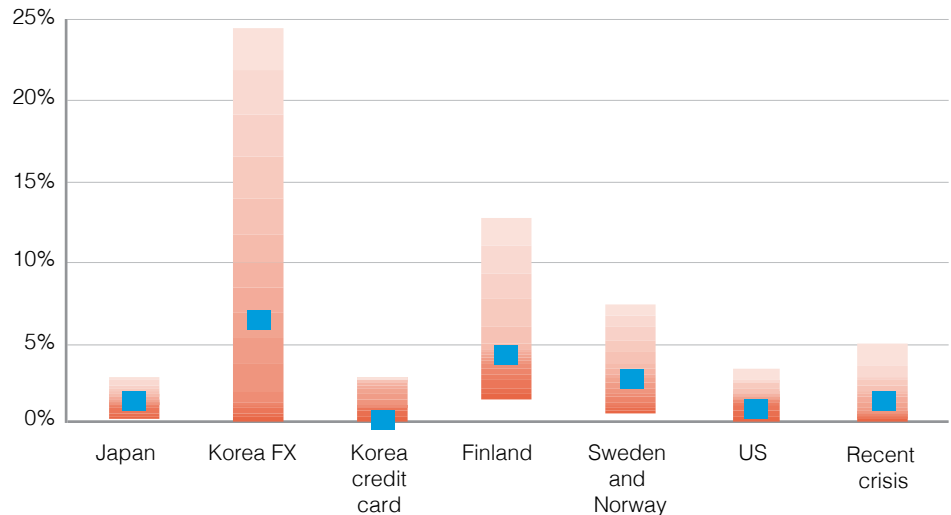
**Chart 1: Losses suffered by banks in the crisis as a percentage of RWAs (2007-2010)**



\* Italics show number of years over which losses occurred

Source: Bankscope.com, ICB (2011)

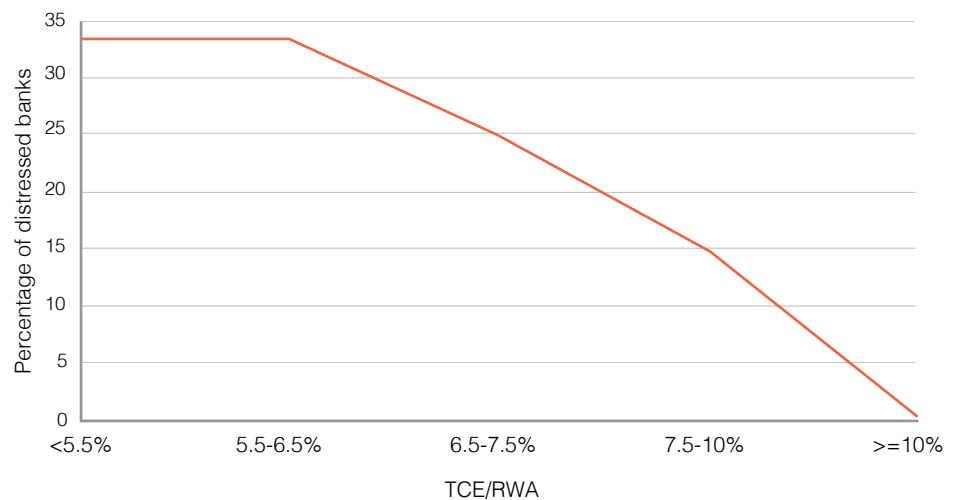
**Chart 1a: Cumulative peak losses as a percentage of RWAs at the start of the crisis\***



The loss variable chosen in this analysis is net income after taxes but before distributions [NB this is a different / lower measure of loss than in the graph above]. Each shaded band shows 5 percentage points of the distribution across banks between the 5th and 95th percentiles. Square shows median. Negative results suggest that the bank made a profit during the period. The crises analysed were: the Japanese crisis (2000-2002), the Korean FX (1997-1999) and credit card crises (2003), the Swedish crisis (1990-93) and the Norwegian crisis (1988-93), the Finnish crisis (1990-93), the US commercial and real estate crisis in the 1980s and early 1990s, and the "recent crisis", for which the countries and banks sampled included Australia (1), Canada (2), France (3), Germany (4), Japan (4), Korea (3), the Netherlands (4) Switzerland (2), UK (2) and the US (10).

Source: BIS (2010) 'Calibrating regulatory minimum capital requirements and capital buffers: a top-down approach'

**Chart 2: Distress rate among top global banks during the credit crisis, by capital ratio**



Source: McKinsey (2009)

## 2. Will higher capital requirements increase the cost of funding?

Theoretical and empirical evidence<sup>5</sup> show that the cost of capital is a function of assets, and not of the liability mix.

The Modigliani Miller theorem states that, in the absence of distortions such as tax distortions, changes in a company's capital structure do not affect its funding cost. As equity capital increases, the volatility of the returns on that equity declines, as well as the risk of debt, leading to a decline in the required rates of return on both sources of funding by investors.

There are several reasons why this theorem does not hold exactly for banks, such as state deposit insurance and debt interest tax subsidy, but it would be simply wrong to conclude that the reduced volatility of the returns coming from higher equity does not have any impact at all on the costs. Indeed recent empirical research on US and UK banks found the Modigliani Miller theorem to be a good approximation also for banks, as the long term impact of higher equity capital had a modest impact on bank loan rates.<sup>6</sup>

Given that much of the cost comes from reducing the debt interest tax subsidy, it represents a private cost that is partly offset by the extra tax revenue received by the Government, and can therefore not be considered as a cost from society's point of view.

Similarly, any reduction in the implicit public guarantee to bank debt is a private cost that should be offset by a fall in the contingent public liabilities that those guarantees create.

We also recognise that investors' perception bias might prevent a decline in leverage to automatically translate into a lower required return on equity. The difference between real risk and perceived risk might indeed cause a small delay in investors realising that a company's risk has declined; however again, this is no reason at all for not requiring higher equity, but simply an incentive for companies to better communicate on their increased safety.

Banks should see the benefits of being perceived as safe in the current environment, just as investors should see the value of a liability mix that favours long term shareholder value creation and lower risk.

**More equity means less risk for investors**

**Private costs and public benefits**

**Banks will benefit from being seen as safe**

<sup>5</sup> Admati et al (2010), Miles et al (2011), Hanson et al (2010)

<sup>6</sup> Kashyap et al (2010), Miles et al (2011)



## The impact on cost of lending is very limited

Several studies<sup>7</sup> have analysed and quantified the impact of higher capital requirements on the weighted average cost of funding and most conclude that it will be very limited: David Miles from the Bank of England estimates that even a doubling of bank capital would increase banks' cost of funding by only 10bp-40bp, while the Independent Commission on Banking concluded that nearly trebling capital requirements from 7% to 20% would increase the cost of funding by close to 30bp. Some analyses come with higher figures, but they fail to take into consideration the benefits of higher capital ratios.

Finally, one argument often put forward is that equity is scarce and expensive given the currently low level of banks' share prices. Whilst this is factually correct, a simple look at credit spreads on long term and short term bank debt shows that all banks' liabilities are currently expensive, not just equity. This argument can thus not be taken seriously as pleading against increasing banks' equity capital. Current market prices on most banks' debt and equity are the living proof if needed be, that the Modigliani Miller theorem holds for banks: banks' weighted average cost of capital is a direct function of the risks taken on the asset side of the balance sheet and of the perception of those risks by investors.

We therefore believe that higher capital ratios will not translate into higher funding costs for banks, except for the previously mentioned debt interest tax subsidy and investors' perception bias. In reality, the impact of these factors is extremely limited and therefore cannot be considered as a cost to society or to the economy.

## If creditors do not take losses, someone else will have to

### 3. The issue of debt loss absorbency

As mentioned earlier, the crisis exposed a double failure in banks' capital. Not only did equity capital prove insufficient in some cases, and some elements of it did not absorb losses as expected, but also debt did not play its loss absorbency role as banks were not allowed to fail.

It follows, then, that if one considers as an example that banks need 15% of RWA loss absorbing capability, as long as banks won't be allowed to fail, this should translate into 15% equity capital, i.e. a much higher equity capital requirement than would be necessary if debt could absorb losses.

Several alternatives have been proposed to address this issue, such as the change of senior unsecured debt into 'bail in' debt, or restructuring the banking landscape so that banks can fail without any major disruption in lending, cost to depositors and taxpayers, and negative impact on the real economy. At this stage, however, none of those alternatives has been implemented and we feel that it is important for policy makers to keep in mind when designing the capital requirements that as long as banks are not allowed to fail, required equity levels should be much higher than would otherwise be the case.

### 4. How much capital should banks have?

In the context of almost continued decline of bank capital ratios over the past century,<sup>8</sup> the question of what is the optimum level of capital that banks should have is an acute and timely one. We believe that there is a strong case for much higher equity requirements than the proposed levels.

Indeed, some recent studies<sup>9</sup> analysing the costs and benefits of higher equity / RWA requirements concluded that the optimal equity to RWA ratio was in the 7% – 20% range, and that the marginal benefits were significantly positive up to 10% of common equity Tier 1/risk weighted assets.

7 IMF 'Bank Behavior in Response to Basel III: A Cross-Country Analysis' (2011), Miles et al (2011), ICB (2011), IIF (June 2010), BIS (2010) 'Mapping capital and liquidity requirements to bank lending spreads' 2010

8 'Between 1880 and 1960 bank leverage was – on average – about half the level of recent decades. Bank leverage has been on an upwards trend for 100 years.' Miles et al (2011) p.6

9 BCBS (2010), Miles et al (2011)

## Socially optimal bank capital

Other sources<sup>10</sup> concluded that optimal bank capital should be around 20% of RWAs, and in any case capital should not be below 15%, as the impact on banks' funding cost and loan rates would be very limited, while the expected cost of future financial crises would be greatly reduced.

It is interesting to note that several banks support privately capital ratios higher than the proposed level, and that several countries such as Switzerland, Spain, Ireland and Sweden have already proposed capital requirements going beyond Basel III.

## Maximum harmonisation?

The current debate on maximum versus minimum harmonisation across Member States is a crucial one, and whilst we do understand the arguments in favour of maximum harmonisation, we feel that policy makers should listen to the message that some regulators are sending when they request higher capital requirements than those that are currently proposed under CRD IV. Consequently, we can only support the single rule book approach provided capital requirements are increased to a level that makes economic sense.

Even former Federal Reserve Chairman Alan Greenspan, not known to be a huge proponent of market regulation, pointed out at the Brookings conference<sup>11</sup> 'Too big to fail', that 10% wasn't always considered an adequate level of total capital for banks. Historically, some needed to have capitalisation as high as 50%, and he argued that 13% or 14% was needed for Systemically Important Financial Institutions (SIFIs) in today's markets.

## Our recommendation for higher capital requirements

Based on academic research, empirical evidence such as banks' losses during the crisis, the unresolved debt loss absorbency issue, and under a maximum harmonisation assumption, we feel that the proposed capital requirements should be significantly higher than the levels proposed by Basel III and closer to average historical levels over the past 100 years. We therefore recommend ratios of Total Capital of 15% of RWA, Tier 1 capital ratio of 10% of RWA and common equity Tier 1 of 7.5% of RWA,<sup>12</sup> to which should be added the capital conservation buffer of 2.5%.<sup>13</sup> Tier 1 capital is in our view the main aggregate as we view it as the most meaningful measure of solvency and as the market is likely to focus on this figure.

It must be noted that the level of 6% Tier 1 capital proposed by CRD IV, which translates into 2.6% of total assets (assuming that total assets represent roughly 2.25 times RWAs) remains indeed extremely low on an historical basis and leaves the financial system still significantly exposed to small declines in assets values.

## 5. Four reasons why banks don't want more equity

We see four main reasons why some large institutions may object to higher capital requirements.

The first one is moral hazard, i.e. the fact that banks' bankruptcy costs are not borne either by creditors or shareholders, as large banks are not allowed to fail. This factor does not incentivise banks to build stronger capital buffers, and the implicit guarantee on bank debt further incentivises banks to hold as much debt as possible as it creates a cost differential by lowering the required yield on bank debt.

## The bankers' view

As already mentioned, the second reason is the tax deductibility of interest paid on debt, which, everything else being equal, makes debt a more attractive source of funding for banks. However this cannot be considered as an advantage from society's point of view. The third reason is the divergence of interests between shareholders and bondholders in a context where bank managers consider generally that their main priority is to serve shareholders' interests; the marginal benefit of issuing more equity serves partly the interests of bondholders, as it reduces the risk of their investment. Shareholders have thus a weaker incentive to push for more equity when the benefit of the additional equity goes

<sup>10</sup> Miles et al (2011), ICB (2011)

<sup>11</sup> Brookings Institution 'Facing and fixing "Too big to fail"' (March 2009)

<sup>12</sup> See Annex I for definitions of Total Capital, Tier 1, common equity Tier 1

<sup>13</sup> We mention the capital conservation buffer separately to reflect the fact that it is in the Directive and thus will require implementing measures from the Member States, unlike CET 1, Tier 1 and Total Capital requirements which are implemented directly via the Regulation

partially to bondholders through a reduced probability of debt having to absorb losses. Finally and most importantly, the 'return on equity bias': as ROE is the most commonly used measure of performance and profitability and is used to determine managerial compensation, banks try to maximise this indicator. This is achieved through increasing profits but also, crucially, through reducing the share of equity in the liability mix.

**ROE focusses on a small fraction of a bank's balance sheet and tells you little about underlying profitability**

### **Box 1: ROE versus ROA: should return on assets be the focus of investors?**

In a recent article,<sup>14</sup> Anat Admati of Stanford University makes a powerful case against the use of return on equity as a measure of value creation and profitability.

Whilst return on equity is frequently used by corporations as a measure of performance, it is flawed. If equity represents only a small fraction of an institution's balance sheet, an increase of ROE does not necessarily mean a rise in profitability, but may just mean an increase in leverage.

As Anat Admati puts it, '*Leverage increases ROE when realised returns on assets are above the borrowing rate by magnifying the impact that rises in assets values have on earnings. However high leverage also magnifies losses when return on assets are low - a small negative return on an asset relative to the borrowing rate can wipe out much, or even all of the equity.*' All other things being equal, a reduction of equity in the liability mix increases ROE without increasing the profits and makes the bank more fragile.

Whilst we appreciate that on a short term horizon shareholders might expect higher dividends from such a reduction as profit is split into a smaller number of shares, it is fairly obvious that this is a risky strategy over the medium term, and that the potential higher dividend is gained at the cost of dramatically increased risk.

If shareholders were fully rational, they would reward good management and rising profits, rather than the weakening of an institution and the increase of its risk at constant profit levels.

Rational debt holders should ask for higher interest from companies that engage in such behavior, because they bear the downside risk: an increase of leverage increases the risk of the company failing and therefore the risk of their investment.

Shareholders should be encouraged to use ROE as a measure of profitability to compare banks only as long as these have identical leverage: if two institutions have identical balance sheet size and identical ROEs, but one has net profits of 100 and the other 50, the second one has achieved its ROE through much lower equity financing than the first one, and is therefore less well managed (as it achieved lower profits with as many assets), less profitable and more risky. The required return on equity should, as a consequence, be much higher for the second one.

Alternatively, shareholders should look at ROA or return on assets, which is a true measure of value creation. In the example above, they would see immediately that the first company is a better investment than the second one.

An interesting point is also made by Andrew Haldane in a recent paper,<sup>15</sup> where he states that, '*if the CEOs of the seven largest US banks had in 1989 agreed to index their salaries not to ROE, but to ROA (...) by 2007 their compensation would not have grown tenfold*' to \$26 million. '*Instead it would have risen from \$2.8 million to \$3.4 million.*'

We believe that Return on Assets is a meaningful measure of banks' profitability and should be promoted and disclosed as a key financial indicator.

<sup>14</sup> Anat R. Admati 'Rethinking how banks create value' FS focus (June 2011)

<sup>15</sup> BOE 'Control rights (and wrongs)' (Oct 2011)

## 6. Will higher capital requirements lead to massive layoffs in banks?

### A 'share of the pie' question

A message sent by a significant number of bank managers is that the implementation of Basel III will lead to significant layoffs of bank staff.

In itself, we appreciate that the proposed package might lead to a redistribution of jobs between business units, as some activities such as trading might reduce their size whilst some others such as traditional lending and risk management might expand slightly, but we see no reason why the banking industry's workforce as a whole should decline automatically as a result of higher capital requirements. This is particularly true in a context where traditional commercial banking and retail banking activities employ significantly more staff than investment banking activities.

Admittedly the new enhanced regulation is likely to lead to lower ROEs for banks, mainly because, everything else being equal, the same amount of profits will have to be divided by a higher level of equity. As discussed above in the ROE vs. ROA box, there is an optical illusion in the perceived decrease of profitability linked to a higher level of equity capital as the real economic profitability has not been affected: we consider therefore that the argument pleading in favour of redundancies having an objective to increase profits (numerator of the ROE fraction) in order to maintain banks' return on equity in the face of higher capital requirements (denominator of the ROE fraction) is not only an economic fallacy but carries also high operational risk implications: the amount of work that banks will need to do when they are funded with a higher proportion of capital will not be diminished compared to the previous situation and therefore they will still need, everything else being equal, the same number of employees. Lowering the pay-roll to increase profits would thus be a shortsighted management decision paving the way for operational problems that would, in turn, weigh soon on profits.

This is also a "sharing of the pie" question in the well-known context of investment banking remunerations being a significant multiple of commercial and retail banking remunerations: should a bank's perceived necessity to reduce its pay-roll cost be implemented through redundancies or the limitation of discretionary variable compensation?

Saying that an expected lower ROE will lead to redundancies is therefore a management decision, where a bank's management chooses to transmit the impact to its employees through a reduction of the workforce, instead of sharing it amongst several stakeholders' categories, thus favoring short term returns to equity investors over employees and long term sustainability.

Incidentally, we note with interest that several prominent industry figures confided off the record that they thought a healthy and sustainable bank's ROE was in the 9% – 11% range, as opposed to the 15-20% often announced as a target by many banks' managements.

## 7. Impact on lending to the real economy

Most European banks have claimed that the implementation of the reform would lead to a significant contraction in lending to the private sector and hurt growth, however recent research by academics and experts suggest that higher capital requirements will have little impact on lending levels and growth.<sup>16</sup>

According to the European Commission's impact assessment study, compliance with the new capital framework is expected to reduce the stock of loans on average by 1.8% by 2020-2030. This figure is not very far from the IMF estimate of a decline in loan growth of 1.3% in the long run.<sup>17</sup>

A reason to cut jobs...

...but not a convincing one

Basel III will have a...

...small impact on the volume of bank lending...

<sup>16</sup> BIS (2010), 'Assessing the macroeconomic impact of the transition to stronger capital and liquidity requirements: Interim report'

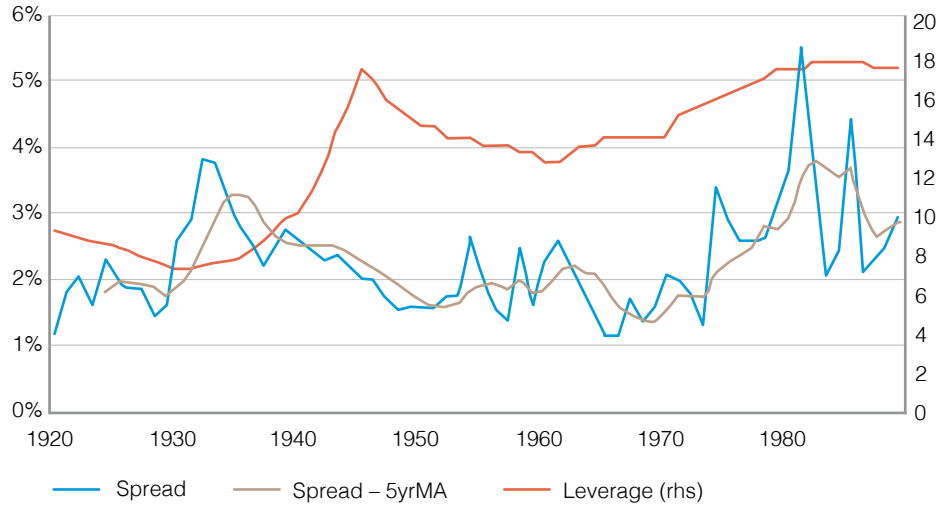
<sup>17</sup> IMF 'Bank Behavior in Response to Basel III: A Cross-Country Analysis' (2011)

**...and a very limited impact of the cost of bank lending**

In terms of the impact on loan rates, most studies conclude that the likely impact on the lending spread will be very limited, in the range of 12bp-16bp.

These results are consistent with historical analysis which shows no evidence that loan rates go up when equity is higher and symmetrically that the leverage increase during the 20th century did not lead to a decline in lending spreads (chart 4).

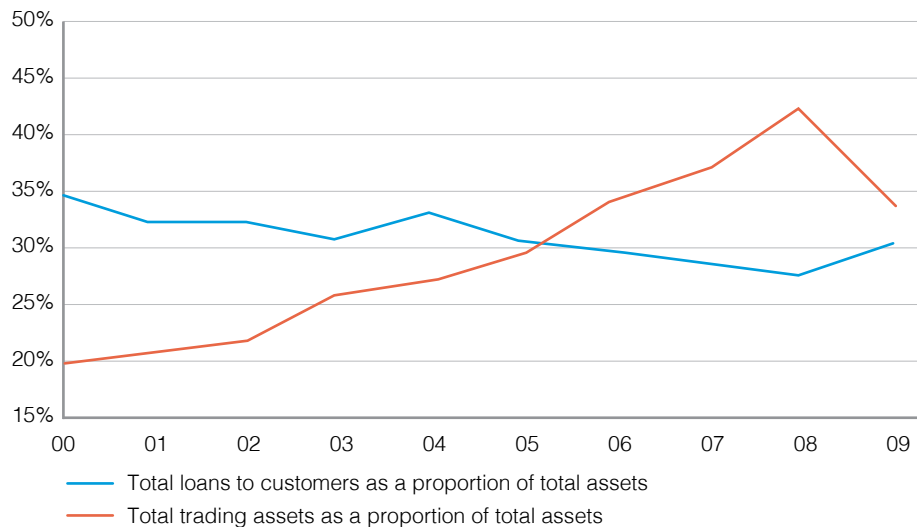
**Chart 3: Leverage and average spreads of business loan rates charged by US commercial banks over 3 months Treasury bills**



Source: Bank of England, based on data from Homer and Sylla (1991), 'A History of Interest Rates', Rutgers University Press

An incorrect argument repeated in some newspapers asserts that higher capital cushions mean less money to be lent, because money sits on banks' balance sheet. This is exactly the opposite of the truth, as capital is not a stock in a vault, but is available as a source of financing. In fact the more equity a bank raises the more money it has to lend. And again recent research<sup>18</sup> finds that in times of stress the more capital banks have, the more loans they continue to supply.

**Chart 4: Evolution of trading and loan book relative sizes**



Sources: Published accounts and Bank of Canada calculations

18 BIS (2011) 'The bank lending channel: Lessons from the crisis'



## The real economy

Finally, since loans to the real economy represent on average about 50% of EU banks' balance sheets, it is clear that even a reduction in balance sheet size does not imply necessarily a reduction in lending. There might be a temptation for some banks to reduce lending rather than trading assets as lending generates lower ROEs, but as such banks' management decisions would have a big impact on society, we feel that they should be monitored by supervisors.

## B. Risk weight approach

### 1. A debatable methodology

#### Risk weights encourage...

The risk weight methodology introduced under Basel II has been fairly controversial, and whilst we understand its purpose, we feel that it raises a number of issues. Before anything else, the risk weight methodology conveys, as Martin Hellwig from the Max Planck Institute for Research on Collective Goods described it, the '*illusion of the measurability of risks*'.<sup>19</sup>

#### ...asset uniformity,

In principle, banks should have the freedom to choose which assets to hold. Risk weights, if improperly designed, might have the mechanical effect of pushing all banks to hold the same assets. This could lead to a reduction in the diversity of bank assets and therefore increase systemic risk.

#### ... static risk assessment,

The choice of fixed risk weights compounds this problem: setting into stone specific risk weights gives the illusion that some assets are forever more (or less) risky than others, when the crisis has shown again the opposite to be true. It might thus be interesting to investigate India's dynamic risk weight system.<sup>20</sup>

#### ...interconnectedness,

The practice of hedging asset positions with derivatives in order to reduce risk weighted exposures is also a key factor of systemic risk as it increases interconnectedness. AIG's 2007 annual report stated that '*approximately \$379 billion... of the \$527 billion in notional exposure of AIG Financial Products' super senior credit default swap portfolio as of 31 December 2007 represents derivatives written for financial institutions, principally in Europe, for the purpose of providing them with regulatory capital relief rather than risk mitigation.*'<sup>21</sup>

#### ...they don't work in a crisis,

Another dimension of the risk weight issue is the statistical methodology it is founded on, namely Value at Risk (VaR). VaR suffers from a number of methodological flaws, the main ones being that VaR assumes statistically independent events (a condition clearly not met in times of crisis in financial markets) and underestimates rare events. These two flaws make VaR a nearly completely useless tool in times of crisis and explain why VaR models are simply 'turned-off' by many trading desks during market crashes. In essence, using VaR methodology for the purpose of calculating banks' required level of capital comes down to using a methodology that is, at best, very weak in times of crisis to calculate the level of equity that banks will need...precisely in times of crisis. This should, at the very least, be in everybody's mind so as not to acquire a false sense of security when it comes to deciding whether the capital ratios emerging from risk weight calculations can be considered as reliable.

#### ...and can be manipulated to raise leverage

Risk weights can also be manipulated and pushed to increase leverage. Risk weights are indeed to a large extent determined by internal bank calculations, and it has now been abundantly documented that different banks can give very different risk weights to identical assets. The difference in actual risk weights by country as shown in chart 5 below is also a critical issue.

19 Hellwig (2010)

20 Acharya V 'The Dodd-Frank Act and Basel III : Intentions, Unintended Consequences, Transition Risks, and Lessons for India'

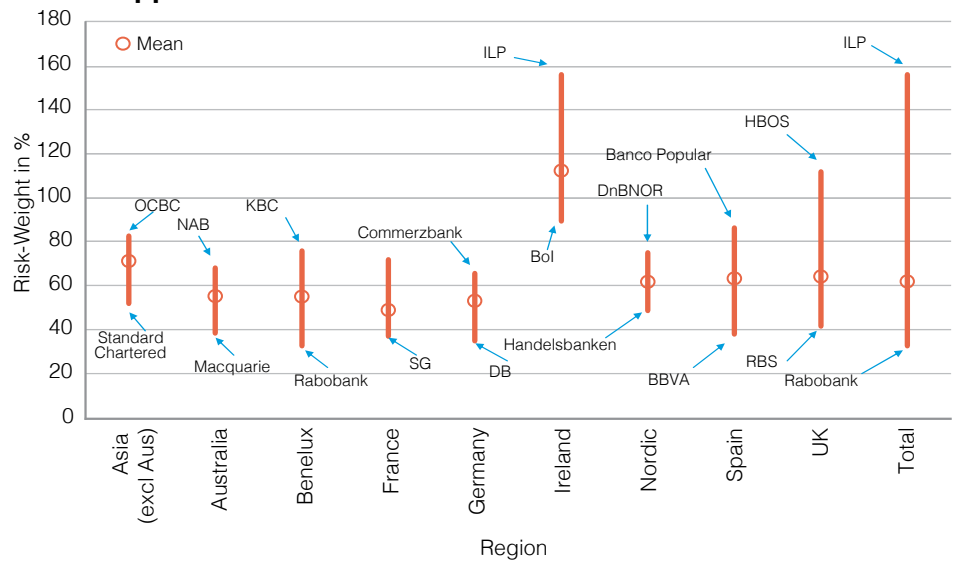
21 AIG Annual Report 2007

As an example, the Independent Commission on Banking found that 'in the run-up to the crisis, whilst the aggregate financial leverage of the four largest UK-headquartered banks was increasing, the riskiness of their assets, as measured by risk weights, was falling. Subsequent events have shown that those lower risk weights underestimated the true riskiness of important asset classes.' [chart 6]

It was also reported recently in the press<sup>22</sup> that several large banks openly intended to tinker with their risk weights by scouring their balance sheet for assets that could be structured differently to achieve lower risk weights, getting new models approved or simply switching to the internal rating system for the latecomers.

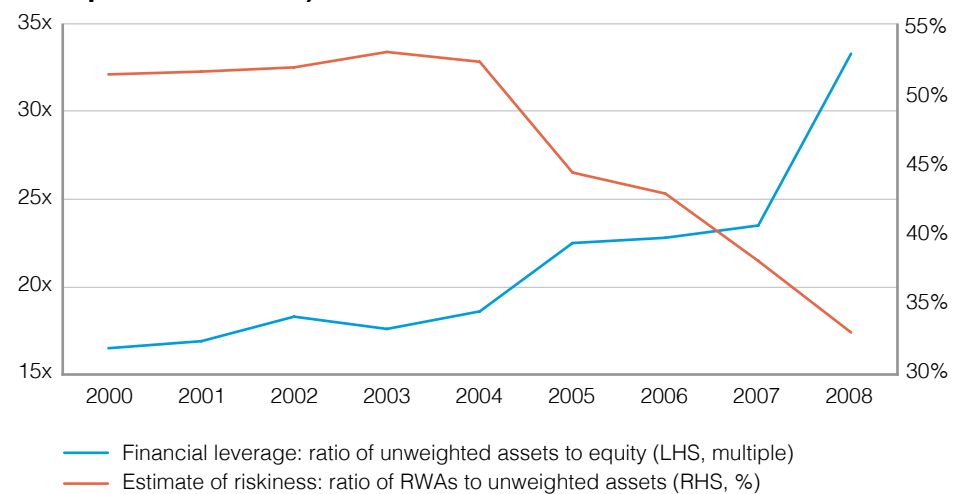
Citibank's recent suggestion to increase transparency on internal risk weight calculations via a call for banks to apply their models against a standard portfolio is therefore an interesting proposal.

**Chart 5: Corporate exposure risk weight range by country under the IRB approach**



Source: S&P (2009)<sup>23</sup>

**Chart 6: Ratio of risk-weighted assets to unweighted assets falls as financial leverage increases (aggregated for the four largest UK-headquartered banks)**



Source: Company accounts of Barclays, HSBC, LBG and RBS; ICB analysis

22 Financial Alchemy Foils Capital Rules as Banks Redefine Risk, Bloomberg 9 November 2011

23 'S&P Approach To Bank's Capital Adequacy', Élie Hériard Dubreuil, copyright Standard & Poor's 2009, reproduced with permission of Standard & Poor's Financial Services LLC

Finally, whilst we appreciate the intention of decreasing banks' reliance on external ratings through the IRB approach,<sup>24</sup> we find that it provides an unfair advantage to large banks able to implement it over small banks for which the burden is too high or the data not available.

We recognise however that risk weights are a useful tool for regulators to interact with banks on a regular basis.

**RWs have a supervisory role**

## 2. On the levels

We would like to highlight a few elements which, in our view, do not participate in achieving the stated goals of CRD IV.

**Zero risk weights should be removed**

First, the existence of zero risk weights is fundamentally flawed and misleading, as there is no such thing as risk free assets. *'In a world where Nestle is seen as less risky than Portugal'*, as a Bloomberg article<sup>25</sup> recently put it, giving a zero risk weight to EU government bonds is rather ironic and goes against all evidence from the crisis. It might also encourage the creation of a bubble in government debt, and is not consistent with the marked-to-market valuation of these same instruments in liquidity ratios: either an instrument carries no risk and banks should be allowed to value it at book or nominal value, or it is risky and needs to be valued at its market value. The recent strong decline of the market value of many sovereign bonds is a clear indication of which approach makes economic sense. We therefore recommend removing all zero risk weights.

**Businesses without credit ratings, are discriminated against**

We are also under the impression that risk weights penalise non-rated exposures such as non-rated corporate and retail exposures under the standardised approach, as non-rated corporations' exposure is attributed a flat risk weight of 100%.

In order to ensure the consistency of the risk weights between the standardised and IRB approaches, we would welcome the replacement of the flat risk weight for non-rated corporate exposures under the standardised approach by risk weights calculated by EBA as the average of risk weights for non-rated corporate exposures under the IRB approach on a country by country basis.

Similarly, the flat risk weight attributed under the standardised approach to retail exposures seems both high and undifferentiated, and we would welcome a lowering to 50%.

Alternatively, in order to increase the possibility for small banks to use the IRB approach, we would suggest allowing them to use the IRB approach only for SME exposures, provided they can demonstrate that this partial use is not done for 'cherry-picking' purposes but because of material constraints.

Given the higher complexity of securitisations and the lower reliability of their ratings compared to company ratings, we would also welcome a higher risk weight range for the purchase of securitised products than the one currently proposed of 20%-150% under the standardised approach and a higher range bottom under the IRB approach.

**The dangers of risk transfer**

Excessive transfer of risk is not desirable from a society point of view, as it reduces the incentives to assess soundly credit risk and curtails accountability, increases investors' reliance on external ratings, and because the issuer always has an informational advantage over the buyer. Thus we would suggest that institutions transferring risk keep a residual risk weight of 25% of the original risk weight on transferred exposures.

Finally, we would welcome Citibank's suggestion to ask banks to benchmark their models against a standard portfolio,<sup>26</sup> in order to strengthen the monitoring of the soundness and consistency of banks' internal models. Whilst we appreciate that this

<sup>24</sup> See Annex 1 for a definition

<sup>25</sup> Bloomberg Business Week 'Basel Rules Face Change With No-Risk Sovereign Debt a Focus', 13 Dec 2011

<sup>26</sup> FT Alphaville 'Pandit's big idea', 11 Jan 2012

would be a limited exercise that would not offer a comprehensive view of possible excesses and discrepancies, it would nevertheless be a step in the right direction and might rein in excessively optimistic risk weighting from banks.

## Creating credit for the real economy

### Box 2 GDP: a simple rule to prevent future banking crises

The main focus of CRD IV/CRR, Basel III and this position paper is on bank capital but this is not the only analytical framework available to address the problem of recurring banking crises. Of the alternative views, one holds that it is what banks do with their capital that matters, not how much capital they have.<sup>27</sup>

The argument is that because banks create money through their credit activity (the well known 'loans make deposits' principle), and because they decide where this credit is allocated (guided by the risk-based Basel rules) there is a tendency for bank lending to favour financial and speculative activities, which is procyclical, contributes little to economic activity and repeatedly creates asset bubbles.

A leading proponent of this view, Professor Richard Werner of Southampton University, believes that capital adequacy requirements, whilst helpful, are the wrong instrument to end the cycle of banking crises, not least because banks themselves create most of the money in circulation, including that from which their capital reserves are built (a fact that is little appreciated outside banking circles).

Werner proposes a different approach to limit the creation of credit by banks according to the use to which the money is put.

He advocates one simple rule to prevent banking crises: allow banks to create credit only if it is used for transactions that contribute to GDP (gross domestic product).

GDP transactions can generate the income streams that make them sustainable in the long run, he says, whilst credit to fund non-GDP financial activities does not increase production and is, by definition, unsustainable.

This simple rule would drastically curtail credit creation for non-productive purposes and reduce the likelihood of future financial crises. The benefits would include returning banks to their most socially useful functions and removing the need for many of the complicated regulatory reforms now under negotiation.

## C. Liquidity requirements

### 1. Liquidity, leverage, maturity mismatch & growth of balance sheet: a tide story

Liquidity is linked to both solvency and the way assets are funded, therefore both must be analysed carefully and, insofar as liquidity issues can bankrupt a bank, liquidity regulation is as important as solvency regulation.

Liquidity crises result from a combination of the five following factors: solvency problems, excessive reliance on wholesale short term funding, high maturity mismatches, high leverage and, to some extent, lack of transparency which can lead in some cases to investors' misperception and overreaction.

As recent studies have shown,<sup>28</sup> the nature of liquidity is procyclical, proportional to leverage and maturity mismatches, and compounded by the development of market based measures of risk.

<sup>27</sup> Werner (2001)

<sup>28</sup> CEPR Geneva Report (2009), FEPS 'The Basel III agreement : a critical survey' (2011)

## Boom and bust – the liquidity cycle

During boom times, asset prices rise, which prompts a decline in market based measures of risk, and encourages financial institutions to respond by expanding their balance sheets, lowering their cost of funding by shortening maturities (when yield curves are upward sloping, i.e. most of the time) and increasing their leverage. Institutions that do not engage in such behaviour are perceived by market participants as underutilising their equity and are penalised through lower stock prices.

When the boom ends, asset prices decline which creates solvency concerns, wariness among investors and drying up of short term funding. This in turn forces banks to sell assets at fire sale prices – all the more if they are leveraged and rely on short term funding, which then leads to a further decline in asset prices and a rise in market based measures of risk; the decline in asset prices affects identical assets in other banks creating solvency concerns about them, which prompts a further drying up of liquidity and further fire sales of assets.

This is a vicious circle: solvency concerns in falling markets generate liquidity issues, and attempts to deal with liquidity issues through deleveraging prompts further asset prices declines, creating solvency problems even where none existed before.

The Geneva Report explains very clearly this procyclical nature of liquidity: *'It is tempting to be misled by our use of language into thinking that 'liquidity' refers to a stock of available funding in the financial system which could be redistributed to those who need it most. When liquidity dries up, it disappears altogether rather than being reallocated elsewhere. When haircuts rise, all balance sheets shrink in unison. Thus, there is a generalised decline in the willingness to lend. When a bank such as Northern Rock finds itself at the receiving end of a run by its creditors, it cannot simply turn to another creditor to take up the slack, for all other creditors are simultaneously curtailing their lending. In this sense, liquidity should be understood in terms of the growth of balance sheets (i.e. as a flow), rather than as a stock.'* Hence the tide comparison, with growth of balance sheets and leverage in the role of the rising tide and vice versa.

## Funding risk, another source of instability

Since high maturity mismatches are a key source of instability in the process and are symptoms of systemic risk building, it is thus critical to analyse how assets are funded. Quoting again from the Geneva Report, *'One of the most critical lessons of this crisis is that, while regulators have been focused on asset quality, systemic risk has as much to do with how assets are funded. If two institutions have the same asset, but one funds it with long-term debt and the other by borrowing overnight from the money markets, there is a substantial difference to the potential for systemic risk. Yet current regulatory rules make little distinction between how the same assets are funded.'*

The way assets are funded is thus an important part of their risk, and we therefore support a strong monitoring of maturity mismatches across the curve. We are not, however, in favour of extending the scope of liquidity ratios to the whole curve, as we recognise that maturity transformation is a core function of banking, and feel that regulating the short end of the curve up to one year as the proposed Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR) do is already a great improvement.

Also, ratios measure liquidity risks but not the funding of liquidity risks, i.e. how a bank whose outflows exceed inflows net of unencumbered assets will bridge the gap, either via new borrowing, interbank market funding, asset sale or access to central bank funding. Basel III only suggests as a monitoring tool the possibility of requesting that banks indicate how they plan to bridge identified gaps in internally generated maturity mismatches, and we feel that funding liquidity risk should be disclosed and monitored on a systematic basis.

Finally, we are concerned that the increased focus on deposits as a funding source, though a welcome development, might have the unintended consequence of triggering



competition between banks to attract deposits by offering higher rates, which would, in turn, penalise banks with a low risk profile. Thus a strong monitoring might be required.

## 2. On liquidity ratio definitions and levels

We will not comment in detail on the ratios as we feel that the fine tuning of some parameters should be left to banks to demonstrate the validity of their arguments based on empirical evidence. We will nonetheless make a few brief observations.

The first observation is that for the reasons given in section 1 above, asking banks not to rely excessively on short term funding makes economic sense. In particular, and beyond the debate of knowing whether the calibration parameters of the numerator of the LCR can be improved, we find the basic philosophy of the LCR (i.e. to rely on funding with at least a 30 day maturity) particularly healthy as the overreliance on very short term (often overnight) funding proved to be a major reason for bank defaults during the banking crisis of 2007/2008.

Being based very much like capital requirements on risk weights attributed to assets and liabilities, the methodology can be criticised on the basis that fixing weights for all assets and all banks is by nature a delicate exercise.

As discussed previously, we also wonder about the consistency of valuing government bonds on a mark-to-market basis whilst giving them a zero risk weight in capital requirements.

## 3. Two remarks on some comments often heard from banks on liquidity ratios

Two points are frequently made by the banking industry about liquidity ratios.

The first comment is that liquidity ratios would go against the very nature of banking, as maturity transformation is at the heart of their activity. We agree with the second part of the statement, but feel that transformation can start at twelve months. Indeed the current ratios will restrain transformation between one day and twelve months, but we are inclined to think that banking transformation should rather be between one year and twenty years than between one day and one year. Such short term funding is most often used with the sole purpose of saving a few basis points, which is understandable as an objective but should be constrained as it creates a disproportionate marginal risk for the system.

One regulator observed recently that *'the liquidity standard may make it more expensive for some banks to extend the term of their funding or diversify their sources of high quality liquid assets. But that is an intended consequence, not an unintended consequence.'*<sup>29</sup>

The second comment is that imposing the LCR ratio would not be realistic because, despite their best efforts, banks often cannot find thirty day funding in the market. We are concerned that large well-rated banks can find themselves in a situation where they do not inspire enough confidence to raise thirty day funding. This brings us back to the factors affecting liquidity that must be addressed, such as concerns about solvency, possible excessive reliance on short term interbank market funding or lack of transparency. In any case, this is no reason to remove the LCR or the NSFR from regulation, only perhaps to think further about how best to manage the situations where they will be breached.

### Targeting excessively short-term funding

### The bankers' view

<sup>29</sup> Global Risk Regulator 'Full backing for liquidity rules disappoints bankers' January 2012

## D. Leverage ratio – is leverage the right tool?

### 1. A sound principle

The question of leverage for banks is comparable to the question of depth of building foundations for a property developer: the shallower the foundations, the bigger the profit, but the more fragile the building. This analogy prompts the question of whether we want a financial system able to weather hurricanes or breezes.

It is very well documented, at least since the spectacular near collapse of Long Term Capital Management in 1998, that leverage increases risk, and the significant rise of leverage in the system over the past decade reinforced by the fast expansion of the shadow banking system is certainly a cause for concern.

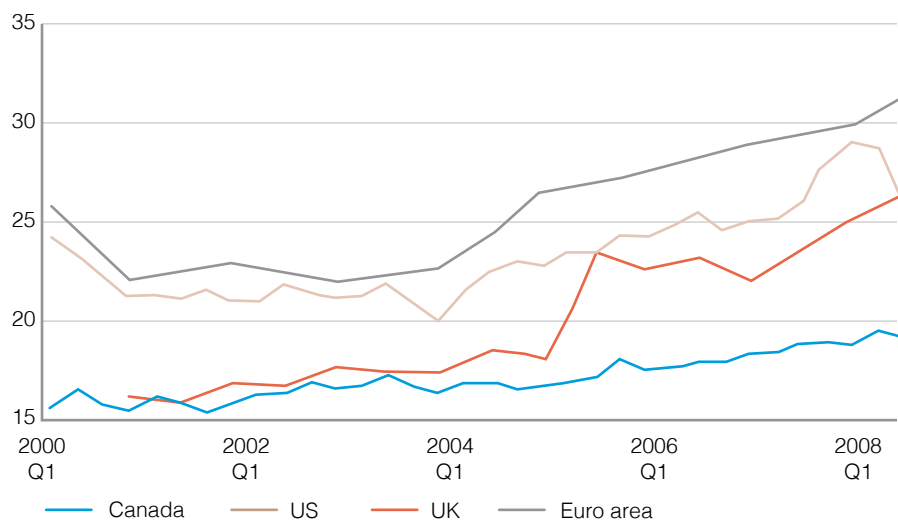
As excessive leverage has also been identified as one of the key causes of the current crisis, it was long overdue to start monitoring and addressing this issue, and we therefore welcome the introduction of the leverage ratio.

Having a complementary non-risk based measure is indeed crucial to curb the temptation for banks to tinker with capital requirements and to mitigate procyclical effects that market based valuations have on leverage.

As importantly, leverage is a robust measure that does not rely on assumptions such as the correlation or volatility of the assets and does not assume any mitigating effects from diversification.

Even Lloyd Blankfein the chairman and CEO of Goldman Sachs, speaking at the 2010 Eurofi financial forum in Brussels, sang the praises of the leverage ratio:<sup>30</sup> *'The idea of a leverage test, which ultimately is a cap on balance sheets of course ignores the relative riskiness of assets, but if you only look at the riskiness of the assets, you are ignoring the fact that you can be wrong about the riskiness of the assets.'* When both Nassim Nicholas Taleb<sup>31</sup> and Lloyd Blankfein praise a risk measure, it tells you something about its relevance.

**Chart 7: Assets as a multiple of capital**



Source: Bank of Canada

### 2. Ratio design – comparison with Canadian, US and Swiss leverage caps

Currently only Canadian and US banks are subject to regulatory leverage caps amongst G7 countries. In Switzerland, Credit Suisse and UBS will be subject to leverage caps

<sup>30</sup> See Annex 1 for a definition

<sup>31</sup> ex option trader and hedge fund manager, author of 'The Black Swan' and a New York University professor

## Different types of leverage ratio in use

from 2013. Looking at their respective ratios' design and track record helps to put the introduction of a leverage ratio in CRD IV into perspective.

Following UBS's problems during the crisis, linked to the scale of its asset growth and not measured by risk weights, the Swiss financial markets supervisor introduced a minimum leverage ratio that will apply to Switzerland's two biggest banks.

The ratio is calculated as the sum of on-balance sheet assets excluding the domestic loan book divided by Tier 1 capital, and is set at 25x in good times and 33.3x during downturns in order to avoid procyclical deleveraging.

Indeed empirical evidence shows that bank leverage rises during boom times and falls during downturns, much as banks expand their balance sheets when monetary policy is loose relative to fundamentals, and banks respond by expanding their balance sheets. There is therefore a strong rationale for implementing a countercyclical flexible cap on leverage.

On the other side of the Atlantic, many have argued that the strong performance of Canadian banks during the crisis can be explained by the leverage cap imposed by the Office of Superintendent of Financial Institutions, together with sound supervision and conservative lending practices.

The Canadian leverage cap is designed differently from the Swiss one, and is calculated as the sum of on-balance sheet plus specific off-balance sheet items divided by Tier 1 plus Tier 2 capital, and is fixed at 20x.

And finally, the US leverage cap is designed as the sum of on-balance sheet assets divided by Tier 1 capital and is fixed at 33.3x for banks rated by the supervisor as 'strong'<sup>32</sup> and 25x for other banks. However banks' actual leverage is typically below the cap, since banks are also subject to corrective action rules requiring them to maintain a maximum leverage ratio of 20x in order to be considered as sufficiently capitalised.

As US investment banks are regulated by the SEC, they are not subject to leverage caps. However this has become a moot point since none exists anymore after the largest US investment banks converted in 2008 to become bank holding companies regulated by the Federal Reserve.

Whilst we find the flexible cap in Switzerland a very interesting approach, all three ratios have, in our view, too narrow a scope as they do not include all off-balance sheet exposures, which in turn limits their effectiveness.

There are indeed three types of leverage: balance sheet leverage, economic leverage and embedded leverage,<sup>33</sup> and all three affected banks during the crisis. The Swiss and US ratios only capture balance sheet risk, while the Canadian one also encompasses to some extent economic leverage.

As a point of comparison, the Basel III ratio, designed as Tier 1 capital divided by the sum of on- and off-balance sheets assets, is much more comprehensive and addresses both balance sheet and economic leverage. We thus support its general design, even though several uncertainties remain.

First, the proposed securitisation treatment follows the accounting treatment (FAS 140) for derecognition. However, in the wake of the Basel Committee on Banking Supervision (BCBS) noting that derecognition rules vary across jurisdictions,<sup>34</sup> an alternative approach could consider including all securitised portfolios into the numerator of the ratio. We support this approach as it would reinforce the comprehensiveness of the ratio.

Second, whilst BCBS currently proposes to include off-balance sheet items using a 100% credit conversion factor, it is also considering whether to assess the impact of

## We support Basel III's inclusion of off-balance sheet items

32 'Strong' meaning banks with no supervisory, operational and managerial weaknesses (World Bank 2009)

33 For a detailed explanation see definitions in Annex 1

34 S&P (2010)

## The question of derivatives – net or gross?

applying standardised Basel II credit conversion factors. We favour the application of the 100% credit conversion factor.

From an accounting standpoint, finding a consistent way to measure banks' assets is a challenge, as US GAAP<sup>35</sup> and IFRS standards offer dramatically different pictures. As an example, Deutsche Bank's 2008 leverage was reportedly 69x using IFRS but 28x under US GAAP.<sup>36</sup> The difference comes mostly from stricter netting conditions for derivatives under IFRS and we would very much welcome the use of the IFRS accounting standard, precisely because it promotes a reduction in interconnectedness, which is in our view one of the most fundamental issues.

Finally we note that, insofar as so-called SIFIs will have an additional capital requirement equal to 2.5% of risk weighted assets, their leverage ratio should not be identical to that of other banks but should be adjusted accordingly, in order not to cancel out the benefit of the additional capital buffer.

According to the European Commission impact assessment study, using a credit conversion factor of 100% for off-balance sheet items and with no netting of financial derivatives, EU large banks' current leverage ratio is 1.6% and EU small banks' ratio is 3.1%, which implies respective leverages of 62x and 32x.

The ratio of 3% currently proposed by CRD IV, which translates into a maximum leverage of 33.3x would thus have no impact at all on small banks and divide large banks' leverage by two.

## Our recommendation

Our proposal for a leverage ratio is based on the double conviction that it must be calculated using IFRS accounting standards if policy makers want to start addressing the issue of the interconnectedness of the banking sector, and that a flexible ratio fixed at 5% / 20x leverage for normal times (and consistent with a Tier 1 capital ratio equal to 10% of risk weighted assets) and at 3% / 33.3x leverage in downturns gives the countercyclical flexibility necessary to adapt the banking landscape to economic cycles.

### 3. On the 'back to Basel 1' argument and other criticisms

An alternative investment managers trade body claimed that the relation between risk and leverage was complex and that higher leverage did not necessarily mean higher risk, thus higher leverage should be more acceptable for hedge fund strategies with very low market exposure or high diversification. The argument that a moderately leveraged highly diversified portfolio is less risky than an unleveraged non-diversified one goes against empirical evidence, as crises typically lead to higher correlations, which in turn destroys the benefit of diversification. Everything else being equal, higher leverage always means higher risk.

## Commonly-held industry views

Standard & Poor's wrote in a 2010 report<sup>37</sup> that the introduction of a leverage ratio could incentivise banks to move away from low risk and low yield business towards higher risk and higher return assets. We disagree with this view on the grounds that the leverage ratio is complementary to risk weight based capital requirements and the combination of the two aims precisely at preventing such a risk. Moreover, monitoring risk weighted assets enables regulators to interact with banks and identify what type of assets they have, thus preventing a return to Basel I weaknesses.

Similarly, a World Bank note mentioned as a weakness of the leverage ratio the incentive it might give banks to build up riskier balance sheets or expand off-balance sheet activities.<sup>38</sup> However, if the scope of the leverage ratio is comprehensive enough and includes all off-balance sheet items, this risk should be reduced. Hence the importance of the scope as discussed earlier.

<sup>35</sup> See Annex 1 for definitions of US GAAP and IFRS

<sup>36</sup> 'Financial transparency' Deutsche Bank roadshow (19/20 February 2009)

<sup>37</sup> S&P (2010)

<sup>38</sup> World Bank (2009)

We do agree, however, with another World Bank criticism in the same report which states that since leverage is procyclical, fixed leverage caps could amplify procyclicality by encouraging banks to deleverage during downturns, i.e. when it is most painful. Our recommendation is therefore for flexible leverage caps that can be adapted depending on the global economic situation, and for a supervised deleveraging process.

Finally, some argue that the leverage ratio did not prevent the US banking crisis. This argument is not valid when it comes to assessing the pros and cons of implementing a leverage ratio in the context of CRD IV as the US ratio did not encompass off-balance sheet assets and therefore did not capture economic and embedded leverage nor did it reflect the dramatic increase of off-balance sheet leverage during the four years leading to the crisis. Weak underwriting standards for securitised assets and the buildup of funding liquidity risk compounded the problems. In our view, this argument merely builds the case for including all the off-balance sheet items into the leverage ratio.

**The US leverage ratio did not capture off-balance sheet items**

#### 4. Recommendations

In light of what has been discussed above, we strongly support the introduction of a leverage ratio including all off-balance sheet exposures and all securitised portfolios with a 100% credit conversion factor, and we advocate the use of the IFRS accounting standards in order to reduce interconnectedness.

We therefore suggest the adoption of a flexible ratio calculated using IFRS accounting standards, fixed at 5% during normal times and 3% during downturns with a view to giving the ratio the countercyclical flexibility necessary to adapt to economic cycles. This suggestion is also consistent with the introduction of a risk weight based countercyclical capital buffer in the Directive.

#### Box 3: Debt interest tax subsidy – giving the wrong incentive

Most tax systems today contain a debt bias, offering a tax advantage for corporations to finance their investment through debt issuance: corporate income taxes allow for a deduction in interest payments for the purpose of determining taxable profits, whereas dividends or capital gains on shares are typically not tax deductible. This debt bias is magnified for domestic investors subject to personal income tax by the tax on capital gains and dividends.

These traditional distortions of debt are not new and have long been recognised. What is new, however, is that we have come to realise that the cost to the public good is much larger than was previously thought. According to a recent IMF report, whilst the tax deductibility of debt is not considered to be a major cause of the crisis, it is likely to have deepened the crisis by contributing to the excessive leveraging of banks.<sup>37</sup>

The original rationale for allowing the deductibility of debt interest was that interest is a cost of doing business, while equity returns reflect business income. This makes no economic sense as both payments represent a return on capital, and there is no justification for taxing one differently from the other. The public cost of the debt bias is much larger in the financial sector, due to implicit public guarantees. Banks are as a result inclined to choose capital ratios much lower than what is socially desirable, and the taxation debt bias exacerbates preexisting distortions in the capital structure of banks, thus magnifying public cost.

**A bias towards debt...**

**...has social implications and costs**

39 IMF 'Tax biases to debt finance : assessing the problem, finding solutions' (2011)



## Let's not subsidise 'pollution'

## Two remedies for the debt bias

The debt tax distortion is not only unjustified and provides the wrong incentives, but it is also not consistent with governments' and regulators' aim to curb excessive leverage. It is indeed paradoxical to subsidise debt and leverage that create systemic risk, and then try to curb leverage through the introduction of a leverage ratio.

As Anat Admati put it in a recent article,<sup>40</sup> *'if it sounds crazy, it is because it is crazy. (...) The analogy would be a government policy that subsidised pollutants, such as the more they pollute, the larger the subsidy. If pollution is bad for health and for the environment, and you required emittants to limit emissions, they would obviously complain that their cost of production would increase, and this might be true because they lose subsidies. Does this mean we must subsidise pollution? Clearly not, especially if there is an alternative! (...) If we believe that banks provide important services, and if we want to subsidise them, we must find other ways to do so which do not lead to this perverse situation. We should not effectively penalise equity as a form of financing.'*

A recent IMF staff discussion note analysed two alternatives to the current tax code.<sup>41</sup>

The first one would eliminate the deductibility of interest for corporation tax purposes. A number of countries have already opted to reduce interest deductibility, but such reductions do not eliminate the debt bias and create new opportunities for tax avoidance.

No country as of yet has opted for the full elimination of the debt bias for fear of increasing the cost of capital. But whilst it is true that in itself elimination of the subsidy would increase the cost of capital, it would also broaden the tax base and, as a consequence, allow (everything else being equal) a reduction in the corporate income tax rate that would compensate for the subsidy loss and reduce the tax burden on profitable equity financed investments.

The second alternative proposed by the IMF would be to introduce an allowance for corporate equity, i.e. a deduction from the tax base of the notional return on equity. Apart from eliminating the debt bias, such an allowance would also promote increased investment and higher economic growth.

The cost to public revenues might be an obstacle, however, as the IMF notes, the cost could be reduced in the short term by giving the allowance only to new investments and in the long term the expected costs should be limited as the favourable economic effects would broaden the tax base. Some evaluations of existing ACE (allowance for corporate equity) reforms suggest the measures are associated with reduced debt-equity ratios (Klemm 2007).

Brazil, Latvia and Belgium are currently applying variants of ACE and a recent tax committee of the Dutch government also proposed the introduction of an allowance for corporate equity.

While we do not comment on which alternative is best, we strongly feel that as European governments are committed to addressing the causes of the crisis and improving the stability of the financial system, a comprehensive and effective reform should include a reform of the tax code.

40 Anat Admati, Huffington Post, 4 Dec 2010

41 IMF 'Tax biases to debt finance: assessing the problem, finding solutions' (2011)

## E. Governance

### 1. A new status for the risk management function

A number of corporate governance failures have been identified by the De Larosière Report and the Basel Committee on Banking Supervision as some of the causes of the excessive accumulation of risk in the financial system. The low status of the risk management function is one of them and we not only support the proposed measures to enhance this function, but we want to suggest a few additional ones.

**Elevate the status of risk managers**

The proposed measures include ensuring that risk management personnel have sufficient authority to influence strategic risk management decisions and direct access to the management body, ensuring consistent remuneration policies between trading, control functions and senior management, and ensuring that control personnel are independent from the business units they oversee, including a remuneration structure independent from the performance of the said business units.

Unfortunately, in many banks, the risk management function is not perceived as attractive, both from a status and remuneration point of view, and therefore fails to attract the most talented individuals. Thus we completely agree that this function should have its status enhanced to be equivalent to trading, with comparable remuneration levels, access to senior management and authority in influencing strategic decisions.

Whilst it is common sense, it might also worth be pointing out that the risk management function should be staffed in good part with ex-senior traders, sales, structurers, middle office and back office employees, as they have an intimate knowledge of the functions they will be monitoring. In order to reduce the risk of ‘buddy relationships’ between them and their former colleagues still in the business units overseen, it would nevertheless be advisable to diversify the staffing source to candidates from outside those specific units.

We would suggest as well giving risk managers the authority directly to challenge trading, as is already the case in a few banks. As an example, a risk manager should have the authority to require a trader partially to unwind a position immediately, for the purpose of checking the position’s real market valuation.

**Don’t rely too much on the models**

Some severe risk management failures were caused by heads of risk management not fully understanding – or choosing to ignore – the limitations of the risk and pricing models used, of their underlying assumptions and of their interpretation. As is often the case, models are imperfect and whilst they are a useful additional decision-making tool, it is always under a certain restrictive set of assumptions. Therefore failure to use them within that framework or over-interpreting their results can lead to dramatic risk overshooting. Whether it is caused by managers’ inability to understand the models set up by so-called ‘quants’ or by the temptation to forget restrictive limitations when business is profitable, it should be ensured that management fully understands the limitations of quantitative risk measures.

### 2. On board diversity and herd thinking

**Herd is not only a boardroom problem**

We welcome the measures on boardroom governance, particularly those aiming at reinforcing the ability of the board to challenge management decisions and reduce group thinking. These include increasing the diversity of board members and ensuring adequate time dedication by limiting the number of directorships.

We would like to point out that herd thinking is not only confined to boards but is also prevalent in risk management, trading and quant functions, as banks are filled with staff who have a similar background (e.g. PhDs in physics...).

## F. Overreliance on CRAs

As the crisis exposed the spectacular failure of credit rating agencies, there has been a growing consensus that regulation should not rely on the credit assessments provided by those institutions for the purpose of calculating capital requirements. As a matter of principle, the task of assessing the credit worthiness of companies and securities for regulatory purposes should not rely on a small number of private agents necessarily prone to conflicts of interests and by nature in a position to make mistakes.

When the CEO of Fitch says that his analysts in charge of Lehman Brothers and AIG were 'disappointed' and 'surprised' by the outcomes at those issuers, the right question to ask is not why they had such a poor record over the past two years, as most forecasters have had a chequered record, but rather whether we should use as a cornerstone of the financial system's stability such fallible private forecasts.

Different approaches have been suggested, an important one being to remove CRAs and their ratings as far as possible from the structure of financial regulation. We fully support this proposal as it is one of the prerequisites to reducing the procyclical effect of credit ratings.

In this respect, the CRD IV section on reducing the over-reliance on credit rating agencies leaves us perplexed. Whilst we completely support the idea, we are surprised by its lack of actual reach: even though the CRD IV package's stated aims are the promotion of financial institutions' development of own sound credit granting criteria, and the removal of reference to external ratings in legislation where suitable alternatives exist, the package is loaded with references to external ratings, mostly in the standardised approach, from risk weight calculations to the definition of eligible collateral and calculations of haircuts. The package also seems to give a preferential treatment to rated exposures over non-rated ones.

Should we understand that no suitable alternatives exist? Even though the package promotes the IRB approach as an alternative to external credit ratings, it offers nothing for institutions that are not able to implement it.

In the USA, the Dodd-Frank Act explicitly requires in its section 939A the removal of all references to credit ratings in regulation but does not provide specific suitable alternatives. And the recent FDIC proposal to use a modified version of OECD risk classification as an alternative standard of creditworthiness is clearly disappointing,<sup>42</sup> in that it displays similar flaws and relies on market based measures (CDS, bond yields and correlations) which all make for circular references and methodologies leading to self-fulfilling prophecies.

This does not change our conclusions that regulation should not rely unduly on private forecasting firms and therefore that external ratings should be banned from regulation, and that the letter-based system of credit ratings should be replaced by simple probabilities of default (and, if possible, by an average probability of default computed by ESMA), a procedure that would diminish considerably in our view the current 'cliff' and procyclical effects of credit ratings.<sup>43</sup>

If anything, the current reliance on external credit ratings or on (fallible) IRB estimates for calculating capital requirements reinforces the case for implementing strict simple leverage ratios.

**Credit ratings agencies are fallible...**

**...but CRD IV still refers to their ratings repeatedly**

**Our recommendation: replace ratings with a simple probability of default and remove all references to them from regulations**

<sup>42</sup> see <http://www.fdic.gov/news/news/press/2011/pr11189a.pdf>

<sup>43</sup> Finance Watch evidence to European Parliament ECON Committee public hearing 24 Jan 2012

*‘Seven major factors contribute in our view to the building of systemic risk, and we conclude that whilst some of them are addressed by CRD IV, others are not, and some are even exacerbated.’*

## II. How likely is the package to meet its ambitious objectives?

**CRD IV does not do enough to address systemic risk and fragility**

### A. Enhancing financial stability and reducing procyclicality

Basel III tries to answer the question of how to improve the resilience of banks on a standalone basis and in a non-procyclical manner. Whilst tighter capital and liquidity requirements would undoubtedly bring significant benefits, we think that the reform does not go far enough in addressing meaningfully the issue of systemic risk and the increasing fragility of the financial system.

It must be acknowledged that the risk of systemic failure will always be there, therefore we must seek as much as possible to reduce its probability and its impact.

As the former head of the European Central Bank defined it, systemic risk *‘is the threat that developments in the financial system can cause a seizing-up or breakdown of this system and trigger massive damages to the real economy. Such developments can stem from the failure of large and interconnected institutions, from endogenous imbalances that add up over time, or from a sizable unexpected event. (...) Historical research has shown that many banking crises were related to economic downturns.’*

**Seven risk factors:**

Seven major factors contribute in our view to the building of systemic risk, and we conclude that whilst some of them are addressed by CRD IV, others are not and some even make the current situation worse:

**...asset uniformity,**

1. The uniformity of asset holdings and of bank business models is the first factor. A majority of participants, regardless of their size, holding similar assets and trading in the same instruments constitutes a major threat to the stability of the system. The banking system needs diversity, and a regulation pushing banks along the road of adopting similar business models is a cause for concern.

The only measure that affects this issue positively is the planned monitoring of asset concentration for SIFIs and, whilst we support it, we feel that it might not be sufficient to address the issue.

**...interconnectedness,**

2. Interconnectedness is another major cause, and its rise over the past decade through the increased exposures to the interbank market and the increased use of credit derivatives is a worrying development. This has been compounded by the fact that many banks have been moving away from the traditional ‘originate and hold’ model.

As far as the use of derivatives is concerned, even if OTC derivatives clearing through CCP directly aims at reducing interconnectedness, we think that allowing for capital requirements hedging, for netting derivatives exposures when it comes to calculating the leverage ratio and, more generally, allowing for mitigation, all reinforce interconnectedness and thus go in the wrong direction.

**...the SIFI surcharge could be counter-productive,**

3. The issue of SIFIs will be addressed by the Basel Committee on Banking Supervision.<sup>44</sup> On the criteria to determine whether an institution is systemically important, we welcome the use of five indicators, however we would add the percentage of market share on the provision of essential services and rate of expansion of the institution as additional criteria, and we regret that BCBS restricts its scope to banks.

As much as we support the effective resolution regime, resolution planning requirements and enhancement of supervision, we are not convinced that the benefits of introducing an additional capital charge for systemically important banks outweigh the drawbacks: indeed we fear that this additional capital requirement, compounded by the clear designation of banks that are globally systemically important might formalise and reinforce moral hazard. If the market perceives these banks to be safer and under greater scrutiny from several regulators, clients and investors might develop more confidence in these institutions, which would have the unintended consequence of helping them maintain a funding advantage.

Only insofar as this additional capital charge acts as an incentive for these banks to get smaller, it offers some benefits, but again we fear that the negative impact will outweigh the benefits.

We want to point out as well that the downsizing and divestment of certain activities of Systemically Important Financial Institutions (SIFIs) and the resulting transfer and fragmentation of activities among smaller banks does not necessarily imply increased system resilience. It is thus important that the tree does not hide the forest and that the focus on SIFIs does not give the misleading impression that moral hazard and systemic risk have been addressed.

**...over-reliance on ratings and models is procyclical,**

4. Procyclicality, specifically anything that reinforces the simultaneous expansion or contraction of bank balance sheets, is also fundamental. We recognise that significant work has been done to reduce procyclicality and, in particular that the introduction of a countercyclical capital buffer goes in the right direction. Yet again, more could be done in that area, such as reducing the use of market based measures of risk and external ratings or procyclical factors in internal ratings calculations. As discussed earlier, we are convinced that introducing a flexible cap on leverage would be an important step toward promoting a countercyclical regulation and would be consistent with the introduction of a countercyclical capital buffer.

**...leverage and maturity mismatches,**

5. and 6. Leverage and maturity mismatches are also key factors of systemic risk, particularly when they are located in unregulated areas such as the shadow banking system. Whilst the issue of excessive leverage has been addressed, and we welcome again the inclusion of all off-balance sheet assets into the leverage ratio, risk weights might have the unintended consequence of shifting risk towards the shadow banking system. We have therefore high expectations for the FSB and BCBS work to tackle these contagion channels.

**TBTF requires structural reform of banks**

7. Finally, 'too big to fail' is still at the center of our banking system and the impossibility of letting banks fail is, in our view, a major cause of systemic risk.

At the time of publication of this report, if a bank should fail despite its higher capital requirements and liquidity buffers, it is extremely likely that taxpayers' money would be put to contribution again insofar as this bank's failure could lead to either a domino effect on the system or a disruption of essential services. Whilst the development of cross border cooperation arrangements and recovery and resolution plans for SIFIs go in the right direction, they are not enough and a structural reform such as ring-fencing or structural separation of investment banking from retail and commercial banking

---

<sup>44</sup> BCBS (2011)

activities should be considered in order to address meaningfully the issue of moral hazard.

In view of this, we conclude that whilst CRD IV goes a significant way towards making banks safer on a standalone basis, it does not address systemic risk by itself. Additional measures need to be taken to ensure that potential future crises do not impact society and the real economy as dramatically as the previous one.

## **B. Enhancing the safeguarding of depositors' interests**

The reduced likelihood of bank failure resulting from the CRD IV package should, as a result, enhance the safeguarding of depositors' interests, however more targeted measures might provide additional benefits.

The lack of confidence in depositor guarantee schemes is evidenced by the reaction from depositors in response to negative news on individual banks. Increasing the disclosure on banks' risks will be a first avenue to increasing depositors' confidence, provided these disclosures can be reported intelligibly to the public.

Strengthening deposit guarantee schemes and extending them to all deposits for natural persons might also contribute to the stated goal. Restricting the extension to natural persons as opposed to legal persons would eliminate the risk of corporate shift from bonds to deposits. The cost of this measure would be compensated in part by the resulting increased possibility of letting banks fail which would imply lower bail-out costs, and by reduced risks of bank runs and liquidity crises.

Granting seniority for deposits over unsecured debt would remove the possibility of using the political excuse of protecting depositors to justify a public bail-out of unsecured creditors, as occurred in Ireland after the bail-outs of AIB and Bank of Ireland. It must be noted that depositor preference is already in place in several countries and has been recently proposed in the UK by the Independent Commission on Banking. It would therefore have the benefit of enhancing the credibility of unsecured debt as a loss absorbing instrument.

Finally, we are concerned that the likely increased use of covered bonds by banks resulting from the regulation might 'ring-fence' assets from banks' creditors (including depositors), and we call for a close monitoring of this issue by supervisors.

## **C. On maintaining the international competitiveness of the EU banking sector**

Building on from our earlier view that higher capital requirements will not lead to a significant increase of banks' weighted average cost of funding and lending spreads, we do not expect any meaningful adverse impact from the package on EU banking sector competitiveness.

Whilst the proposal might prompt a limited contraction of banks' balance sheets and the need for banks to raise additional capital in difficult market conditions, a sufficient transition period should ensure that a fair portion of the capital shortfall can be met through retained earnings.

In a context of heightened concern from clients and investors about counterparty risk and bank resilience, banks perceived to be safer as a result of strengthened capital and liquidity ratios will attract more deposits, customers and funding. The strengthening of financial stability and improvement of the safety of EU banks will thus be a positive factor for the EU banking sector's competitiveness.

**Better disclosure of banks' risks**

**Depositor preference**

**Monitor the use of covered bonds**

**Stronger banks will attract more customers and funding**



**Current regulatory proposals do not go far enough to protect taxpayers**

**Ringfencing reduces contagion and makes banks less reliant on the State**

#### **Box 4: Structural reform - is ring-fencing the alternative to micromanagement?**

Last September Sir John Vickers' Independent Commission on Banking (ICB) published a report proposing to ring-fence retail banks from investment banking.

There is a wide recognition that economies need strong, profitable and accountable banks i.e. that are able to perform like any other business, making profits when well managed and failing when poorly managed. A structural reform, if successful in curtailing the impact of future bank crises on the real economy, might enable regulators to treat banks more like normal businesses.

Based on its assessment that current regulatory proposals do not go far enough, the ICB concluded that a package of measures was necessary to increase banks' ability to absorb losses, to cheapen and simplify bank resolution and to curb incentives for excessive risk taking.

With these objectives in mind, it proposed the structural separation of retail banking and wholesale/investment banking through ring-fencing, and an increase of primary loss-absorbing capacity for ring-fenced banks via increased equity requirements, the creation of bail-in bonds and the introduction of depositors' preference.

The expected benefits from ring-fencing include: making orderly bank resolution easier and cheaper and consequently reducing contagion risks, reducing interconnectedness and risks for the supply of vital retail services; and finally maintaining banking competitiveness through softer regulation for investment banks relative to ring-fenced banks. The ICB report can therefore be viewed as opening a debate on the best way to complement Basel III's micro prudential package by proposing additional measures targeted at resolving the moral hazard issue linked to 'too big to fail'.

We welcome the criteria selected when designing the scope of the ring-fence, that only those services whose continuous provision is imperative for the economy and for which there is no easy alternative should be inside, namely: deposit taking, payment services and loans to individuals and corporations (most importantly to SMEs but not exclusively). Those are, in our view, the only banking services that deserve the potential involvement of taxpayers.

We also support the flexibility left to banks to decide whether they also want to include inside the ring-fence other services such as deposit taking from / lending to large non-financial corporations. The scope is indeed a critical and difficult question, typically in the case of corporate finance, as it can be argued on the one hand that large corporations have access to alternative sources of financing in the market, but on the other hand, that activities such as export finance are a critical part of lending to the real economy and that promoting capital market funding is not necessarily desirable.

Our initial view is that insofar as lending to large non-financial corporations is a useful service from society's point of view, it deserves a place inside a ring-fence provided that loans are kept on the books. We espouse as well Vicker's recommendation that ring-fenced banks deal at arm's length with non ring-fenced areas.

Whilst anticipating operational costs and some increase in banks' funding costs resulting from the proposal, to the extent that the latter correspond to the curtailing of the implicit subsidy of taxpayer bailout, these are not costs to the economy. The ICB acknowledges nevertheless that significant uncertainties

**Structural remedies  
might reduce the need  
for regulators to micro-  
manage banks**

**ICB reforms have  
indisputable merits**

remain when trying to assess the costs and benefits, and more in depth impact assessment analysis might be worth considering.

As many European countries never experienced ring-fencing in the past and have developed a universal bank model, some critics have emerged to question the relevance and feasibility of such a reform for some European banking models, fearing for its competitiveness and in particular for activities such as project finance. Further impact assessment is clearly necessary on that point.

As the current crisis originated from excessive and unsound mortgage lending, and this activity would have been inside the ring-fence we also recognise that such a reform is not the answer to all evils, and that strong and sound lending standards, higher capital and increased accountability are as important. Sound banking regulation is both about reducing systemic risk and letting bankers do their job whilst assuming the potential cost of failure. In an ideal world, banking regulation should not be about micromanaging banks and we think that answering the question of ring-fencing or of separation of banking activities might be a pre-requisite to less micromanagement of banks by supervisors.

The reforms proposed by the ICB have indisputable merits: first, they would remove the funding subsidy of capital market activities which might incentivise a reallocation of funding towards traditional lending; second, they would improve the possibility of letting banks fail and narrow the scope of moral hazard to activities that are essential for society; third, they would improve the possibility of an orderly resolution of failing banks and increase debt loss absorbency; finally they would contribute to restoring confidence in the banking sector and therefore reduce the risk of bank runs.

Consequently, we look forward to the coming work of the *High Level Expert Group on reforming the structure of the EU banking sector* that has been convened by Commissioner Barnier.

*'We hope EBA will consider the impact of the expected "natural deleveraging" when reviewing bank capital plans.'*

### III. Potential unintended consequences to address and monitor

We would like to highlight a few potential unintended consequences that, in our view, deserve special scrutiny, in addition to risk reweighting and the migration of risk towards the shadow banking system which are already on the radar of regulators.

#### A. Excessive deleveraging

**Which assets will banks reduce first?**

We believe that an unofficial but key objective of banking regulation should be to promote a return to one of the core functions of banking which is to lend to the real economy. We fear, however, that the current combination of bank recapitalisations and difficult market conditions could lead to negative effects for society and the real economy, absent a close monitoring of banks deleveraging by supervisors.

In today's difficult market conditions, one solution for banks faced with the obligation to improve their capital ratios is to reduce the size of their balance sheet. This can be done either through reducing real economy loans or reducing other parts of their balance sheets. It must be noted that the largest European banks hold very substantial trading and derivative assets, often larger than their entire loan portfolio. In that context, there is a possibility that banks choose to respond to the enhanced regulatory requirements by reducing lending to the real economy. Even though we appreciate the rationale from an individual bank point of view to reduce activities that display a lower headline return on equity, we are convinced that such a development would be very damaging from society's point of view and contrary to the spirit of the CRD IV package, and should therefore be specifically monitored.

The European Banking Authority (EBA) is fully aware of this risk, as detailed in a paper published in early December 2011: national supervisory authorities under the auspices of EBA will ensure that banks' plans to strengthen capital are not achieved through excessive deleveraging or disrupting lending into the real economy, and banks will have to defer their capital plans until they have been reviewed.<sup>45</sup> The sale of selected assets may be agreed to the extent that it does not *'lead to a reduced flow of lending to the EU's real economy.'*

A key element will be for banks to better communicate to the market about the consistency and relevance of their new business mix and expected return.

**Protecting exporters and the real economy**

Finally, we would like to highlight two elements that EBA will hopefully consider when reviewing banks' capital plans: the first one is the expected 'natural deleveraging' (i.e. the fact that banks might decide not to renew existing loans or reduce the amount of new loans granted) and the second one is deleveraging that might hurt EU exports. As supervisors focus on lending to the real economy mostly in the EU, there might indeed be a risk that some banks reduce lending to the EU's export partners (for instance,

---

<sup>45</sup> EBA 'Recommendation on the creation and supervisory oversight of temporary capital buffers to restore market confidence' December 2011

but not exclusively, in non-EU European countries), which could have very negative consequences. We therefore hope that EBA's assessment will not focus only on the EU.

## **B. Risk of excessive risk transfer to consumers through innovative products**

**Protecting consumers from hidden risk transfers**

Basel III may lead to excessive risk transfer to consumers and as such may require a strengthened level of consumer protection. Indeed to the extent that the new regulation increases capital requirements, banks' product offerings might evolve to shift risks away from bank balance sheets through products that will share risk between banks and investors in a non-socially optimal manner.

Whilst it is nothing new that banks offload some risks from their balance sheets by packaging it into a structured product that they can then sell to clients, excessive risk transfers are already a concern in the area of pension products where consumers bear significant investment and longevity risks.

There is nothing wrong per se in selling risks to clients as long as clients understand the nature of the product and of the risks they take. In the face of oncoming enhanced capital adequacy regulation, there might be a temptation for banks to offload low grade and illiquid assets onto their customers. Convinced as we are that additional risk transfers to consumers are not socially desirable, enhanced monitoring and supervision of banks' product offerings will therefore be indispensable.

## **C. Transition period: won't the market make it shorter anyway?**

**Implement the reforms slowly for capital requirements...**

Basel III's transition period is relatively long, out of concern for the impact of the reform on the economy and also partly as a result of successful industry lobbying.

Interestingly, banks recognise that as soon as a measure is designed and voted, financial markets integrate it and scrutinise those banks that do not meet the future criteria.

We therefore support the currently proposed long transition period for capital requirements: on the one hand the market is likely to make it shorter for large banks, but on the other hand, it would enable institutions such as saving banks to have the time to build retained earnings.

**...but quickly for disclosure measures such as the leverage ratio**

We do, however, welcome shorter transition periods for the disclosure of key indicators such as the leverage ratio, as already proposed in the UK, which would reduce the discrepancy between official implementation dates and integration by the market, and enable regulators to reclaim their role from the market.

## Comparing shadow banks and traditional banks

## Risk transmission: securitisation and other channels

### Box 5: Shadow banking system – the reckless Siamese twin

Whilst it can be argued that 100 years ago, the traditional banking system was a shadow banking system, as it operated without comprehensive regulation or credible public backstops, the recent emergence of an unregulated parallel banking system was noted in the 1990s, and this system grew spectacularly to reach an estimated \$60 trillion in 2007, or 25-30% of the total financial system and around half the size of bank assets.<sup>46</sup>

The Financial Stability Board defined shadow banking as *'the system of credit intermediation that involves entities and activities outside the regular banking system'*, narrowing it down for regulatory purposes to the part of this system that *'raises systemic risk concerns, in particular by maturity/liquidity transformation, leverage and flawed credit risk transfer, and/or regulatory arbitrage concerns'*.<sup>47</sup>

The shadow banking system, just like the traditional banking system, has three protagonists: savers, borrowers, and, instead of banks, non-bank financial intermediaries. Just like traditional banking, it conducts credit operations but the main difference with the traditional banking sector is that it acts as an intermediary whilst banks are not mere intermediaries as they create money in the course of their credit activity. However, the fact that a significant part of the shadow banking sector (in particular hedge funds), is financed through bank loans (i.e. money creation) blurs the line on that last point. It also opens doors for possible regulation of the shadow banking system (should not prime brokerage activity conducted by banks be regulated more strictly to the extent that it includes lending money to the shadow banking system?). Another difference between the way banks and shadow banks lend money is linked to the fact that traditional bank lending is mostly conducted by one institution when credit intermediation in the shadow banking system is conducted through several steps via a chain of intermediaries, from loan origination, loan warehousing, securitisation and arrangement, to distribution / wholesale funding.

The FSB rightly highlights the importance of examining connections between non-banks and bank activities, since banks can be exposed to the shadow banking system in several ways, either when shadow entities are bank-owned, through the provision of finance and credit lines to shadow banks by banks, or when banks are funded by shadow entities.

Although securitisation was intended originally to transfer risk to counterparties better equipped to absorb losses and despite the fact that intermediating credit through non-bank channels can offer market participants alternative sources of funding, the shadow banking system can be a significant source of systemic risk by itself and through its interconnectedness with the traditional banking system. The initial freezing of credit markets in 2007 was indeed caused by a run on some entities of the shadow banking system by their counterparties. It has also proven to undermine banking regulation and enabled the build-up of additional leverage and risk in the system.

Shadow banking risk is addressed to some extent in the CRD IV package but much more work needs to be done. The inclusion of off-balance sheet exposures in the leverage ratio and in the liquidity outflows and the new capital treatment of

<sup>46</sup> FSB Recommendations 'Shadow banking: strengthening oversight and regulation' 27 Oct 2011

<sup>47</sup> FSB Background Note 'Shadow Banking: Scoping the Issues' 12 Apr 2011

liquidity lines to SIV and conduits are positive steps but strong incentives to shift risk towards the non-regulated area remain.

Thus we welcome the task force set up by the FSB on the subject. Whilst its final recommendations are not due until end of 2012, the task force has already identified 5 key areas where further regulatory action might be necessary:

- regulation of banks' interactions with shadow banking entities, in particular enhanced consolidation for regulatory purposes, concentration limits, risk weights for banks' exposures to shadow banking entities and treatment of implicit support.
- regulatory reform of money market funds.
- regulation of other shadow banking entities.
- regulation of securitisation, specifically retention requirements and transparency.
- regulation of securities lending and repo.<sup>48</sup>

---

<sup>48</sup> See Annex 1 for a definition



*'The CRD IV package is a meaningful reform that addresses several shortcomings of previous regulation and significantly improves banks' resilience on a standalone basis, even though more could be done in our view.'*

## Conclusion

The CRD IV package is a meaningful reform that addresses several shortcomings of previous regulation and significantly improves banks' resilience on a standalone basis, but more could be done in our view.

However, from a macro prudential point of view, whilst procyclicality is meaningfully addressed, systemic risk and moral hazard are not, and although we strongly support the work done by the FSB on shadow banking and by the *High Level Expert Group on reforming the structure of the EU banking sector* as both will complement the CRD IV package, we feel that more could be done within the CRD IV framework itself.

We suggest the following in order to further enhance financial stability and more generally to better achieve CRD IV objectives:

### Recommendations for CRD IV

1. Increase minimum Total Capital to 15% of RWA, Tier 1 capital to 10% of RWA and common equity Tier 1 to 7.5% of RWA, which including the capital conservation buffer translate respectively into 17.5%, 12.5% and 10% of RWA, as it should provide significant benefits in terms of reducing the likelihood of future crises. It would also compensate for the fact that debt cannot play its normal loss absorbing role since banks are still not allowed to fail.
2. Increase the leverage ratio to a flexible cap of 5%-3% under IFRS, and include it in pillar 1 from 2015.
3. Remove zero risk weights, replace the flat risk weight for non-rated corporate exposures under the standardised approach by country averages of IRB risk weights for non-rated corporate exposures, lower the risk weight for retail exposures and allow under specific circumstances partial IRB implementation for small banks.
4. Introduce a residual risk weight requirement of 25% for transferred exposures with a view to curbing excessive risk transfer, increasing accountability and countering issuers' informational advantage.
5. Benchmark banks' internal models against a standard portfolio.
6. Require banks to disclose their return on assets among their key indicators.

### Other recommendations

Outside of the scope of this proposal, we also feel that the elimination of the debt interest tax bias, the regulation of the whole shadow banking system, a structural separation of banking activities and the supervision of deleveraging would be essential to complete the proposed package and promote both the restoration of confidence in the financial system and a renewed focus on banking's core function of financing the real economy for productive use.

# Annex I: Definitions

**Additional Tier 1 capital:** capital instruments that are perpetual with no incentive to redeem them, rank below Tier 2 in the event of insolvency, are not purchased by the institution or its subsidiaries, are not secured or guaranteed by the institution, that may include call option but only exercisable by the issuer and not before 5 years.

**Balance sheet leverage:** whenever an entity's assets exceed its equity base, its balance sheet is said to be leveraged.

**Basel III:** third set of recommendations on banking laws and regulations issued by the Basel Committee on Banking Supervision in 2010.

**Common equity Tier 1:** ordinary shares, retained earnings, other reserves, reviewed interim profits, other capital instruments that are perpetual, with no preferential distribution or obligation to distribute, absorb the first losses, rank below all other claims in case of insolvency, and are not secured or guaranteed.

**CRD IV:** Capital Requirements Directive IV, aiming at transposing, together with CRR, the Basel III accords into European regulation.

**CRR:** Capital Requirements Regulation, aiming together with the directive CRD IV at transposing the Basel III accords into European regulation. Unlike a directive that needs to be implemented nationally by Member States, a regulation is directly applicable.

**Economic leverage:** banks face economic leverage when they are exposed to a change in the value of a position exceeding the amount they paid for it. A loan guarantee is a typical example.

**Embedded leverage:** refers to a position with an exposure larger than the underlying market factor, such as an investment in a fund that is itself funded by loans.

**IFRS accounting standards:** International Financial Reporting Standards are a set of international accounting standards stating how transactions and events have to be reported in financial statements. The standards are defined by the International Accounting Standard Board. IFRS is used in many countries, amongst others in the European Union. One of the key differences between IFRS and US GAAP is the stricter netting conditions for derivatives under IFRS.

**IRB approach:** the Internal Ratings Based approach to capital requirements for credit risk relies upon a bank's internal assessment of its counterparties and exposures, unlike the standardised approach that relies more heavily on external ratings.

**Leverage ratio:** definitions vary across jurisdictions. Basel III defines it as an institution's capital measure divided by that institution's total exposure measure. Switzerland, Canada and the USA define it the other way round as an institution's assets divided by that institution's capital measure. In the CRD IV legislation, leverage ratio is defined as Tier 1 capital divided by total assets.

**Repo:** abbreviation for repurchase agreement, a contract in which a seller of securities agrees to buy the securities back at a specified time and price. It is a form of short term financing.

**Tier 1 capital:** Common equity Tier 1 plus additional Tier 1 capital.

**Tier 2 capital:** capital instruments that are not purchased by the institution or its subsidiaries, neither secured nor guaranteed, that have an original maturity of 5 years, that may include call options but only exercisable by the issuer and not before 5 years, and whose level of interest or dividend will not be modified based on rating.

**Total capital:** Tier 1 plus Tier 2.

**US GAAP accounting standards:** Generally Accepted Accounting Principles are a set of accounting standards and rules for reporting financial information. They are issued by the Financial Accounting Standards Board.

## References

- Acharya V , 'The Dodd-Frank Act and Basel III: Intentions, Unintended Consequences, Transition Risks and Lessons for India', International Growth Centre, London and New Delhi, 2011
- Admati Anat R, DeMarzo Peter M, Hellwig Martin F & Pfleiderer Paul , 'Fallacies, Irrelevant Facts, and Myths in the Discussion of Capital Regulation: Why Bank Equity is Not Expensive', revised October 2010, Rock Center for Corporate Governance at Stanford University Working Paper No. 86, Stanford Graduate School of Business Research Paper No. 2065
- Basel Committee on Banking Supervision (BCBS), 'Guidance for national authorities operating the countercyclical capital buffer', December 2010
- Basel Committee on Banking Supervision (BCBS) Consultative Document, 'Global systemically important banks: Assessment methodology and the additional loss absorbency requirement', July 2011
- BIS, 'Calibrating regulatory minimum capital requirements and capital buffers: a top-down approach', October 2010
- BIS, Macroeconomic Assessment Group, Interim Report 'Assessing the macroeconomic impact of the transition to stronger capital and liquidity requirements' August 2010
- BIS, Working Paper No 345, 'The bank lending channel: Lessons from the crisis', Gambacorta L & Marques-Ibanez D, May 2011
- BIS, Working Papers No 324, 'Mapping capital and liquidity requirements to bank lending spreads', King Michael R, November 2010
- Center for Economic and Policy Research (CEPR), 'The Fundamental Principles of Financial Regulation', Geneva Reports on the World Economy 11, 2009
- European Commission Staff Working Paper Impact Assessment, Accompanying the document Regulation of the European Parliament and the Council on prudential requirements for the credit institutions and investment firms, SEC (2011) 949 final
- Financial Stability Board, Background Note, 'Shadow Banking: Scoping the Issues', 12 April 2011

- Financial Stability Board, Recommendations, 'Shadow Banking: Strengthening Oversight and Regulation', 27 October 2011
- Foundation for European Progressive Studies (FEPS), 'The Basel III agreement : a critical survey' 2011
- Hanson S, Kashyap A & Stein J, 'A Macroprudential Approach to Financial Regulation'. Forthcoming in The Journal of Economic Perspectives, 2010
- Hellwig M, Preprints of the Max Planck Institute for Research on Collective Goods Bonn 2010/31, 'Capital Regulation after the Crisis: Business as Usual', 2010
- ICB (Independent Commission on Banking), Final Report, September 2011
- IIF, 'Interim report on the cumulative impact on the global economy of proposed changes in the banking regulatory framework' June 2010
- IMF Staff Discussion Note SDN/11/11, 'Tax Biases to Debt Finance: Assessing the Problem, Finding Solutions', de Mooij R, May 2011
- IMF Working Paper WP/11/119, 'Bank Behavior in Response to Basel III: A Cross-Country Analysis', Cosimano Thomas F. & Hakura Dalia S, 2011
- Kashyap A, Stein J & Hanson S, 'An Analysis of the Impact of "Substantially Heightened" Capital Requirements on Large Financial Institutions', Working Paper, 2010
- McKinsey working papers on risk, 'Capital ratios and financial distress: Lessons from the crisis', No 15, December 2009
- Miles D, Yang J & Marcheggiano G, Bank of England External MPC Unit, Discussion Paper No. 31: revised and expanded version, 'Optimal bank capital', April 2011
- Standard&Poor's RatingsDirect, 'The Basel III leverage ratio is a raw measure, but could supplement risk-based capital metrics' 15 April 2010\*
- Werner R, 'Economics As If Banks Mattered: A Contribution Based On The Inductive Methodology', The Manchester School, 79: 25–35. doi: 10.1111/j.1467-9957.2011.02265\_5.x, September 2010
- World Bank, Crisis Response Note Number 11, 'The Leverage Ratio – A New Binding Limit on Banks' December 2009

---

\* Standard & Poor's Financial Services LLC (S&P) does not guarantee the accuracy, completeness, timeliness or availability of any information, including ratings, and is not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, or for the results obtained from the use of ratings. S&P GIVES NO EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE. S&P SHALL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, EXEMPLARY, COMPENSATORY, PUNITIVE, SPECIAL OR CONSEQUENTIAL DAMAGES, COSTS, EXPENSES, LEGAL FEES, or LOSSES (INCLUDING LOST INCOME OR PROFITS AND OPPORTUNITY COSTS) IN CONNECTION WITH ANY USE OF RATINGS. S&P's ratings are statements of opinions and are not statements of fact or recommendations to purchase, hold or sell securities. They do not address the market value of securities or the suitability of securities for investment purposes, and should not be relied on as investment advice.







## CRD IV – Summary and Timeline

The European Union proposes to revise its rules on bank capital through an updated Directive and a new Regulation, collectively known as the Capital Requirements Directive 4 (CRD IV).

CRD IV translates the international 'Basel III' standards package as endorsed by the G20 into European legislation. The Commission's official goal of the new rules is to *'strengthen the resilience of the EU banking sector while ensuring that banks continue to finance economic activity and growth'*. The proposal also includes the Basel recommendations from December 2010 on Credit Value Adjustments and Counterparty Credit Risk. The Basel recommendation for additional requirements for large international banks ('SIFI surcharge') may be inserted through a later amendment to the CRD.

In addition to the implementation of the Basel III agreement, CRD IV also introduces a 'single rulebook' in order to reduce national divergences in the way that the CRD is implemented.

The CRD IV proposal was published by the European Commission in July 2011. The European Parliament and European Council are currently forming their opinions with the ambitious goal of reaching a common agreement by the Summer of 2012, with the new rules coming into effect by the end of 2013 at the earliest.

### Indicative timeline of the legislative process:

**July 2011** – CRD IV proposal published by the European Commission

**January 2012** – European Parliament rapporteur Othmar Karas (EPP, Austria) presents draft report

**27 February 2012** - Deadline for MEPs in the Economic and Monetary Affairs Committee to table amendments

**March 2012** – Danish Presidency plans to reach agreement amongst Finance Ministers ('General Approach')

**25 April 2012 (earliest)** – Economic and Monetary Affairs Committee adopts its position

**May 2012** – Compromise negotiations between the institutions

**11 June 2012 (earliest)** – European Parliament plenary vote

**22 June 2012 (earliest)** – Compromise endorsed by Finance Ministers

## About Finance Watch

Finance Watch is an independently funded public interest association dedicated to making finance work for the good of society. Its mission is to strengthen the voice of society in the reform of financial regulation by conducting citizen advocacy and presenting public interest arguments to lawmakers and the public. Finance Watch's members include consumer groups, housing associations, trade unions, NGOs, financial experts, academics and other civil society groups that collectively represent a large section of European citizens. Finance Watch's founding principles state that finance is essential for society in bringing capital to productive use in a transparent and sustainable manner, and that the legitimate pursuit of private interests by the financial industry should not be conducted to the detriment of society. For further information, see [www.finance-watch.org](http://www.finance-watch.org)



**Finance Watch**

Finance Watch  
Square de Meeûs 38/40  
1000 Bruxelles  
Tel: + 32 (0)2.401.87.07

[www.finance-watch.org](http://www.finance-watch.org)