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***February 10th, 2016***

# The crash of banking stocks - what's really going on?

*(All price references are as of 9/2/2016)*

Year-to-Date the SX7R index of large European banking stocks, which includes names such as HSBC or BNP, is down nearly -25%, -38% since the last peak in July. The credit market is in the same mood: initially limited to peripheral banks – mostly those with large NPL ratios, for example in Italy (6.75% UCGIM AT1, -21% YTD) - the fall was generalized to the strongest issuers (BNP AT1 7 3/8 -10% YTD) and Tier 2 securities or Legacy securities, including those issued by insurers. US banks have suffered far less: -18% YTD vs. -25% for Europe.

We need to go back to the Eurozone crisis of 2011 to find such a drawdown (-47%). But in 2011, the explanation was simple: Greece had announced the restructuring of its debt and the future of the Eurozone was everything but certain. A disorderly breakup of the single currency posed a huge risk to bank balance sheets. Hence, Mario Draghi's famous phrase "*Whatever it takes*" was enough for banks to rally by +90% to the peak of last July.

➢ Today, nobody can claim he has a perfect and straightforward explanation.

- In the current market meltdown, the three "usual suspects" are China, oil and "withdrawal of liquidity", (whatever that means).
- In addition, a number of economic and regulatory issues directly hit the banking sector (NPL of Italian banks, MDA risk.)

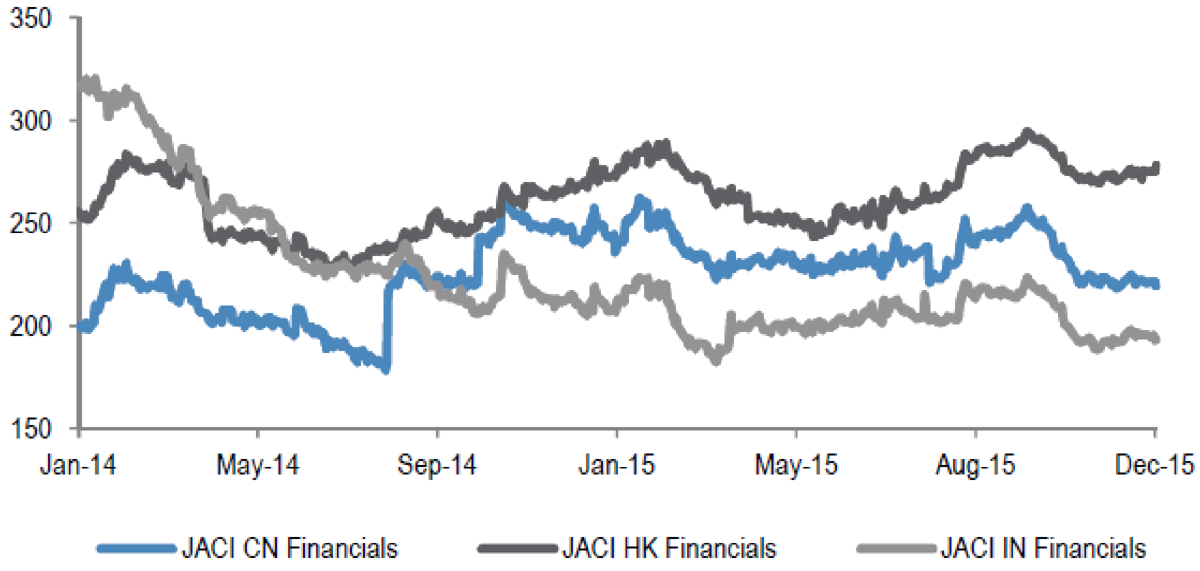
➢ Is it really that bad?

We will review these explanations and try to assess whether they represent a real threat to the European banking sector.

## I. China? Not really

Blaming China's slowdown in falling markets is always tempting. The reality is that China's slowdown has been going on for several years that the gradual increase in NPL is very slow and that, with the exception of a handful of them, the exposure of European banks to China, and Asia in general, is very low. Even exposure to "Sino-dependent" countries, like Australia, is reduced. According to aggregate data from the ECB, exposure (H1 2015) to emerging Asia accounted for only 1.5% of loans. Moreover, US banks are more exposed than European ones. We believe the graph below is the best proof that rising credit spreads do not come from Asia.

***Bank credit spreads: China, Hong-Kong, India***




*Source: JPMorgan*

However, rules limiting annual currency withdrawals, combined with other factors, led to a sharp fall in reserves of the country. The government probably tried to mitigate these factors by selling financial assets (the Chinese SWFs are worth roughly 5% of GDP). Hence, we believe it is mostly from selling flows that the Chinese slowdown is affecting financial markets.

## II. The risk on commodities / oil exposures? Yes there is a risk but it needs to be analyzed in detail

The drop in oil prices has a short-term impact on financial assets and a medium-term impact on the credit risk of the Oil & Gas sector, which is mostly a risk borne by the high-yield bond market and to a lesser extent by banks.

The majority of oil producing countries have 80% of their budget financed by revenues from production. The target price fixed at $60 by OPEC in 2015 is an equilibrium price below which these states are forced to find alternative financing solutions (debt, sale of financial assets). SWFs of oil states hold around 7000bn$ of financial assets and they are among the top sellers since the fourth quarter of 2015. Saudi Arabia, for example, has financed much of its public deficit in 2015 (98bn$) by selling financial assets, including 2bn$ of European equities in the fourth quarter of 2015, according to Morgan Stanley. These selling flows have greatly affected markets.

But lower for longer oil prices also mean a sharp deterioration in the creditworthiness of all oil companies in the value chain, starting with the producers using the most expensive technologies (especially fracking). For banks, the key issue is obviously the amount of losses that can be expected in the global financial system. The difficulty of the estimation exercise is that banks may disclose aggregate "Oil & Gas" exposure where the risks can be very different in nature. Banks have tried to improve disclosure with Q4 results, but uncertainties remains. New numbers disclosed in Q4 include:

**BNPP** - €26bn net oil and gas book, with 75% investment grade, 60% to majors. Reserve based lending business sold in 2012. Additional exposure of €8bn to Metals and Mining, 60% investment grade. Both combined are 3.5% gross of total book.

**UBS** – CHF6bn oil book, 90% US. 50% investment grade IG. Large exploration book which is a concern. Total is 2% of total book.

**ING** - €29bn oil book. €3bn is reserve based lending. 85% of book is not directly exposed to oil price risk. 1.8% NPL ratio, with 21% coverage.

**DNB** – Oil & gas is obviously a significant part of the book for this Norwegian bank (7-9% of total loans). The bank took higher losses in 4Q to build collective provisions – not individual ones. The book is very Nordic oriented, which is clearly less risky, just as their shipping book was less risky than German banks' ones.

**Nordea** – €6bn Oil & Gas book, less than 2% of total loans, very much Nordic orientated. Group loan losses are expected to 'stay within the long term average of 16bps in the coming quarters'.

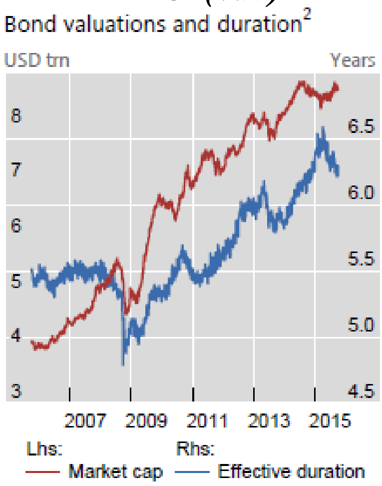
As these examples show, we must make some distinction between low-risk assets (credit to investment grade companies, short-term trade finance with market hedge, etc.) and high-risk assets (oil servicers primarily) and the rest of the exposures. What one can say is that European banks have mainly exposure on Trade Finance business (75% of the exposure of SG) on geographically close clients (Middle East, Africa, Nordics) and producers with low costs, in contrast to US banks.

For the three risk categories above, we estimated loss rates over two years - 2% on exposures to low risk, which compares with a rate of 0.06% on long-term exposures rated investment grade by Moody's, 20% on high risks, which compares to 10% in the high yield market in periods of sharp increase in defaults, and 12% on the average risk. On this basis we estimate the losses at $33bn for large banks with exposures to the Oil & Gas market, or about 4% of aggregate profits for 2016 to 2017, or 1% of core capital. Adding possible metal & Mining and trading losses would probably not increase that figure above 1.5% of tangible equity. However, there is clearly dispersion among banks: expressed in % of the consensus earnings the most vulnerable European banks are Standard Chartered, Commerzbank, Natixis, ING, ABN Amro, Deutsche, CASA and DNB. Brokers estimates for banking losses on high yield exposures is usually between $40bn and $60bn and should be concentrated on American banks. US banks have an average exposure to the energy sector of 5.4% of loans against 3.5% in Europe.

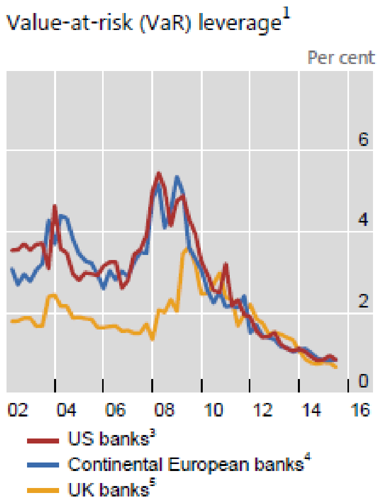
## III. The reduced liquidity? Yes but it does not impact the fundamentals of the banks

Prices fall because there are more sellers than buyers. Sure, but it's a little bit short. The actual problem is with dealers, which naturally act as shock absorbers through their inventories. Unfortunately, for a variety of reasons, their absorption capacity has decreased:

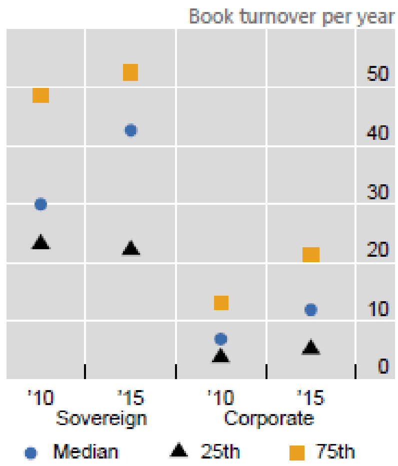
***Low rates increase interest rate risk (VaR)***




***Under regulatory constraints, dealers have to reduce their VaR***




***And cannot keep their inventories***




*Source: BIS Committee on the Global Financial System*

So there is no doubt that seller flows – as well as buyer flows – have an exacerbated impact on the market, especially the fixed income market, regardless of the fundamentals of issuers. Sales from China and the oil countries, sometimes done via leveraged hedge funds, have strong impact on prices.

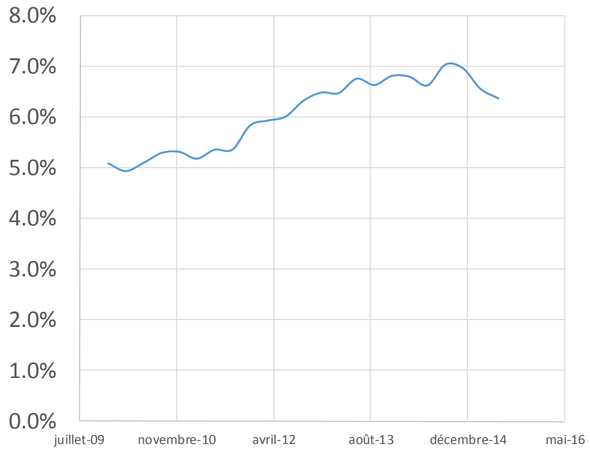
Let us now review the various economic and regulatory issues affecting the banking sector. Economic topics in order of importance are the Italian NPL situation, the negative interest rate environment and the structural problems of profitability.

IV. Italian NPL (and Spanish - Irish)? Their impact is greatly overestimated

A disastrous communication - corrected since – from the ECB triggered market fears that the ECB would force Italian banks to sell their NPLs with heavy discounts, with a massive capital impact and therefore a risk of bail-in. This stress has been naturally increased by two episodes: the resolution of four smaller regional banks, whose NPLs were transferred at a very low price (approximately 20% of par), and the Novo Banco episode: what easier way is there to solve the NPL problem than hurting creditors? Still, we be believe the market panicked without good reason.

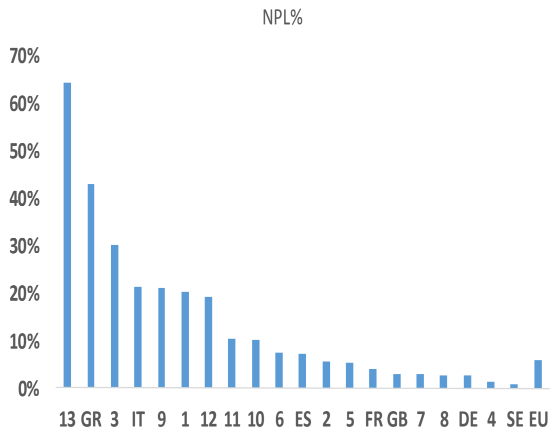
The issue at stake is well known: the IMF and the ECB have embraced the theory that excess NPL is harmful to growth, mostly because it disrupts the transmission channels of monetary policy. It is true that the evolution of Italian NPLs is not especially glorious. According to the latest figures published by the EBA, Italy is well above the European average (20% versus 6%) and slowing NPL formation is only very gradual. The graphs below summarize well the situation of European NPLs: slow decline and strong geographic dispersion.

**NPL evolution**




*Source: EBA*

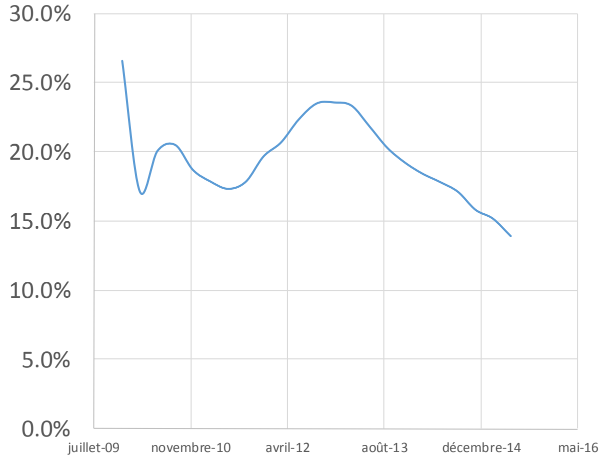
**Geographical dispersion**




*Source : EBA. The EBA does not disclose country names where there are less than 4 banks*

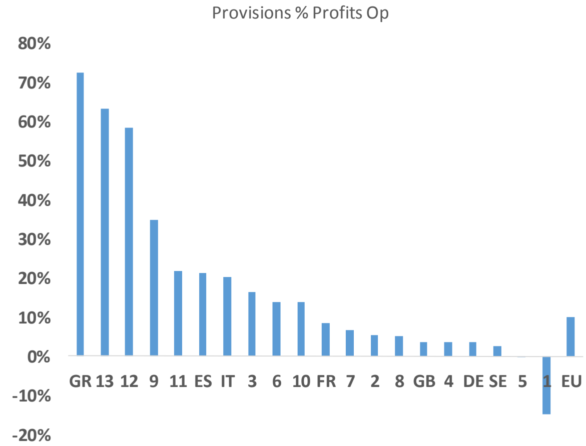
In Italy in particular, the major banks have NPL ratios between 4% (Mediobanca) and 24% (Monte Dei Paschi), Unicredit and Intesa being at the middle (9% and 11% respectively). However it is important to emphasize that NPLs are a stock and not a flow: what counts is not really that NPL are on the balance sheet (especially because the capital charge attached to them is very small) but their impact on the income statement - the flow and not the stock. The graphs below depict a very different reality:

**Loan loss provisions as % of operating profit**




*Source : EBA – moving average over 4 quarters*

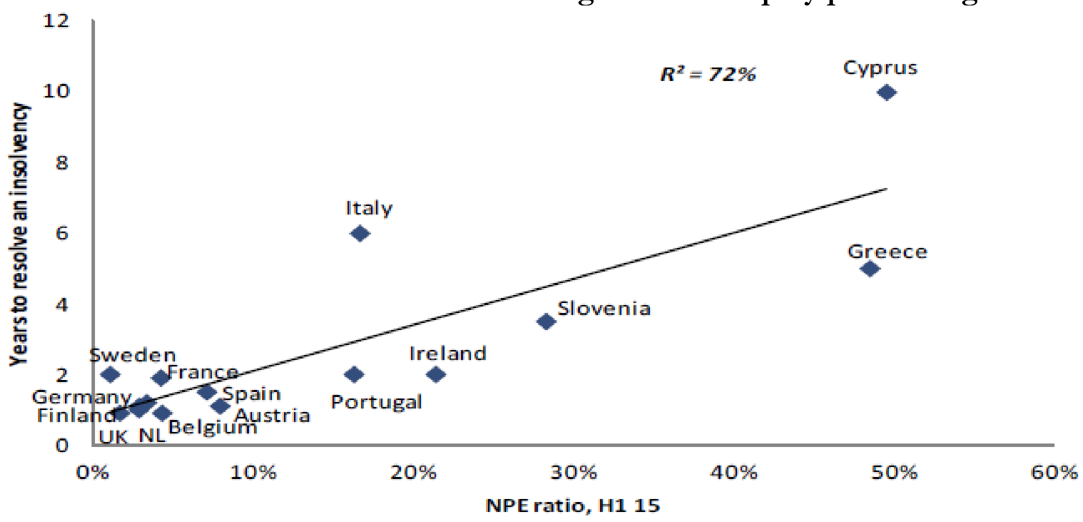
**Geographical dispersion**




*Source : EBA. The EBA does not disclose country names where there are less than 4 banks*

On this metric, the more one important we believe, Italy no longer appears as isolated and displays provisions in line with Spain. Detailed analysis also shows that the main determinant of the level of NPL in Europe is the length of judicial proceedings:

**Link between NPL ratios and length of bankruptcy proceedings**




*Source : Autonomous Research*

This is why we are convinced that it is above all the nature of the procedures and the governance of NPL portfolio management that are key for banks. The letter sent by the ECB to banks confirms that view, as it specifically sought information on the management of NPLs. As stated by the ECB, it was only a routine letter, not limited to Italian banks and designed to benchmark NPL management in Europe. More importantly, Mr. Draghi explicitly confirmed, after consulting with Ms. Nouy, that Italian NPLs are properly provisioned and would not result in new capital needs. The ECB has also repeatedly stressed how the reform of the Italian bankruptcy law was a significant step forward in accelerating the NPL recovery procedures and therefore improving ultimate NPL value. Finally, the creation of bad banks announced recently, even if the structure is far from perfect, reflects the political will to handle the treatment of NPL stocks with no impact on the credit market.

## V. Negative rates? No, they are not an insurmountable issue for banks.

Another common explanation revolves around negative rates and USD curve flattening. The belief is that recent market action could slow the Fed in its inclination to increase rates and weigh on the profitability of banks.

It does not really hold water:

- The exposure of European banks to the USD curve is very low (sensitivities are published in Pillar 3 reports) - and we cannot really say that the first rate hike was followed by a massive rebound;
- The low interest rate environment in Europe has been here for a long time and is probably not going away any time soon. Banks are adapting. The negative impact on interest margins is not debatable, but it can be reduced through appropriate hedging or pricing policy. Similarly, negative rates act as a tax on the European banking industry via the central bank reserve mechanism, but the amounts are very low compared to the profitability of the European banking sector.

Given the major uncertainties in the USD curve (the path set by the ECB is clearer) one would expect US banks to suffer more - the opposite is observed.

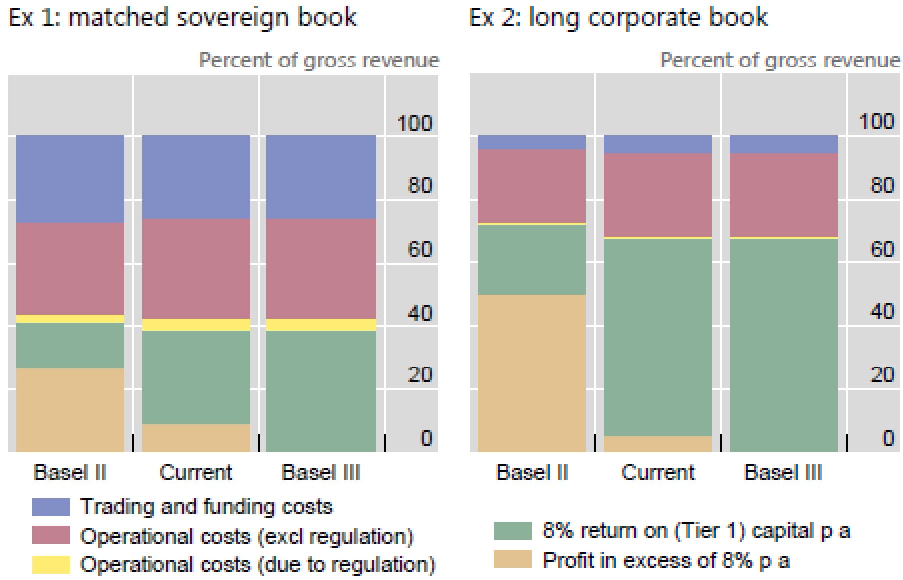
## VI. The structural profitability issues? They exist, but they are not new.

The low rates environment is only one of the structural problems faced by banks. The regulatory environment is another one, with impacts such as:

- Strongly increased capital requirements, decreasing ROEs;
- Largely reduced profitability on some businesses such as repo, because of the leverage ratio;
- Decreased profitability of certain securities and derivatives businesses because of clearing rules, etc.;
- Increased cost of carry on the liquid assets due to LCR rules;
- Etc.

The analysis below, made by the BIS, provides an excellent example of profitability issues in the fixed income business with two 'classic' situations: a book of govies funded by repo and a book of corporate bonds.

***Impact of recent regulations on profitability***




*Source : BIS*

It is true that on this point, US banks seem better armed than European ones, mostly because they have a smaller balance sheet, a less constrained LCR ratio and a leverage ratio they have been applying for many years. But, again, the explanation seems unsatisfactory. These trends are long-term and well-known now. We must also remember that other businesses were favored by regulation (portfolio management, SME lending), that competitive pressure is greatly reduced, that digitalization enables cost reductions, and that, on average, banks have managed to maintain ROE of 8% / 10%, a substantial premium to the risk-free rates as these go further into negative territory.

It should also be stressed that the last reported quarterly results have been good. SG CIB has compiled the following nice chart on European Q4 results:

| | NII | Revenue | Costs | Loan Losses | Adjusted PBT | Capital Build |
|---|---|---|---|---|---|---|
| **Frenelux** | | | | | | |
| BNPP | | Beat | Miss | Beat | Beat | 20 |
| ING | In-line | Beat | Miss | Beat | Beat | 40 |
| **Spain** | | | | | | |
| BCP | Beat | In-line | In-line | In-line | Beat | 20 |
| BBVA | Miss | Miss | In-line | Beat | Beat | 50 |
| BKIA | In-line | Miss | In-line | Beat | Beat | 57 |
| BKT | Beat | Beat | In-line | Miss | In-line | 10 |
| CXA | Beat | Miss | In-line | Miss | Miss | 0 |
| POP | Beat | Beat | Miss | Miss | Miss | 26 |
| SAB | Beat | Beat | In-line | Miss | In-line | 0 |
| SAN | Miss | In-line | Beat | Miss | Beat | 20 |
| **Nordics** | | | | | | |
| DNKE | In-line | Beat | Miss | Beat | Beat | 40 |
| DNB | In-line | In-line | Miss | Miss | Miss | 80 |
| NDA | In-line | In-line | Miss | In-line | Miss | 20 |
| SEB | In-line | Beat | Beat | Beat | Beat | 100 |
| SHB | Beat | Beat | Miss | Miss | Miss | -20 |
| SWED | In-line | In-line | In-line | Miss | Miss | 110 |
| **IBs** | | | | | | |
| CS | n/a | Miss | Miss | n/a | Miss | -20 |
| DBK | n/a | Miss | Miss | Miss | Miss | -40 |
| UBS | n/a | Miss | Miss | n/a | Miss | 20 |
| **Italy** | | | | | | |
| ISP | In-line | Miss | Miss | In-line | Miss | -30 |
| UCG | Beat | Beat | Beat | Miss | Beat | 41 |

*Source: SGCIB*

Apart from global IBs, this has been the healthiest quarter in a while! Banks generally performed well on the day, with investors apparently looking at just one number – the dividend – but then lost momentum over the following days.

On the regulatory front, topics are numerous and include the move towards Basel 4, bail-in and MDA.

## VII. Regulatory Risk - Basel 4? Nothing new in January.

The profound regulatory changes since the crisis are not fully over. Several important issues are on the agenda of the Basel Committee and the EBA: sovereign risk, risk weight floors, market risk, operational risk, etc. All these initiatives will have an impact on bank capital and potentially on the dividend capacity, with impacts on CET1 ratios that can be estimated between -100bps and -500bps, over a long period of time (2019+). The impact on the credit market is not negligible; as of 1/1/2016 coupon payments on hybrid instruments are subject to the so-called "MDA" rule which is directly linked to the Common Equity Tier 1 ratios.

Again, US banks have a slight advantage over European banks: RWA density is higher in the US and operational risk is better reflected.

Yet once again, the explanation seems implausible: the existence of these changes is now well known. Most investors are still struggling to measure these impacts, but nothing has changed on that front. On the contrary, the recent rhetoric of regulators, both from the Basel Committee and the ECB, is that the new rules will not increase the overall capital requirement. Promises only bind those who believe in them and we do not take these statements at face value, but the fact remains that the recent developments on this front are rather positive – they certainly did not trigger a crash.

## VIII. Bail-in and the ever-moving goalpost?

The Portuguese authorities have certainly underestimated the systemic impact of their decision to arbitrarily transfer five bonds from the good bank Novo Banco to the bad bank BES. There is no doubt that the motivation for this decision was purely political – the point was to protect Portuguese investors and hurt international ones - and it was taken in a rush hours before the Portuguese central bank lost its authority on these matters. The Single Resolution Board is now in charge.

The systemic problem is obviously not the 2bn€ loss (before any compensation) to be taken by investors like Pimco and Blackrock. It is more fundamentally a problem of principle related to the nature of the bail-in: the safeguards established by the BRRD for investors (primarily the principle that no creditor is worse off than in bankruptcy) are extremely flexible and subject to arbitrary financial modeling. The risk is that investors are held hostage to political demagogy and that a structural problem will be solved by using the "easy cash solution": bank bonds.

This problem has become particularly acute with the Italian NPL issue - see above - and we think it explains part of the crash not only in the credit market, but also on the equity market as shareholders are obviously the first victims of bail-in.

Yet, we believe the market has over-reacted strongly to what was certainly an unfair decision, but also an exceptional one in a very difficult political context. The "scandal" that ensued (eg. Pimco has announced it would boycott all Portuguese assets) will make people think twice before reproducing the same error - to the point that the Portuguese government had to announce a partial compensation for bondholders. The ECB explicitly distanced itself from the decision. Finally, and more importantly, member states have entirely lost their control on bail-in[1] since 01/01/2016: the Single Resolution Board will now be taking decisions on resolution, bail-in, etc., and can be expected to use a more consistent and rational approach, less influenced by domestic political constraints. This is also probably why the Greek (NBG), Italian (Banca delle Marche, etc.) and Portuguese (Banif, Novo Banco) authorities precipitated resolution decisions at the end of last year.

## IX. The (strange) MDA regulation? Risk or opportunity?

January 2016 saw the entry into force of the regulation on "MDA" (Maximum Distributable Amounts.) What is it about? The European Directive ("CRDIV") which implements Basel 3 introduced a threshold below which a bank can be limited in its ability to distribute dividends and coupons on its Tier 1 securities (Basel 2 Tier 1 and AT1). This regulation is essential to understand the risk of AT1 securities.

This threshold is defined as the "*combined buffer requirement*." This terminology has generated a lot of debate, partly settled today. They relate, in essence, to three questions:

1. How are the requirements under Pillar 2 and the MDA combined?
2. Which capital buffers are included in Pillar 2 / SREP requirements?
3. How are the requirements under Pillar 1 - Total capital, Pillar 2 and MDA combined;

For two years, our position, based mostly on a legal analysis, has not changed, while banks showed a frankly contradictory communication. We consider that (i) the MDA threshold includes the Pillar 2 requirements, (ii) that only the capital conservation buffer (2.5%) is included in Pillar 2 and (iii) that a bank must first comply with Pillar 1 requirements, including total capital, before pillar 2. This is the most conservative position and, we believe, the only permitted by the Directive. Many investors, encouraged by the communication of some banks and the silence of the ECB, felt that a more flexible position would be adopted.

But last December the ECB, under pressure from the EBA, confirmed our conservative view on questions 1 and 2. This caused concern in the market. The third question is still under discussion and banks strongly disagree. BNP or Banco Popular Espanol, for example, have provided explicit statements that contradict our view. Still, we stand by our own analysis and believe it will eventually prevail, but there is no doubt that the market is concerned about these complex regulations and a communication that remains unclear. This has clearly weighed on valuations – but, we believe that coupon risk has not substantially changed over the past few months and that the market offers huge investment opportunities if the risk is properly assessed.

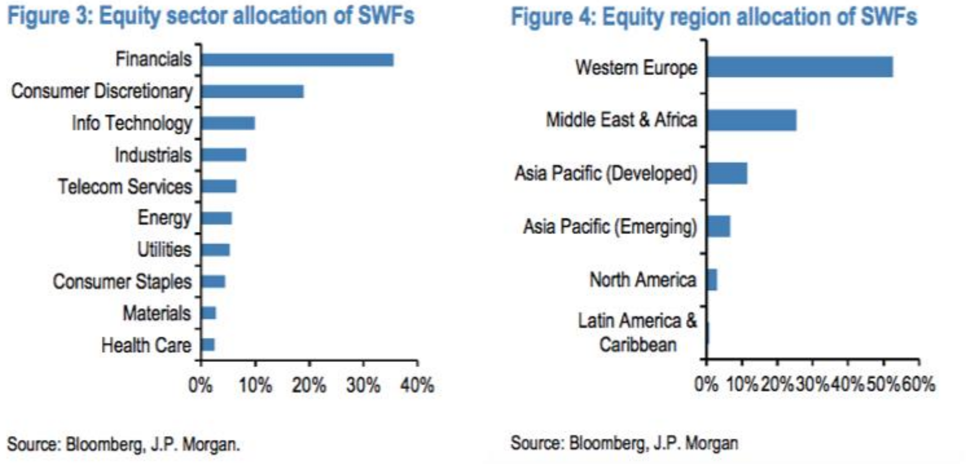
[1] For large banks only

## X. In conclusion

We can draw the following conclusions:

- On fundamentals: profitability hasn't changed dramatically recently (if anything Q4 results were better than Q3) and solvency is not undermined by stocks of NPL.
- On regulation: the market has suffered from a bad decision on Novo Banco and a hazardous communication on the MDA. However, the trend is favorable with (i) the transfer of resolution powers to the Single Resolution Board, (ii) a progressive clarification on MDA and (iii) a possible watering down of Basel 4.
- The flows are still on the downside - it is naturally very difficult to know when the bottom will be reached but clearly it's not far from where we are. The chart below sums up the performance of the European banking sector.

***Sovereign Wealth Fund allocation***




What strategy should be favored in this context? Jeffrey Gundlach, the star manager of DoubleLine said on February 8th 2016 "*The whole question for me is when am I going to buy enormous amounts of corporate credit, because it's crystal clear that that's the next opportunity that's out there. There's plenty of things out there that will have 100 percent returns. It's a whole question of: Don't tell me what to buy, tell me when to buy it.*"
We couldn't agree more, considering the current yields (10%+) of AT1 bonds issued by banks such Santander or BNP, whereas B-rated issuers in the periphery still have yields below 5%. Investors who are not constrained in managing their liquidity and can withstand some volatility should not try to catch the lowest point at all costs and take this opportunity to buy bonds at very distressed prices. The recent history of 2009 or 2011 shows how rapid the rebound can be.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