

# The Supervision of Market Based Finance: From Intermediaries' Static Stability To the Dynamic Stability of Markets

*Antonio Foglia*

- A market view of different intermediaries: comparing banks and hedge funds
- Some unintended consequences of regulation that impact markets
- Towards a better market infrastructure
- Restoring Financial Confidence
- Epistemic Conclusion

# A market view of different intermediaries: comparing banks and hedge funds:

- Balance Sheet Structures
- Failure dynamics

# INSOLVENCY RISK

## WHY IS CAPITAL NEEDED?

Capital is needed to absorb losses before they affect other liabilities and cause insolvency.

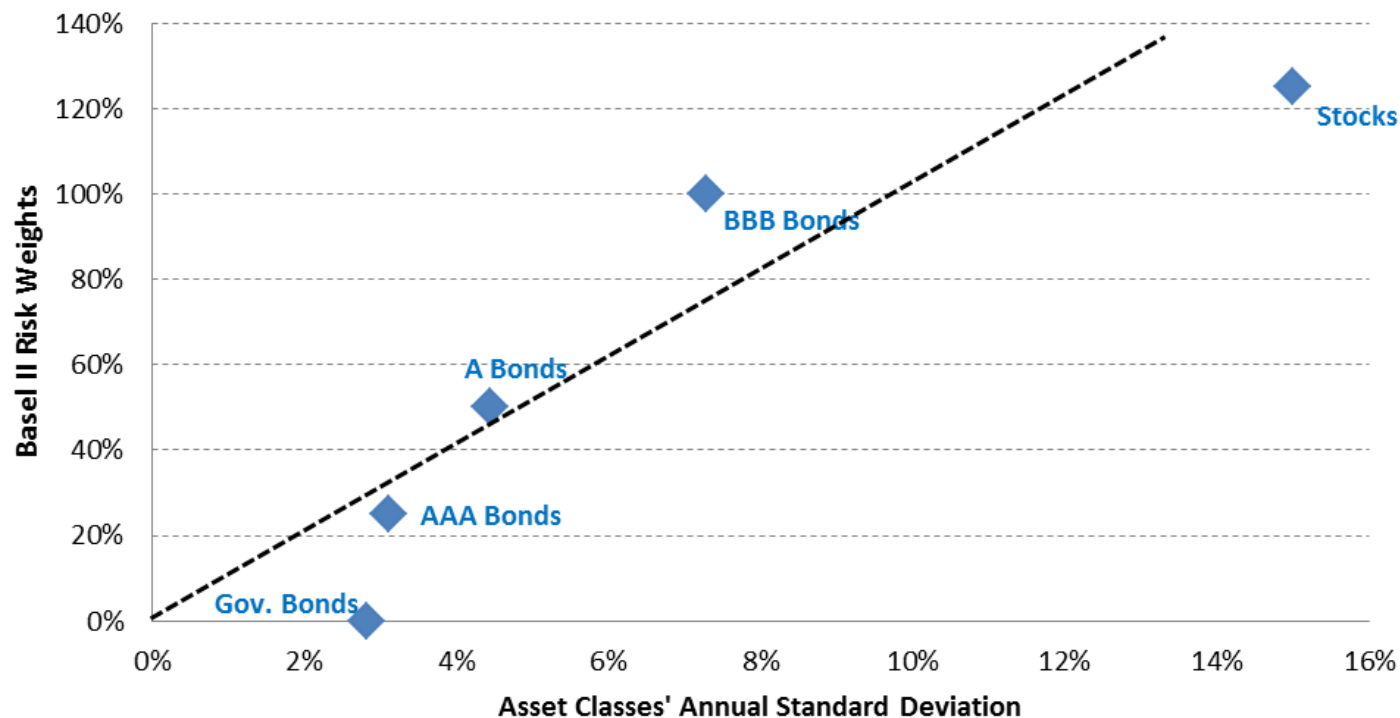
The market will only finance institutions that are solvent on a mark-to-market basis, not on the institution's hypothesis about the future.

## HOW PROBABLE ARE M-T-M LOSSES?

For normally distributed returns, there is a 50% probability of encountering losses higher than 1 annual standard deviation every 4 years, and of suffering losses larger than 2 annual standard deviation every 30 years.

# RISK WEIGHTING ASSETS

- Basel's Bank Capital Requirements are mainly based on Risk Weighted Assets
- Every asset class is assigned a risk weight either by the regulator (Standard) or by banks' internal models.
- Basel II Standard Risk Weights were already broadly coherent with a M-T-M risk framework.



# CAPITAL AND RISK WEIGHTED ASSET

|  | Gov Bonds | AAA Bonds | A Bonds | BBB Bonds | Stocks |
|--|-----------|-----------|---------|-----------|--------|
| Annual StDev   | 2.8%      | 3.1%      | 4.4%    | 7.3%      | 15.0%  |
| Basel II - Risk Weight Coeff.                                      | 0%        | 25%       | 50%     | 100%      | 125%   |
| Basel II Minimum Capital   | -         | 2%        | 4%      | 8%        | 10%    |
| Basel II - Allowed Leverage  | $\infty$  | 50        | 25      | 12.5      | 10     |
| Basel III Minimum Capital (including capital buffers of 5% of RWA) | -         | 3.3%      | 6.5%    | 13%       | 16.3%  |
| Basel III - Allowed Leverage                                       | $\infty$  | 30        | 15      | 8         | 6      |

While the risk weighting scaling is broadly coherent with price volatility scaling, Basel requirements at around only one annual standard deviation of the assets they refer to is perplexing. And this is before exploiting the benefits of diversification and considering fat tails risk.

# A SAMPLE BANK BALANCE SHEET 1/2

## ECB Stress Test Sample - End 2013

|                           |       |
|---------------------------|-------|
| Equity/RWA (Tier 1 Ratio) | 11.1% |
| RWA/TA                    | 40%   |
| Leverage                  | 22.5  |

|                       | <i>Nominal</i> | <i>Basel II coeff.</i> | <i>Risk Weighted</i> |
|-----------------------|----------------|------------------------|----------------------|
| <i>Stocks</i>         | 337.50         | @125%                  | 421.9                |
| <i>AAA Bonds</i>      | 1912.50        | @25%                   | 478.1                |
| <i>Tot Assets</i>     | 2250           |                        | 900.0                |
| <i>Tier 1 Capital</i> | 100            |                        |                      |

A typical bank has a portfolio that has the same risk as one leveraged 3.4x in equities and 19.1x in AAA bonds. Other than in regulated banks, portfolios with so much risk do not exist because they would not survive long and hence the market would not fund them.

# A SAMPLE BANK BALANCE SHEET 2/2

Simplifying assumptions:

- No risk weight for other risks (operational etc)
- BUT no benefit from diversification, which usually cuts by about 40% RWA in banks' models

Diversification benefits and dynamic risk control suffer from fallacy of composition that makes them systemic problems.

Some consider the goodwill associated with a banking licence as an important hidden asset. But this also assumes a bank is allowed to continue operations through taxpayers' funding when considered potentially insolvent by the market. It happened in the Financial Crisis but should not happen again.



# A SAMPLE HEDGE FUND BALANCE SHEET

| <b>Sample Aggressive HF Balance Sheet</b> |                  |                    |            |
|---|------------------|--------------------|------------|
|   | <b>Positions</b> | <b>Basel II RW</b> | <b>RWA</b> |
| <b>Stocks Long</b>                        | 120              | 100%               | 120        |
| <b>Stocks Short</b>                       | 60               | 100%               | 60         |
| <b>Stocks Net</b>                         | 60               |                    |            |
| <b>Gov Bond , 8y duration</b>             | 100              | 0%                 | 0          |
| <b>Corp Bond BBB 3y duration</b>          | 30               | 100%               | 30         |
| <b>Foreign currency</b>                   | 50               |                    |            |
| <b>Interest rate risk</b>                 |                  |                    | 29.0       |
| <b>Currency risk</b>                      |                  |                    | 62.5       |
| <b>Total Assets</b>                       | 310              |                    |            |
| <b>Total Risk Weighted Assets</b>         |                  |                    | 302        |
| <b>Equity</b>                             | 100              |                    |            |

|                          |       |
|--------------------------|-------|
| <b><i>Equity/RWA</i></b> | 33.2% |
| <b><i>RWA/TA</i></b>     | 97%   |
| <b><i>Leverage</i></b>   | 3.1   |

Minimum required capital according to Basel III (13% of RWA including add-ons) would be 39.3 only. At 100, an aggressive HF has 2.5x the minimum capital prescribed to banks and 3.5x the capital banks currently have.

# AN AGGRESSIVE HF WOULD HOLD AT LEAST TWICE AS MUCH CAPITAL AS A BANK

|                                  | <b>Bank</b> | <b>HF</b> |
|----------------------------------|-------------|-----------|
| <i>Equity/RWA (Tier 1 Ratio)</i> | 11.1%       | 33.2%     |
| <i>RWA/TA</i>                    | 40%         | 97%       |
| <i>Leverage (TA/Eq)</i>          | 22.5        | 3.1       |
| <i>Capitalisation (Eq/TA)</i>    | 4.4%        | 32%       |
| <i>Assets' Volatility</i>        | 4-6%        | 10-15%    |

Banks, also under Basel III, will have capital equal to only roughly one annual standard deviation of their assets. This gives bank a 50% chance of becoming insolvent every 4 years.

Aggressive HF have 2-3 annual standard deviation of capital at least.

# THE IMPORTANCE OF FAILURE

The economy is a complex dynamic system populated by agents with imperfect understanding and prone to error.

In such an environment, failure is an inescapable part of human progress and knowledge accumulation. Early recognition and correction of mistakes improves resilience, as do buffers and shock absorbers such as bank capital or social safety networks.

Failure must be built into the governance structure of a world characterised by intrinsic fallibility and radical uncertainty.

Dynamic resilience of the system can't be achieved through static robustness of the parts.

# HEDGE FUNDS FAILURES

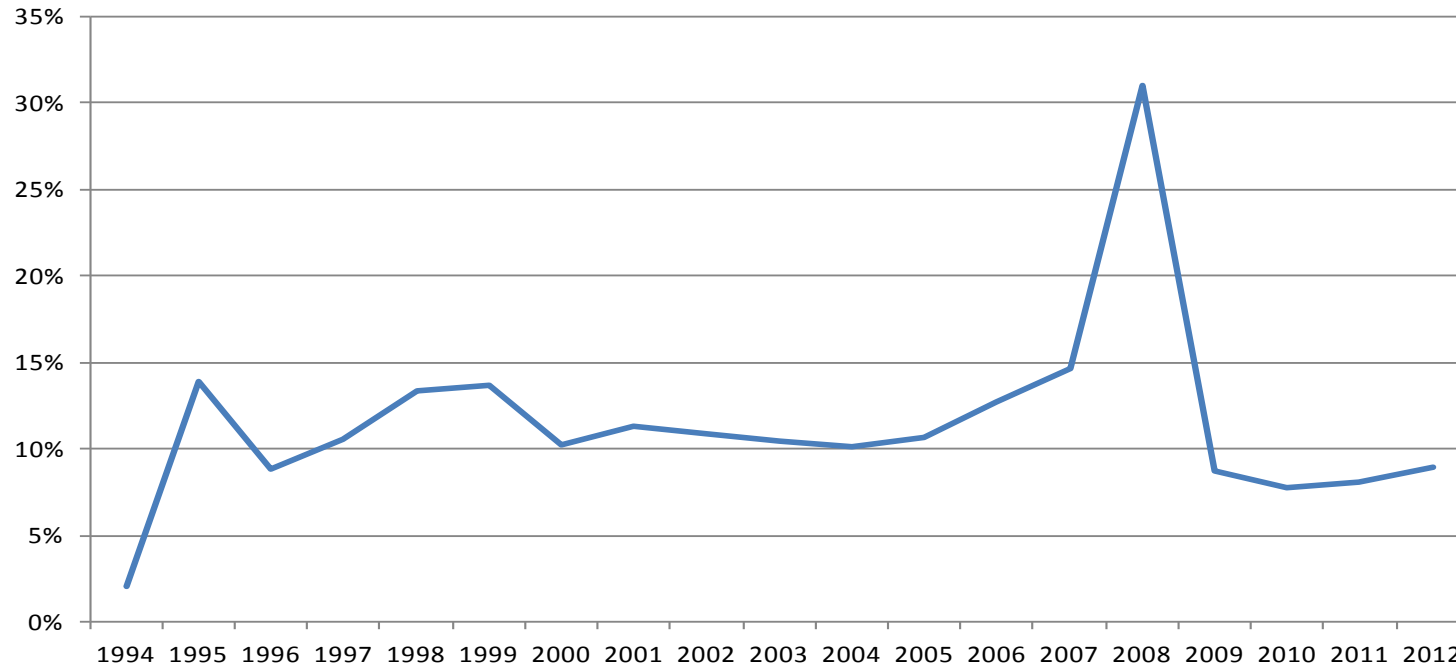
Failure, among HF, is defined as funds ceasing to exist. This “Attrition” usually occurs simply because returns don’t match investors’ expectation.

It very rarely occurs because of an insolvency. Notable exemptions were LTCM (1998) and Peloton (2009) which were among the very few HF that allowed their risk to balloon towards banking levels.

In a crisis, HF fail because disappointed investor redeem entirely after losses exceed expectations. This happens when a fund loses 3-4 times its annual standard deviations. An aggressive HF with a 12% annual standard deviation will probably be redeemed to oblivion if it suffers a drawdown of -50% or so.

# CREATIVE DESTRUCTION

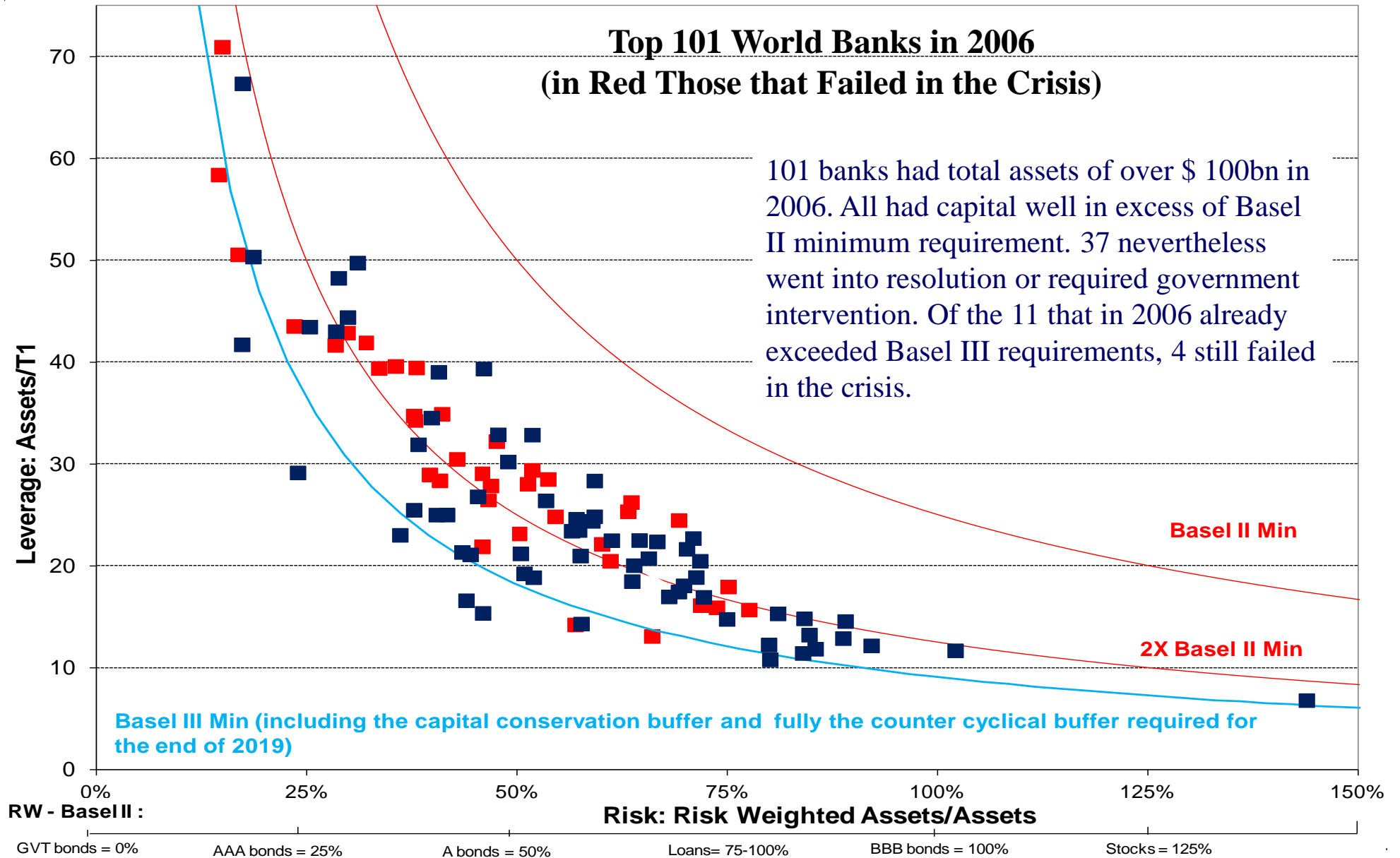
## Hedge Fund Attrition Rate



Note: Attrition rate is the % of funds in a database that disappear each year, thus overestimating the actual shutdown rate. Source: CISDM (from 1994 to 2009), HFR (from 2010 to 2012).

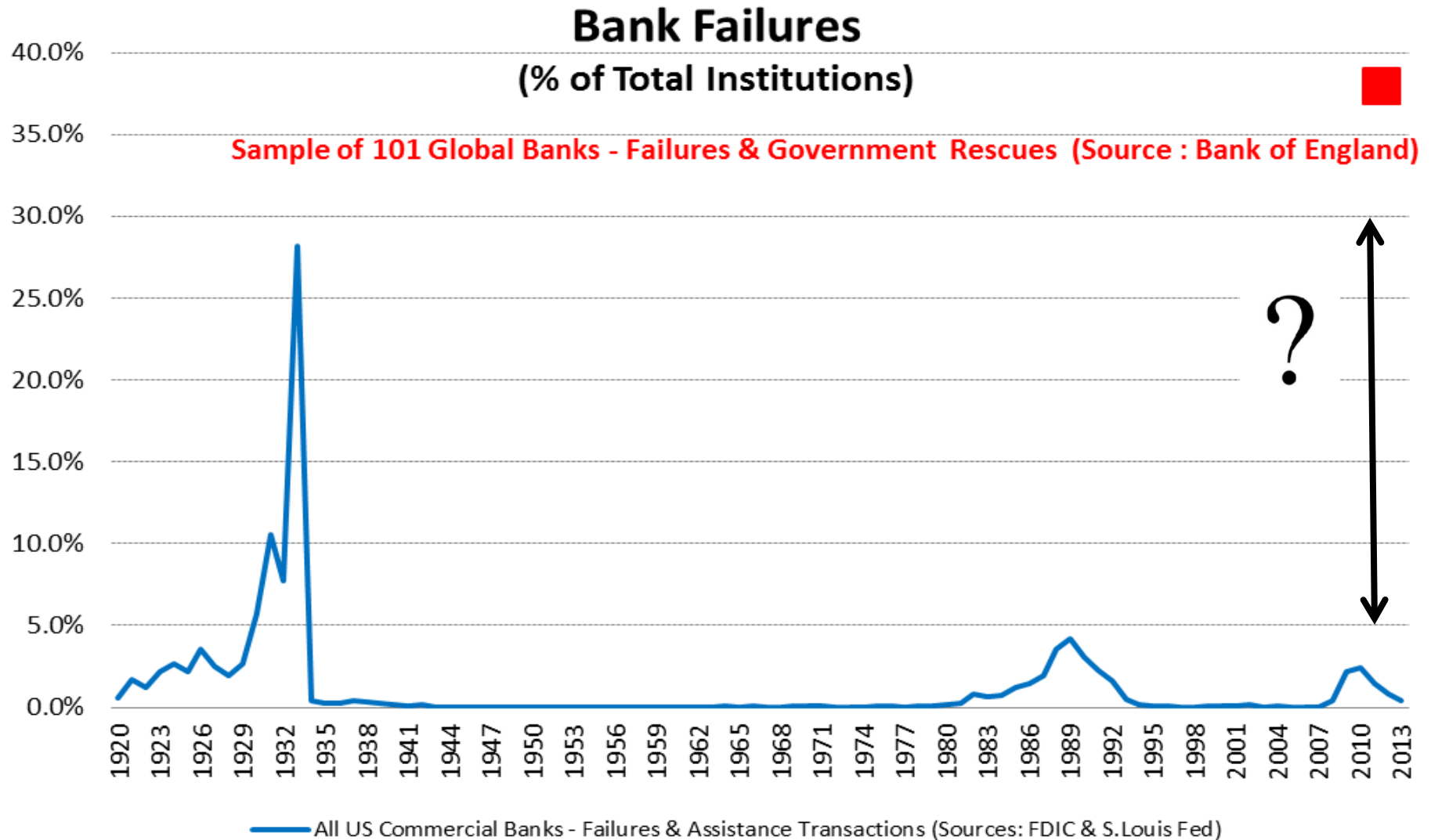
Failure among HF is a frequent event that should never have systemic consequences (LTCM did).

# FAILURE AMONG BANKS



Source of Data : Bank of England (A. Haldane: The dog and the frisbee, 2012)

# DISTORTING CONSERVATISM



Failure is a matter of definitions...

# BANK FAILURE DEFINITION

“The solvency of a bank depends on whether the value of its assets, *if held to maturity*, is sufficient to meet its obligations to depositors and holders of other bank debt” (John Vickers, “Some Economics of Banking Reform” Dec, 2012 – emphasis added).

If banks are to rely on markets, rather than taxpayers, for their funding, they must remain solvent on a mark-to-market basis.

The fuzzy and unworkable concept of “value if held to maturity” relies on estimates made by economic agents that are bound to be even more biased than the market (the management that brought the bank in trouble, the authority whose supervision failed).

A butterfly effect: an apparently small mistake in the regulator’s definition of bank solvency has triggered the biggest financial hurricane in 80 years.



# Some unintended consequences of regulation that impact markets:

- Distracting the priorities
- Barrier to Entry
- Driving business models

# DISTRACTING FROM PRIORITIES

- The survival of Board Members and Top Management depends on compliance with rules and regulations.
- Boards (and other top governance bodies) overwhelmingly deal with rigid agendas dictated by the regulatory framework.
- The business risk is assessed essentially in terms of its distance from regulatory prudential speed limits. As prudential rules turned out to be grossly wrong, the banking system crashed unaware of its own risk and without breaking any rule.
- Drivers distracted by way too many sign posts, are likely to miss the turn and crash.



# BARRIER TO ENTRY

- Markets dynamic stability depends crucially on the bio-diversity of agents but businesses are currently constrained by regulation within uniform models.
- Experimenting with new businesses models and products is crucial to innovation. Many will fail. Small idiosyncratic failures are not systemically threatening.
- In the last 15-20 years regulatory related cost have increased the minimum size to reach breakeven for a new financial start-up (fund manager, bank) by about 10 x.
- This size might be still considered low by supervisors looking to minimize the number of actors they must oversee but is unfortunately way beyond what might be achievable by young entrepreneurs willing to try.
- The previous Foglia generation in regulated financial business “seeded” at least 3 successful competitors. The current generation basically none. The unregulated HF business is, again, a successful opposite model.

# **DRIVING BUSINESS MODELS: SHIFTING BANKS PRIORITY FROM FUNDING TO RETURN ON TARGET REGULATORY CAPITAL**

- Under Basel II, minimum regulatory capital was not a constraint on business. The way to increase return on equity was to increase assets. Funding was hence a priority and banks engaged in low risk, low return business that provided exploitable funding.
- After the crisis, capital requirements have become a constraint, particularly as the banking system anticipates correctly further tightening of rules (TLAC). Funding, instead, became plentiful with Central Banks' offering it.
- The strategic objective of banks is becoming to achieve a return on target regulatory capital higher than the cost of raising that capital (still around 10%).
- Many traditional low risk banking services do not offer a return on target regulatory capital (after tax and bonuses) high enough and are being discontinued.
- Recent examples include: Credit Suisse withdrawing from prime brokerage, banks closing down correspondent and clearing relationships, mispricing of almost risk free services.

# Towards a better market infrastructure

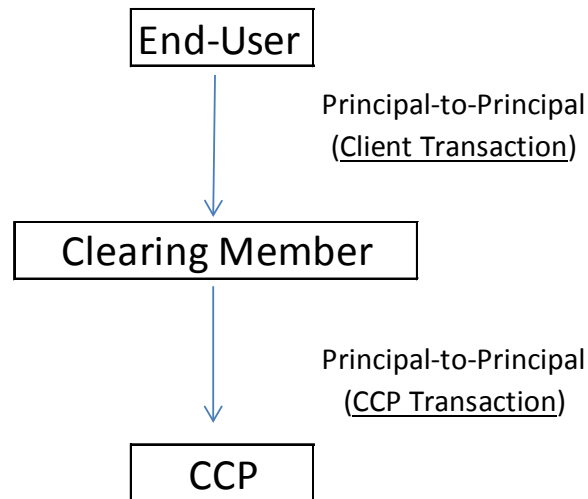
- Taking credit considerations out of trading
- Competing central clearing counterparty models
- Misunderstanding Shadow Banking
- Beware Asymmetric Products
- Credit flows: a demand or supply issue?
- New Credit Channels

# CREDIT DIFFERENCES LEAD TO OLIGOPOLISTIC TRADING

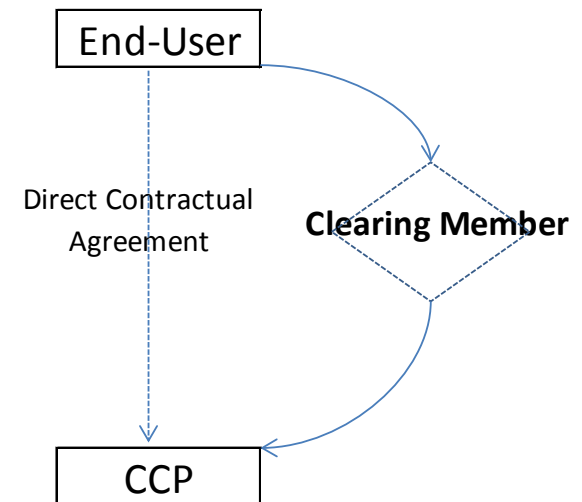
- Markets prefer to trade on a forward basis as it facilitates leverage. Futures and derivatives prove it.
- Forward settlement of transactions brings about counterparty credit risk.
- In unregulated OTC markets, trading will gravitate towards the intermediaries with the best credit: the Too Big To Fail are by definition, but not by merit, the best credits and, as fragile hubs of all trading, become Systemically Important Financial Institutions (SIFI).
- Concentrating trading on a handful of SIFI intermediaries gives them a sample of orders large enough to make market making indistinguishable from front running. This also explains why Goldman Sachs, Bank of America, Morgan Stanley, etc. can achieve quarter after quarter of “trading” profits without losing in any single day, which statistically should be almost impossible.
- A 2-3% market share might offer a statistically significant sample sufficient to engage in front running activity. We probably need at least 50-100 roughly equally large intermediaries, not half a dozen SIFIs.
- (Self)regulated Exchanges had understood long ago that all market participants must have equal credit to improve price discovery and avoid concentration. Margining and centralised clearing historically solved the credit problem.

# CENTRAL CLEARING COUNTERPARTY MODELS

## “Principal-to-Principal” Clearing Model (EMIR)

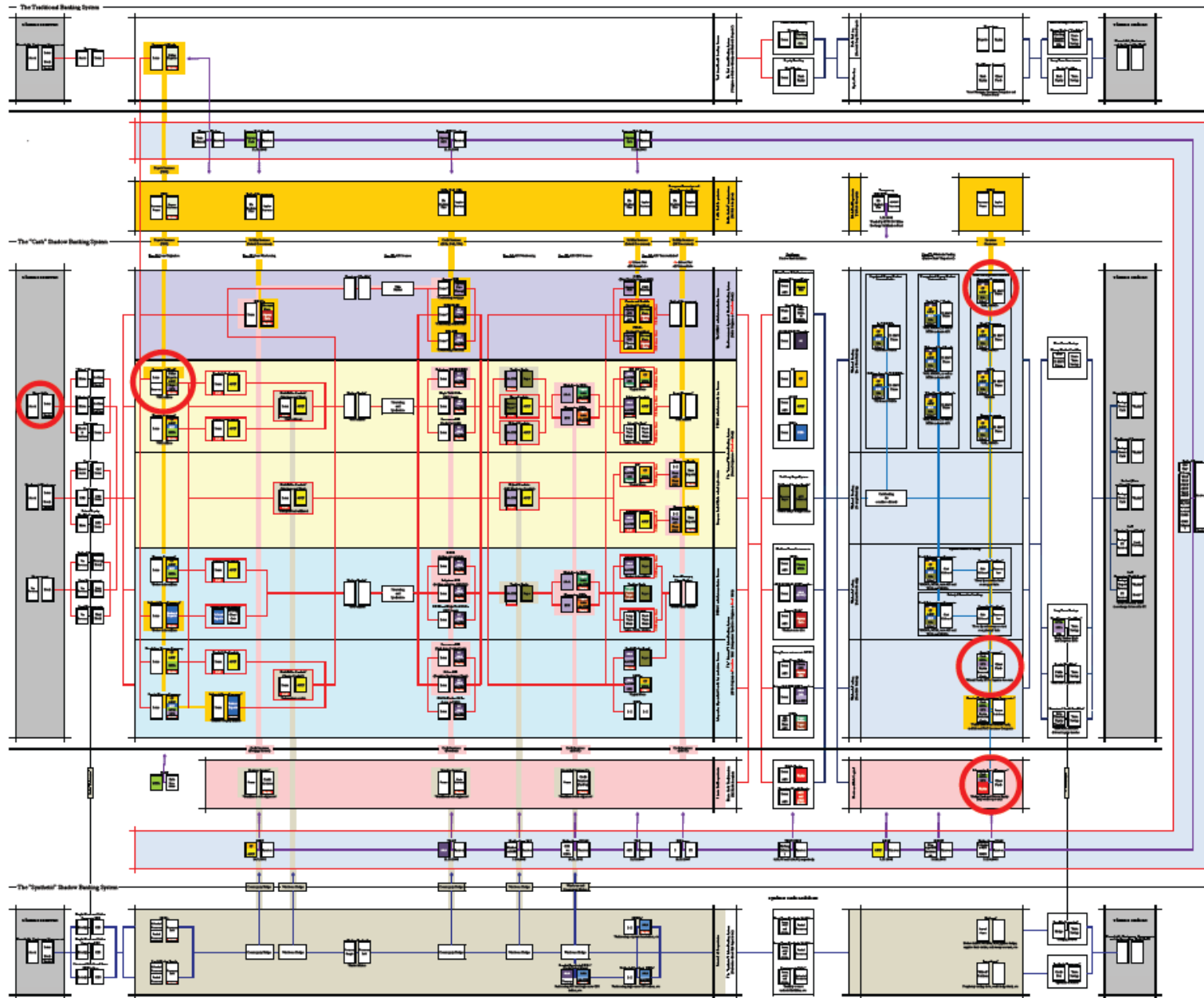


## “Agency” Clearing Model (FCM Model)



- The EU’s Principal CCP model, unlike the US’s Agency model, leaves end users exposed to the credit risk of the clearing member. This does not solve the key problem that led to unhealthy OTC markets concentration: nobody has a better credit merit than TBTF institutions
- After lobbying successfully for the ‘Principal’ model, creating TransAtlantic strains, banks in the EU are now discovering they are no longer interested the low risk clearing member business that was a source of funding but has a low return on regulatory capital.

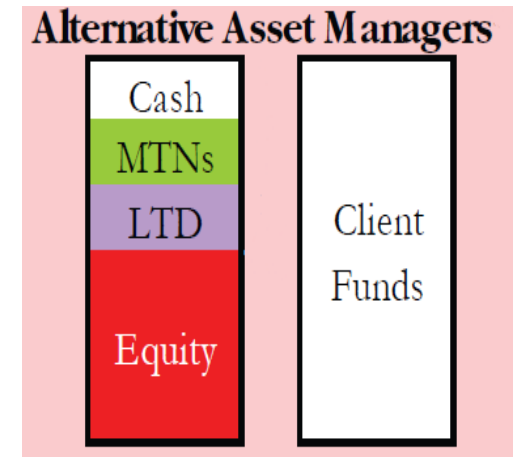
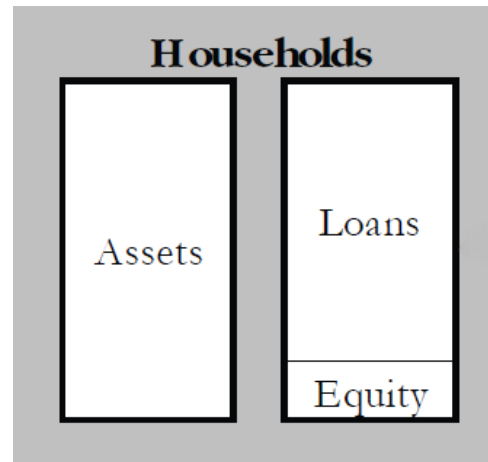
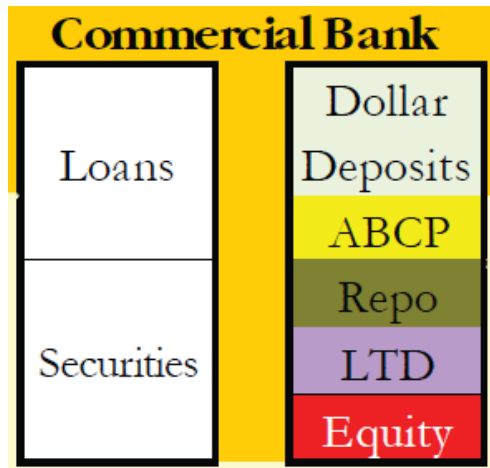
# NY FED'S VIEW OF THE SHADOW BANKING



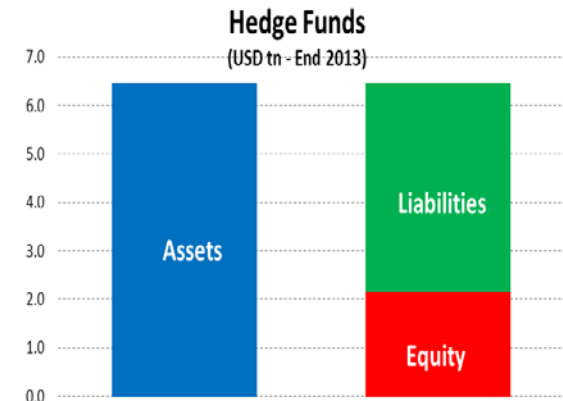
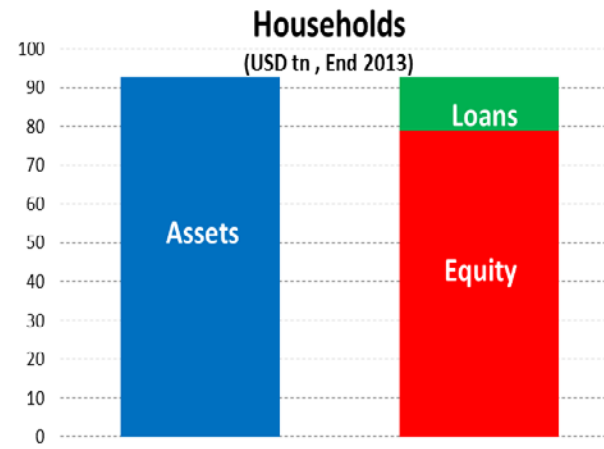
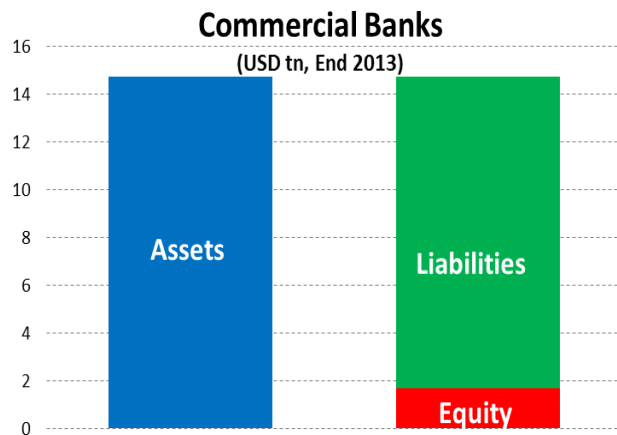


# NY FED MISUNDERSTANDS REALITY (1/2)

**NY Fed View**

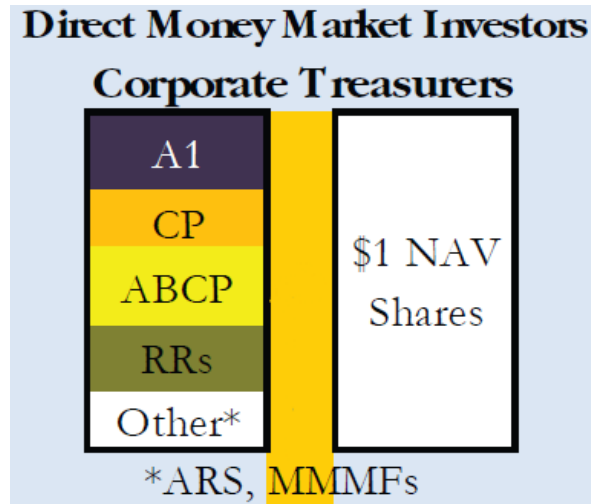
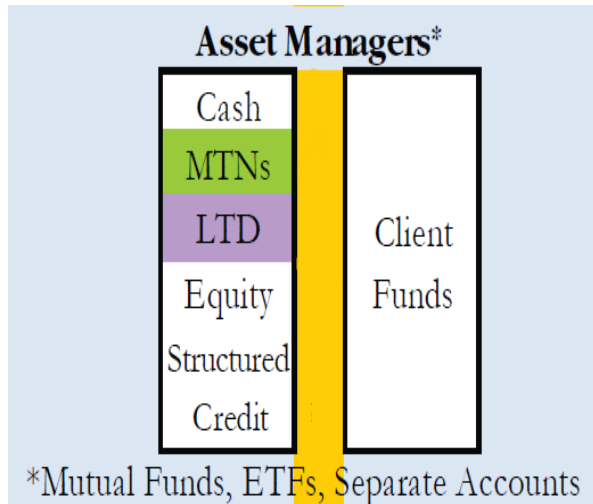


**Reality**



# NY FED MISUNDERSTANDS REALITY (2/2)

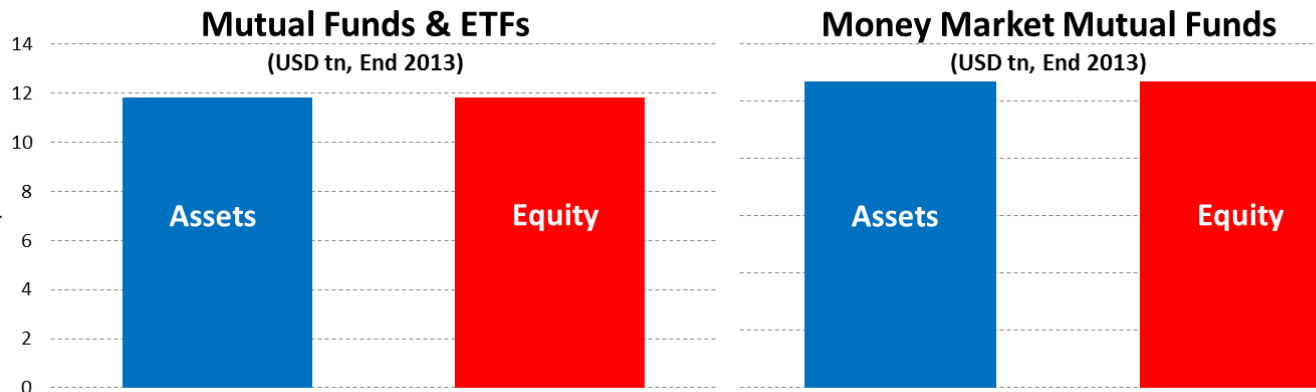
**NY Fed View**



“The second reform proposal is to institute capital requirements for money market funds, similar to the capital requirements imposed on banks (see McCabe, 2011). Capital requirements move the default barrier of the funds, allowing some losses in their portfolios without triggering bankruptcy.”

[First proposal: variable NAV but says these suffered runs as well. Third is two share classes, with liquidity requirements]

**Reality**



Source: Financial Stability Policies for Shadow Banking, Tobias Adrian, Federal Reserve Bank of New York Staff Reports, no. 664 February 2014

# NOT ALL PRODUCTS MIGHT BE TRADABLE

- Credit Default Swaps sellers are writers of options and naked writing of options requires careful margining (and has historically been a fatal source of funding).
- The S&P500 may move up or down by 50% or so in a year, and will do so in relatively small increments that makes appropriate margining possible. CDS may go from 1% to 100%, a 3 orders of magnitude move, and will do so in gaps, making reasonable margining almost impossible.
- A reasonable clearing house should ask sellers of CDS margins so high that the product would lose its appeal.
- This is just fine, since sellers of protection (those who should pay the margin, but currently don't) are probably using the product as a funding mechanism and are not properly accounting for the risk they run, just as AIG did. Given the shape of the distribution of credit returns, appropriate margin or accounting might be impossible.
- When overused, asymmetrical returns products, like options, tend to skew the return profile of the asset class they refer to, by creating dangerous feedback loops. Portfolio insurance in the 1987 NYSE crash is a case in point. Open interest in asymmetrical products should be disclosed and monitored. The amount of Credit Default Swaps outstanding versus the amount of credit risk is another example.

# RESTARTING CREDIT FLOWS AND INVESTMENTS

- SMEs lament banks are not lending: a supply issue?
- Banks lament worthy takers are not borrowing: a demand problem?
- Credit stagnation also in unstressed lending markets, such as France, points to a demand issue.
- Historically credit in Europe has apparently been at least 1-2% cheaper than in the US for SMEs of similar credit worthiness.
- Under-capitalized SMEs are unlikely to see entrepreneurs increasing their commitment now also because owners have lost, through fiscal transparency, any possibility of diversifying any of the underlying sovereign risk they run.

# NEW CREDIT CHANNELS: CROWDFUNDING, P2P LENDING

- Small, but growing fast
- Too early to tell winning models
- Credit merit databases as discipline enforcers?

## Crowdfunding models

**DONATION-BASED CROWDFUNDING**  
Individuals donate small amounts to meet the larger funding aim of a specific charitable project while receiving no financial or material return in exchange.

**EQUITY-BASED CROWDFUNDING**  
Sale of a stake in a business to a number of investors in return for investment, predominantly used by early-stage firms.

**PEER-TO-PEER (P2P) BUSINESS LENDING**  
Debt-based transactions between individuals and existing businesses which are mostly SMEs with many individual lenders contributing to any one loan.

**PEER-TO-PEER (P2P) CONSUMER LENDING**  
Individuals using an online platform to borrow from a number of individual lenders each lending a small amount; most are unsecured personal loans.

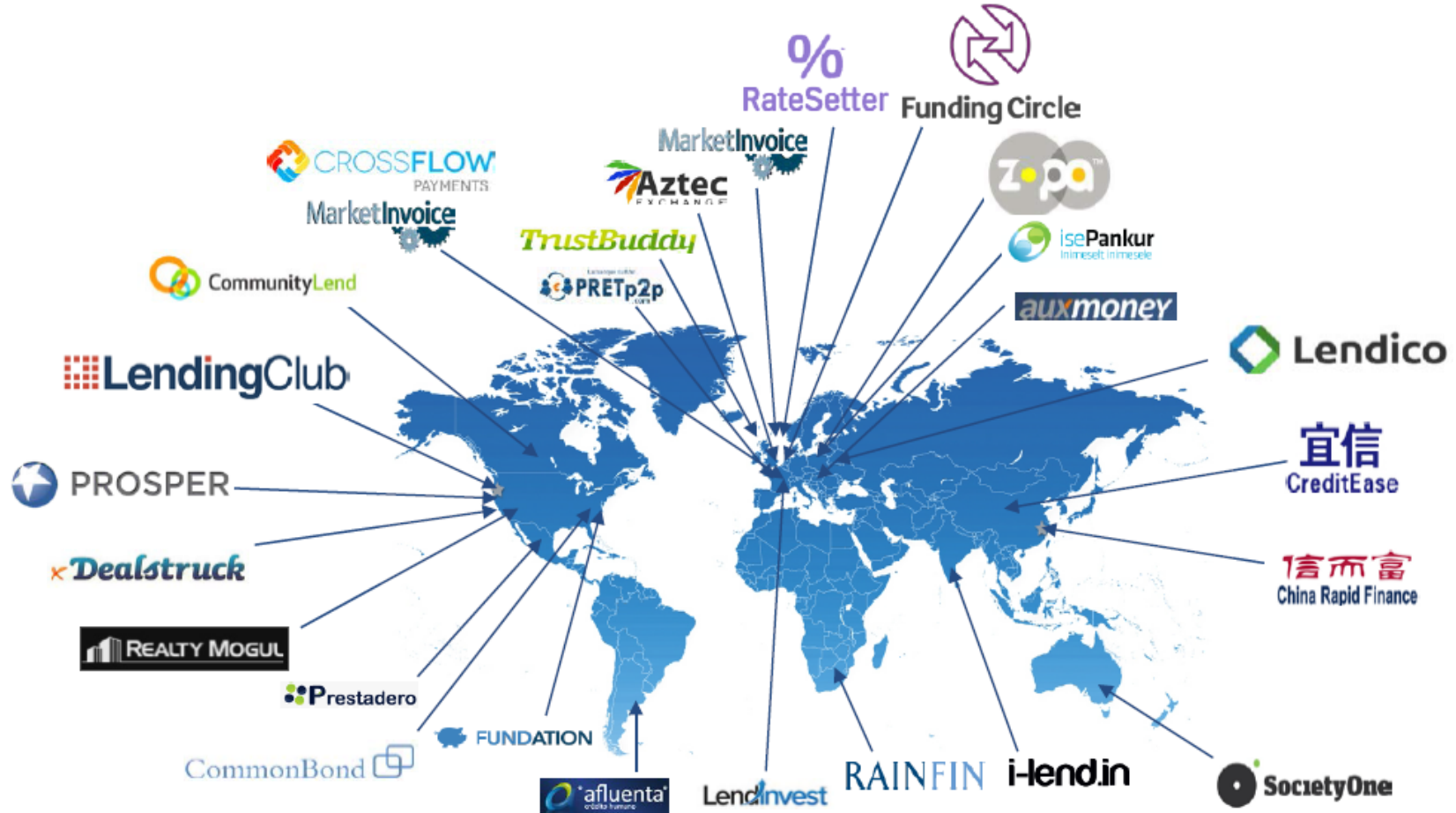
**REWARD-BASED CROWDFUNDING**  
Individuals donate towards a specific project with the expectation of receiving a tangible (but non-financial) reward or product at a later date in exchange for their contribution.

## Gross flows and growth of UK crowdfunding

| The crowdfunding market by platform 2014 | Average growth rate 2012-2014 |
|--|-------------------------------|
| P2P business lending £749m               | ↑ 250%                        |
| P2P consumer lending £547m               | ↑ 108%                        |
| Invoice trading £270m                    | ↑ 174%                        |
| Equity crowdfunding £84m                 | ↑ 410%                        |
| Community shares 34m                     | ↑ 95%                         |
| Rewards crowdfunding £26m                | ↑ 206%                        |
| Pension-led funding £25m                 | • 5%                          |
| Debt-based securities £4.4m              | ↑ 117%                        |
| Donation crowdfunding £2.0m              | ↑ 77%                         |

Source: David Bholat, BoE

# THE FUTURE OF GLOBAL LENDING?



"Peer-to-Peer lenders could eventually replace high street banks. At present, these companies are tiny, but so, a decade ago, was Google."

– Andrew Haldane, Bank of England 2012

Source: The Independent

Source: Marshall Wace, P2P Global Investments

# Restoring Financial Confidence

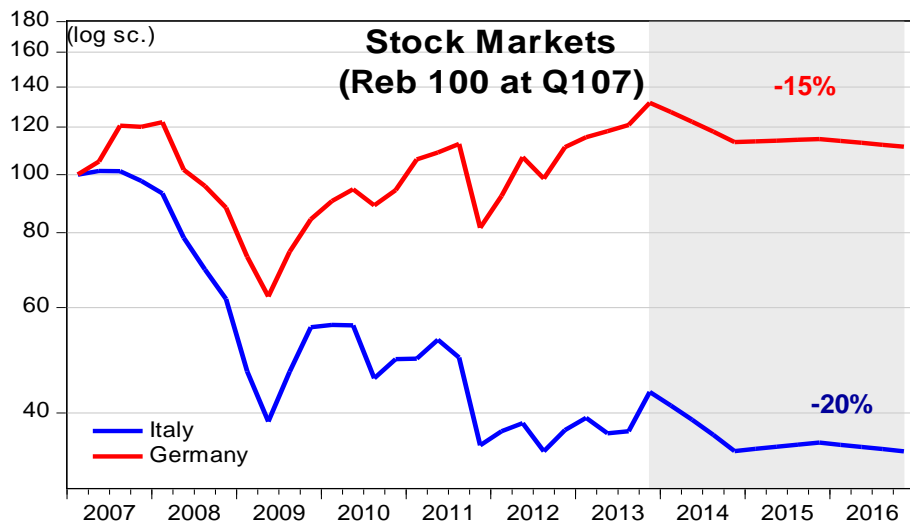
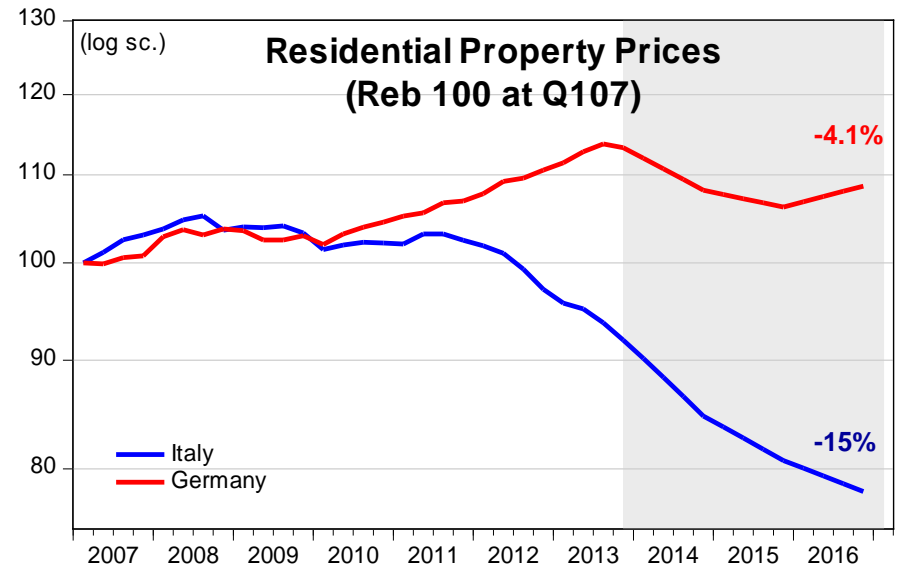
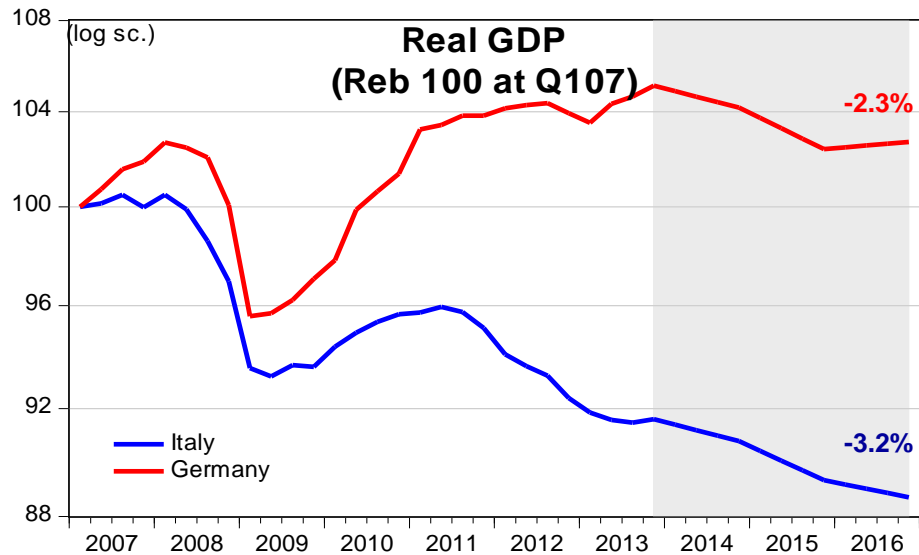
- Banks still dysfunctional: EU Stress Test
- Eurozone Unresolved
- Economic Policy Ineffective

# BIASED HYPOTHESIS...

- The AQR/ST hypothesis were set to obtain about 10% failings to prove the exercise credible. But not many more in order not to undermine the sector's and regulator's overall credibility.
- Only a plausible adverse scenario was tested, not a black swan.
- Asymmetric hypothesis across the Eurozone are unnecessarily pro-cyclical.
- For instance, results show German banks would likely not have survived the recent past that Italian banks have already endured, let alone the tougher Italian stress test.



# PROCYCLICAL HYPOTHESIS



Stress tested a credible adverse scenario, not a black swan.

Procyclical stress test assumptions miss the point of the exercise entirely:

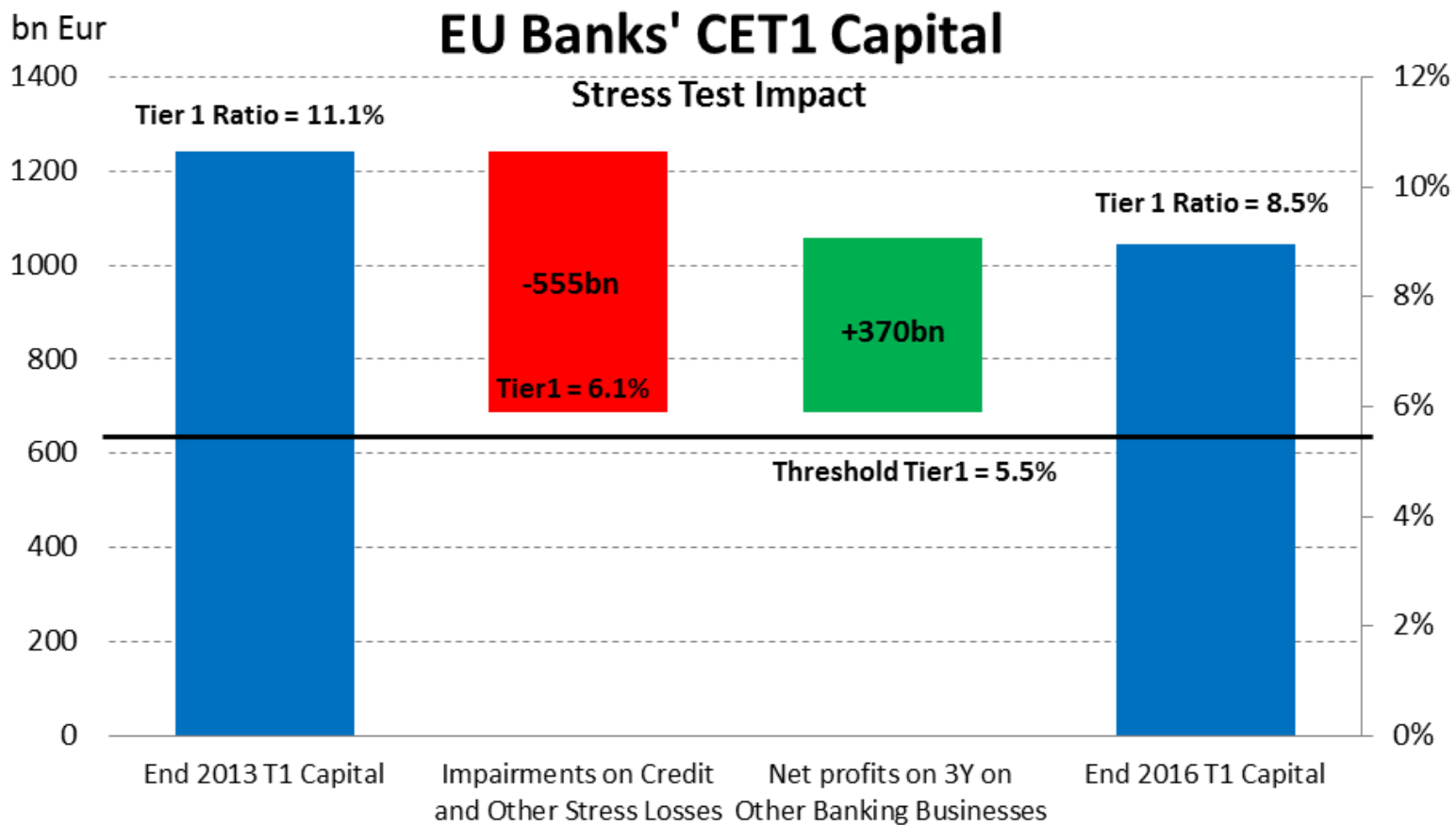
- a pat to the German banks that are fragile but standing tall thanks of their easy recent past but
- a slap to the more resilient Italian banks already on their knees due to post-crisis headwinds.

The results showed that all German banks would have failed in the environment that Italian banks endured and survived since 2008.

# ...STILL LED TO LARGER LOSSES THAN PERCEIVED...

- Stress Test looking over 3 years but the envisaged losses could be concentrated in a couple of quarters.
- After the stress test losses, banks would be too weak to finance in the markets having lost almost half their capital and remaining over 40x leveraged.
- Passing the stress test assures banks they will indeed receive ECB/Taxpayer support in case the downside scenario materialises.
- The Authorities are probably aware of this: expect higher prudential requirements (TLAC etc) for years to come.
- Not to curtail credit to the economy, Authorities should allow alternatives to banks to flourish, rather than spread questionable fears on misnamed “Shadow Banking”.

# LARGER LOSSES THAN PERCEIVED



After a hit that could happen in one or two quarters the banking system would be left with a Tier1 ratio of 6.1% only. This is a leverage of over 40x. Banks this weak would be almost insolvent and hence unable to refinance in the market and would have to rely on taxpayers' money again. Gains in the following 3 years on taxpayer funded operations would allow the banks to regain over half the losses.

# ...LEAVING DESIRABLE RESILIENCE A DISTANT GOAL

- At worst, the EU banking system was simulated as losing 550bn, equivalent to less than 2% of its €28tn assets.
- When viewed alongside Basel risk weighting scales, the severity of these simulated losses seems small.
- The EU stress test simulated losses that are estimated to be only one half an annual standard deviation of the assets banks own.
- Banks are still far from a level of resilience that would allow them to withstand natural market volatility and keep on funding without recourse to taxpayers.
- The 2007 – 2008 crisis was a 3 standard deviation event. Banks would lose 2.5 – 3x their current capital should it ever happen again.
- The Fed Stress Test showed similar weakness in US banks when viewed this way.

# BANKS' RESILIENCE REMAINS A DISTANT GOAL

## The ECB Stress Test: Outcomes.

**STRESS???** WHAT STRESS???



# VENDOR FINANCING

In a currency area, such as the Eurozone, a net exporting country must accept as payment the liabilities of net importing countries.

Over time, the persistent accumulation of credits on net importers living beyond their means makes those credits become ever more vulnerable.

The accumulation of official reserves, or of Target 2 balances, shifts the risks of vendor financing to the public sector.

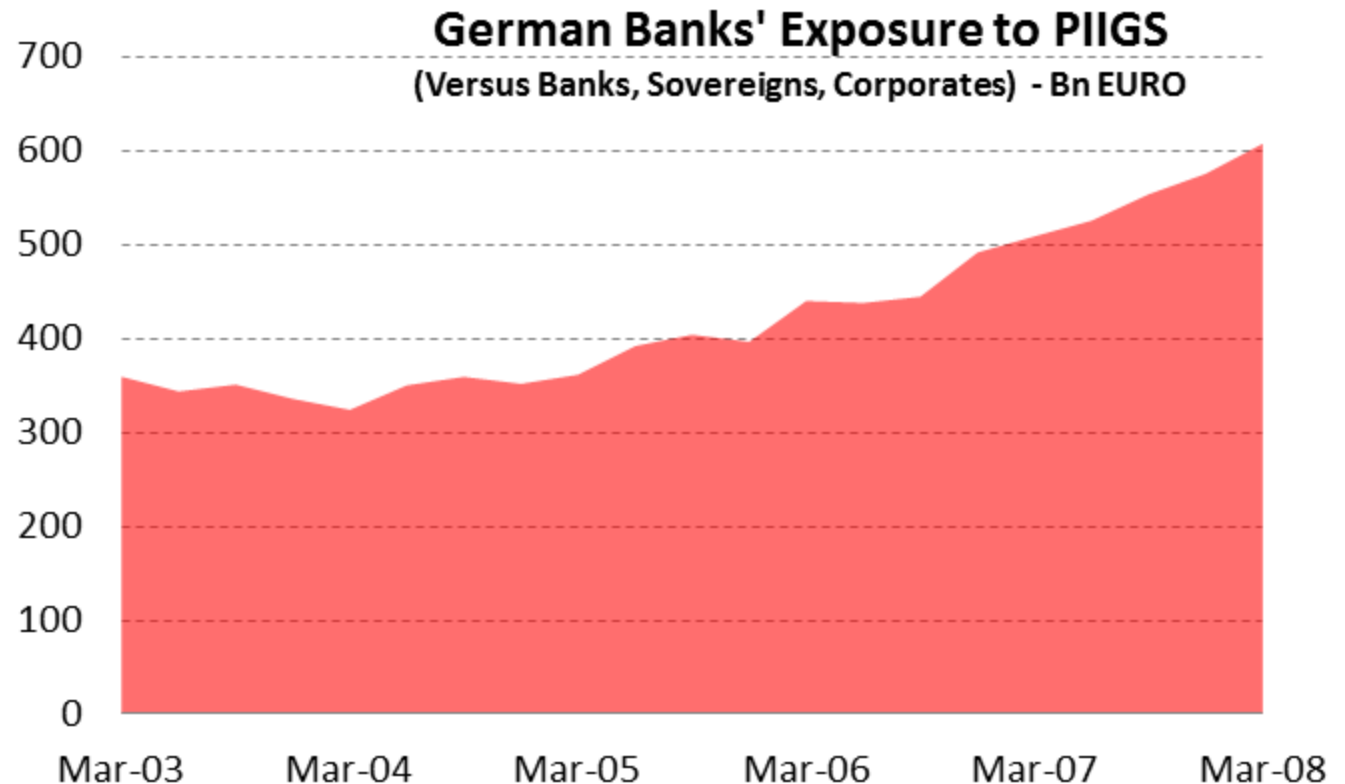
By hiding the risk, this transfer inhibits the private sector's self restraint and, in effect, subsidizes exports.

# ACCUMULATION OF CREDITS

Between 2003 and 2008 the German banking system accumulated around €300 bn of additional credits on the Periphery.

Roughly half of this growth was due to persistent current a/c surpluses (vendor financing), and half to the search for the higher yield available in the Periphery.

By 2008, the German banking system had accumulated €600 bn of credits on the Periphery, equal to over 1.5x its capital.

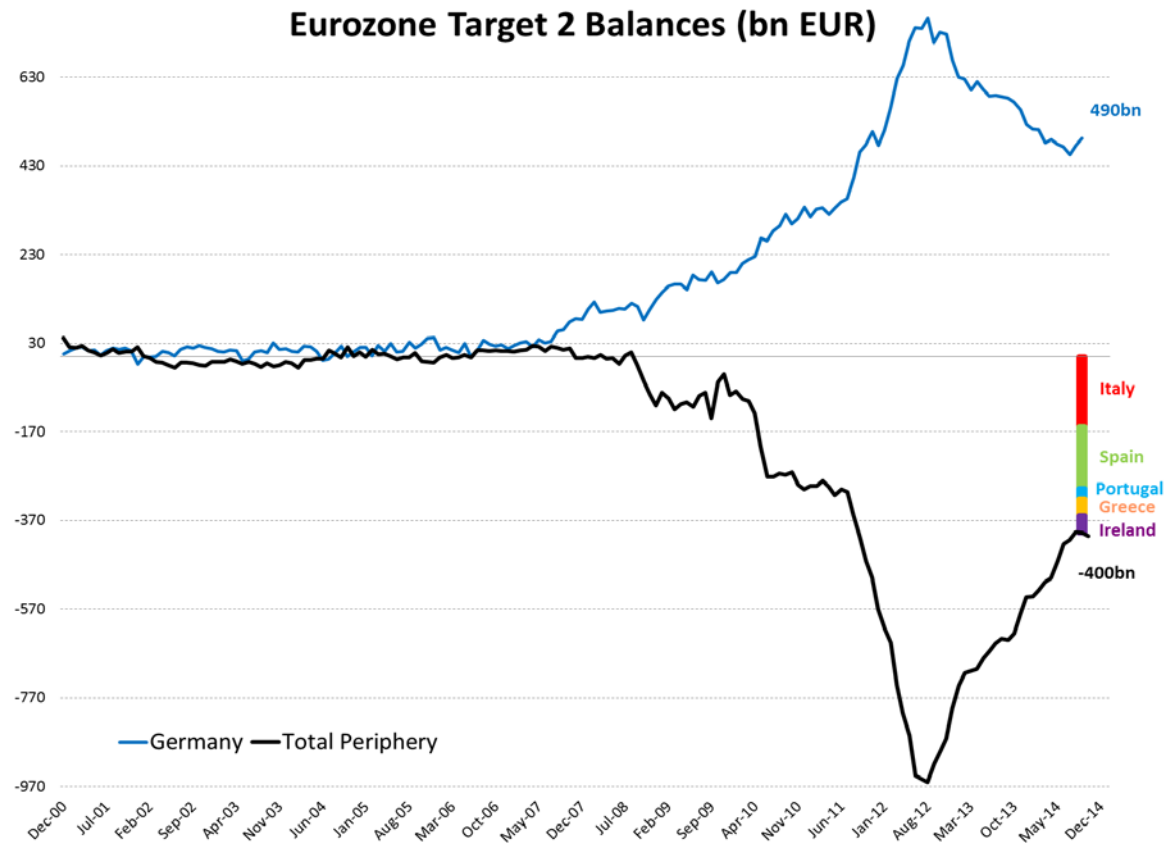


# RISKS ARE EXPOSED

With the onset of the financial crisis, the private sector became less willing to finance the Periphery.

Repatriation of bank credits on the Periphery was made possible by the intervention of the public sector as evidenced by the sudden increase of Target 2 balances.

The ECB's LTRO funds accelerated the process by providing Periphery banks with cheaper funds and encouraging repayment of more expensive and drying international interbank flows.

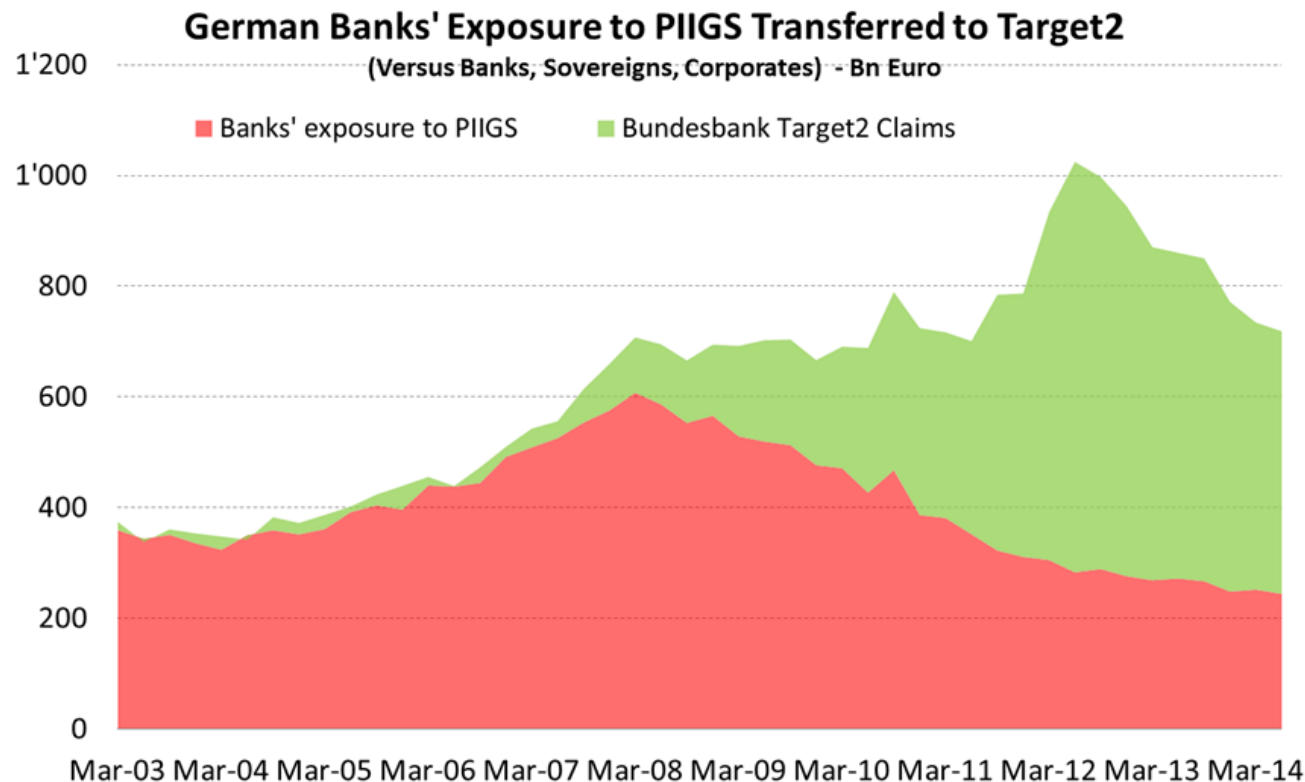




# €520 BN BAIL OUT OF GERMAN BANKS

Since the beginning of the crisis, the German banking system has been able to reduce exposure to the Periphery by about €520 (equal to 1.4x its capital) despite continuing (but reduced) current a/c surpluses.

The Bundesbank filled the gap and saw its Target 2 balances grow by the required amount.



# GERMANY MUTUALIZED ITS SOURING CREDITS

Target 2 allowed German banks to dispose of credits on the Periphery perceived as an increasing risk in favour of safer deposits at the Bundesbank.

The Bundesbank's Target 2 balance, though, is not a credit only toward the Periphery because it is guaranteed by all ECB shareholders.

Germany has in fact mutualized the souring credits it had accumulated on the Periphery (due in good part to its persistent current a/c surpluses) by replacing those with the much safer Target 2 balances.

Had the German private sector remained exposed to the Periphery, and its banking sector at risk of insolvency, German politicians would have been more lenient on Debtors, the natural solidarity between creditor and debtors would have emerged, and the risks of vendor financing would have been evident.

# OTHER EUROZONE ISSUES

- Debt / GDP larger than 70% in ‘foreign currency’ are historically unsustainable. Eurobonds are a must.
- PPI[G]S had better fiscal discipline since joining the Euro than Germany or France. Including unfunded government pension liabilities, German public finances are fare worse than Italy’s.
- German economic model delivered low private sector growth and negative real wages for 15 years despite massive foreign and public support.
- The fragmentation of banking is happening on both lending and deposit taking.
- Keynesian Fiscal spending can’t plug the demand hole: with 2-4% of GDP (a minimum for impact) one can roughly rebuild the whole highway system of a country. Mobilizing such resources on a useful time frame seems impossible in modern economies.
- Unless confidence returns, BCE money creation will end up in the liquidity trap. Hayek: “The more the state ‘plans’, the more difficult planning becomes for individuals”.

# Epistemic Conclusion

- A massive cognitive failure
- What Governance for the Markets?
- Learning from the Crisis

# AN ONGOING MASSIVE COGNITIVE FAILURE

- The economy is a complex dynamic evolving system populated by fallible agents with imperfect knowledge.
- Financial regulation and large financial institutions have become themselves complex systems.
- The financial crisis was caused by massive unavoidable cognitive failure by regulators and bankers.
- We need to switch to new paradigms to understand what happened, why it will happen again, and hopefully be more resilient when it will.
- Misunderstood financial permissivism caused the financial crisis.

# REGULATING FINANCIAL MARKETS

- Markets as complex evolving systems. Man made ecosystems and just as prone to potentially catastrophic changes
- Competition, not regulation, is the solution to cognitive limits and fallibility. Simplification helps. History is a great guide.
- Change in paradigm for financial stability: from the protection of intermediaries' static stability to the preservation of markets' dynamic functionality.
- Some key interacting variables:
  - Agents' degrees of freedom and responsibility (the importance of failure and biodiversity)
  - Agents' incentives (game theory, behavioural economics...)
  - Marginal returns' nature (beware increasing marginal returns)
  - Network architecture of agents' connections (beware hub & spoke)
- The dynamic properties of complex financial system (volatility, creative destruction) implies trade offs: long term emerging efficiency might require the acceptance of volatility over time frames conflicting with the desire of politicians, authorities and bankers to see their mandates renewed.

# THE OFFICIAL ANALYSIS OF THE CRISIS...

- “The bankruptcy of Lehman Brothers on 15 September 2008 turned what had previously been a crunch in the interbank market into an outright financial panic” → it was a liquidity rather than solvency crisis.
- “The crisis has revealed two deficiencies of the existing regulatory framework”:
  1. “the focus on [ex-post] crisis management”  
→ crisis prevention is doable and needed.
  2. “the focus on preventing distress at individual financial institutions [...] failed to capture the build-up of financial-system-wide risk”  
→ macro prudential supervisions is the solution.
- “Systemic risk arise from two sources”:
  1. “TBTF, too interconnected to fail” → Regulate SIFI differently.
  2. “Procyclicality of financial institutions collective behaviour”  
→ price stability mandate includes market prices.

[Quotes from a recent Central Banker speech]

## ...IS ENTIRELY WRONG

- Lehman was an insolvency, not liquidity crisis. 6 years after, the debt holders expect to recover ca 60% in the most favourable environment they could hope for. It is the revealed latent insolvency of the banking system that dried the interbank liquidity market up, not vice versa.
- Regulators failed in micro prudential supervision: half the big banks failed (BoE), none breached prudential rules ahead of failure. Having disastrously erred on a narrow mandate, why should they do better on a broader one?
- TBTF, too interconnected are real problems. Despite recognizing them, Authorities were unable to provide credible solution in 7 years. Market volatility arises from uncontrollable natural factors: the impact on long duration asset prices of small changes in expectations. Suppressing natural volatility pushes risk in the tails, not least by anesthetizing market participants to it.



# SUMMARY AND CONCLUSION

## Summary:

- 1) Heavily regulated banks guaranteed by their Sovereign create a fragile system and are obsolete.
- 2) Unregulated HF relying only on their own resources are a more robust system and foster innovation.
- 3) Unregulated Crowd Funding, P2P Lending Platforms etc are viable alternatives to banks in conveying credit to households and SME's.
- 4) Unregulated securitisation proved to be the way to originate, repackage and distribute credit risk (except where governments interfered, as with sub-prime mortgages)

## Conclusion:

**PLEASE DON'T ALSO HEAVILY REGULATE EVERY POSSIBLE ALTERNATIVE TO BANKING!**

Antonio Foglia is a London based Italian and Swiss Economist. He is Board Member and shareholder of Banca del Ceresio, a private bank in Lugano, Switzerland and of its subsidiaries in London and Milan.

After earning a degree in Political Economy from Bocconi University in Milan, he worked in Tokyo, New York and London to complete his training. He has been professionally involved in Private Banking and with Hedge Funds since the mid-1980's. In addition to co-managing several leading multimanager Hedge Funds, including Leveraged Capital Holdings N.V., the world's oldest offshore multimanager fund, and Global Managers Selection Funds, the largest Italian Fund of Hedge Funds, Antonio Foglia is or was also a director of several Hedge Funds, including George Soros' Quantum Endowment Fund.

Antonio Foglia is a member of the Swiss Society for Financial Market Research and of the Italian Financial Analysts' Association. He served three terms on the Foundation Board of the Swiss Finance Institute, is a member of the Scientific Committee of Italy's Confindustria and a Trustee of the Central European University.

Articles by Antonio Foglia appear on Italy's leading newspapers Corriere della Sera and il Sole 24 Ore.

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