Background

- The financial crisis highlighted several weaknesses in the financial system regulatory framework
- This led to twofold consequences, somehow possibly in conflict with each other:

1. in the attempt to avoid leaving potential risks uncovered, Regulators required Banks to have more granular and specific risk measurement systems in place

Higher complexity of the overall framework and of the applied methodologies

2. internal risk models (and resulting RWA) have been questioned by Regulators, academics and analysts because of their lack of transparency and disparate results across banks

Increase models' simplicity addressed as the only way to improve results comparability

Some bewildering positions are coming out from Regulators community…

The observed high level of RWA variance drove some new and radical positions among Regulators, in the trade off between **simplicity** and **risk sensitivity,** putting under discussion the overall internal modelling framework

"Complexity associated with the use of internal models, significant choice in the modelling of risk parameters and national discretions have contributed to material variations in risk weighted assets across banks….. "

"….the undue complexity of the Pillar 1 framework, by making it difficult to compare banks against the peers, may also be weakening the effectiveness of the market discipline provided by Pillar 3"

BCBS "The Regulatory framework: balancing risk sensitivity, simplicity and comparability" July 2013

"The combined complexity and opacity of risk weights generated by each banking organization for purposes of its regulatory capital requirement create manifold risks of gaming, mistake and monitoring difficulty….."

"… I believe we should consider discarding the IRB approach to risk weighted capital requirements"

D.K. Tarullo "Rethinking the Aims of Prudential Regulation", May 2014

"The financial system has become increasingly complex over recent years. Both the private sector and public authorities have tended to meet this complexity head on, whether through increasingly complex modelling and risk management strategies or ever-lengthening regulatory rulebooks. But this neither helped to predict, nor to prevent the global financial crisis."

Bank of England, Financial Stability Paper n.28 – May 2014

… industry instead is struggling against risk insensitive measures…

The last months have been characterized by an intensive discussion in the industry to support a risk sensitive approach to regulatory capital, grounded on internal models

- Risk management is by its very nature about risk sensitivity: simplicity should not be pursued as a value per se underestimating the impacts on loss of risk awarness
- the lack of risk discrimination due to excess of simplicity could increase risk in the system:
  - to earn the appropriate risk premium business must recognize different risks assumed and inherent cost of capital
  - a risk insensitive measure (such as the proposed leverage ratio) could generate incentives to increase higher risk, higher return assets avoiding then lower risk, lower return assets

The recognition of such drawbacks from a risk insensitive framework was at the basis of the need to overcome Basel I regulation and industry seriously hopes that the improvements brought in by Basel II are not wished away

… and against separation between regulatory and managerial measures…

A central point of discussion is on the possibility to reconsider the linkage between internal and regulatory models:

- a Basel II core principle is the requirement to embed internal risk measures into risk management practices to prevent regulatory arbitrage
- the same internal use is now being criticized as a source of complexity: regulatory models would have embodied the increasing complexity of banks' risk management models.

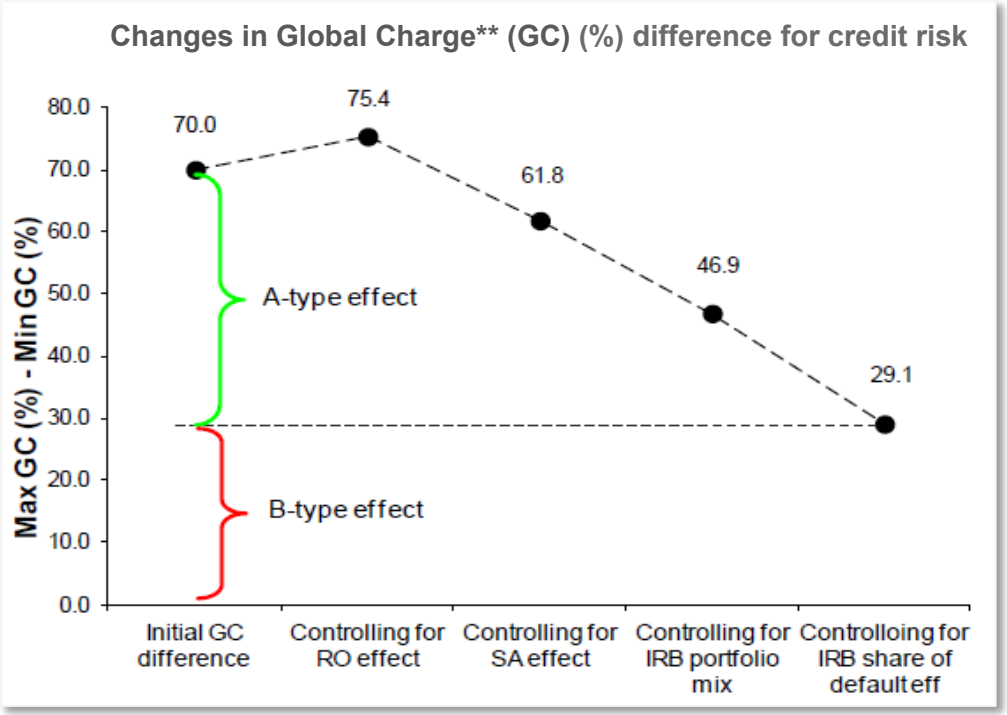
We withstand the proposal to fully disentagle regulatory and managerial measures

- *some adaptations of regulatory parameters could be recommended for managerial purposes (e.g. different calibration horizon)*
- *a complete separation between the two would be even potentially dangerous: investments in internal models not recognized for regulatory purposes would definitely decrease, lowering their quality and discriminatory power and causing possible mispricing and system instability.*

Is dismantling internal models the real solution for RWA volatility?

If the key issue is RWA variance, is it really the solution dismantling internal models?

Based on EBA review of the consistency of RWA in banking book*, at least 50% of the variance is due to balance sheet structure and different Basel II approach choice *(A-type effect)*. The remainder should be explained by differences in the underlying credit risk, in the supervisors approaches and banks modeling choices *(B-type effect)*



While only a residual portion of RWA volatility is clearly attributable to modelling, any discussion should also consider that

- *varying outputs across banks factor in different underlying portfolio risk profiles*
- *a certain divergency level is embedded into the internal modeling concept*

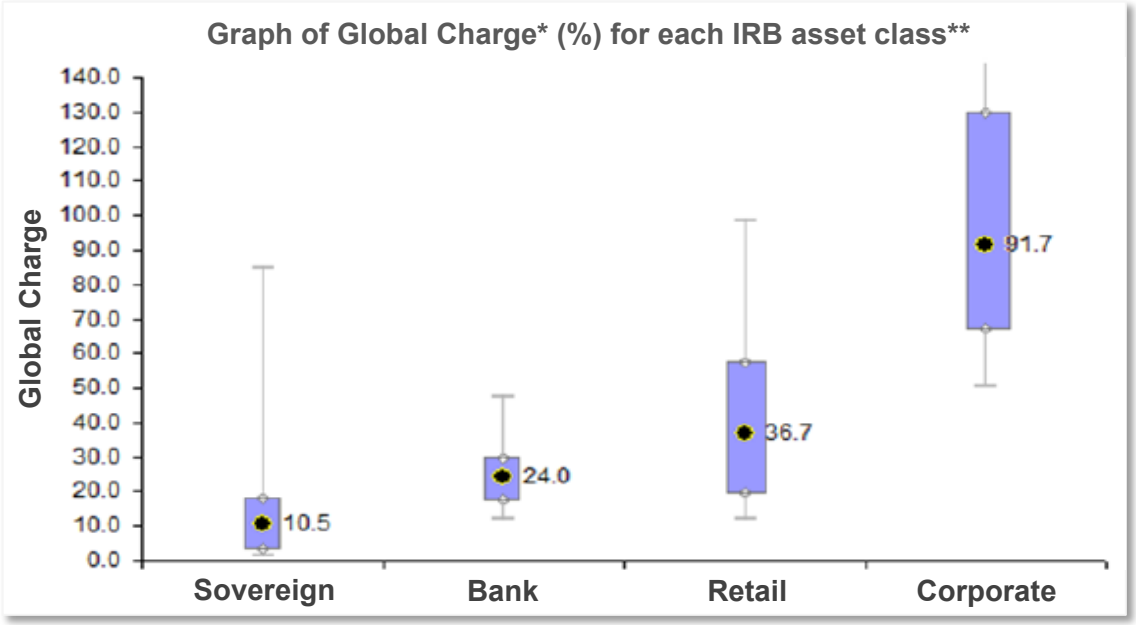
** Interim results of the EBA review of the consistency of risk-weighted assets – Top down assessment of the banking book, Febr.2013*

** Global Charge (GC) = $RWA + 12.5\ EL/EAD$

Low Default Portfolios: an easy target for criticism

Discussion on RWA volatility and models comparability has been having a special focus on low default portfolios. Due to observations paucity their modelling needs to integrate a higher level of expert inputs, while validation exercise is generally challenging

This criticism should be questioned.



RWA volatility is indeed higher in corporate and retail portfolios than in sovereign and bank

* Global Charge (GC) = $RWA + 12.5\ EL/E$

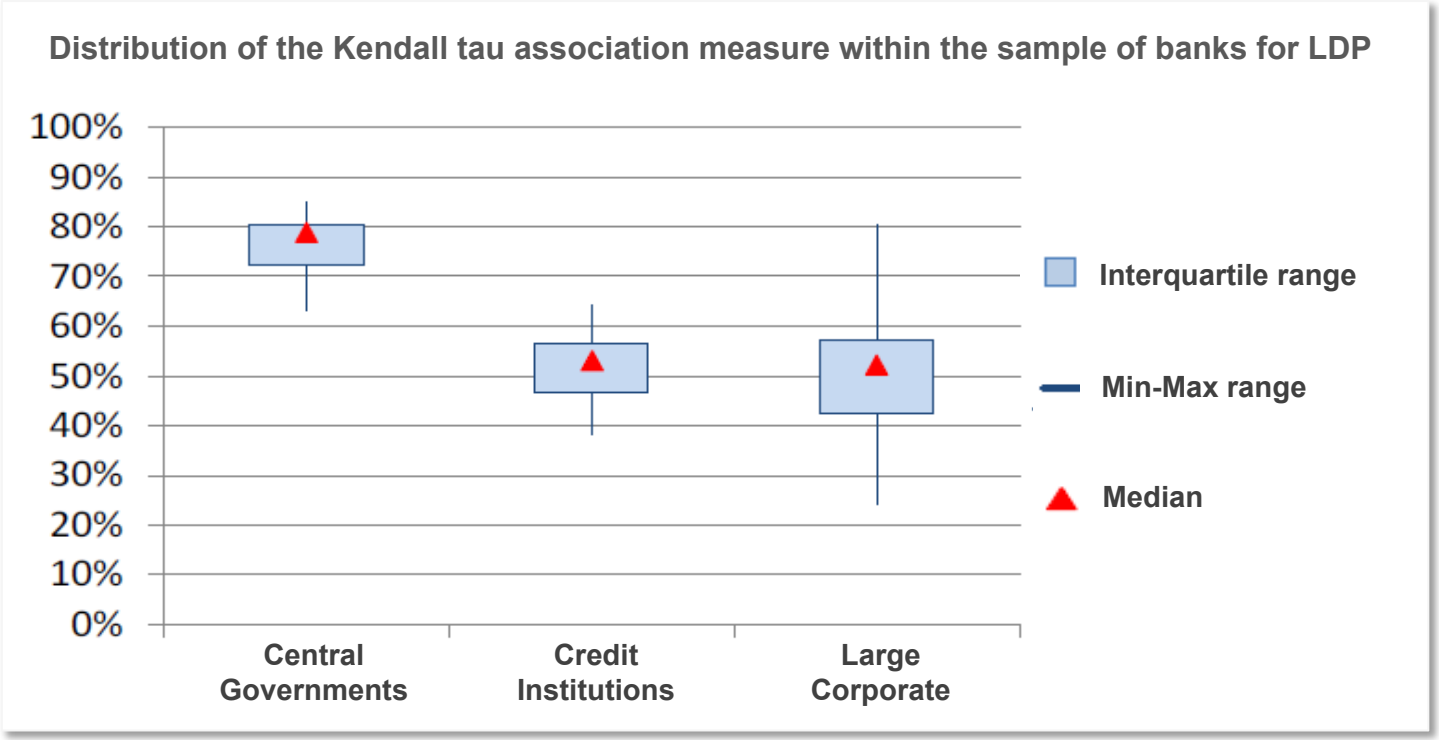
Any discussion about parameters volatility should differentiate between two different possible sources: rank ordering and calibration

*** Interim results of the EBA review of the consistency of risk-weighted assets – Top down assessment of the banking book, Febr.2013*

Rank ordering seems not to be the issue…

Again EBA carried out in 2012 a benchmarking exercise on Low Default Portfolios, based on hypothetical portfolios (HPE)*, involving 35 banks from 13 European Union countries

The study outlines that "banks seem to rank the counterparties in the HPE largely in the same way". Their general reference to external ratings provides a common ground for risk ordering, especially for Central Governments



** *Interim results update of the EBA review of the consistency of risk-weighted assets – Low default portfolio analysis, August 2013*

…. As confirmed by internal observations…

LDP models show **strong ordering capability** benefiting from **intrinsic modeling properties**

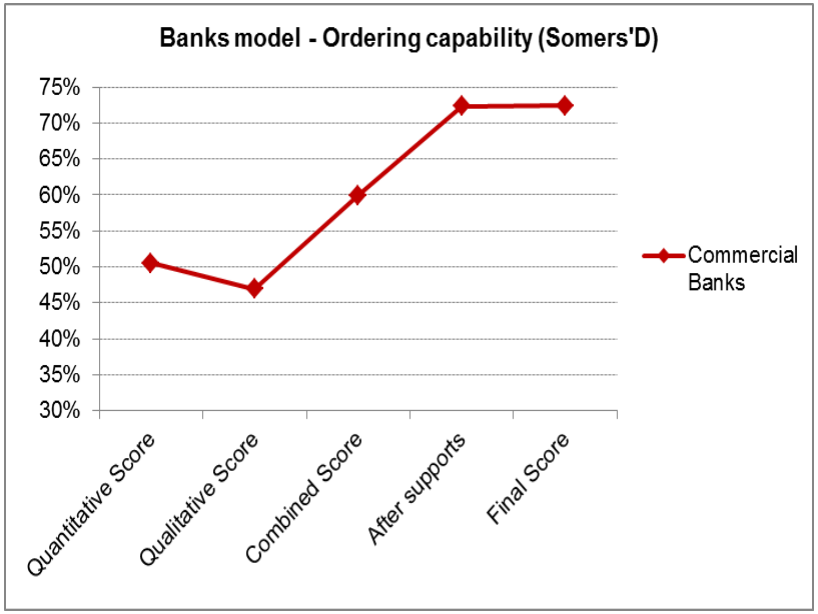
Methodologies are indeed **designed to replicate grade-by-grade classification** more than default/ non-default behaviour

Ordering capability – Somers'D

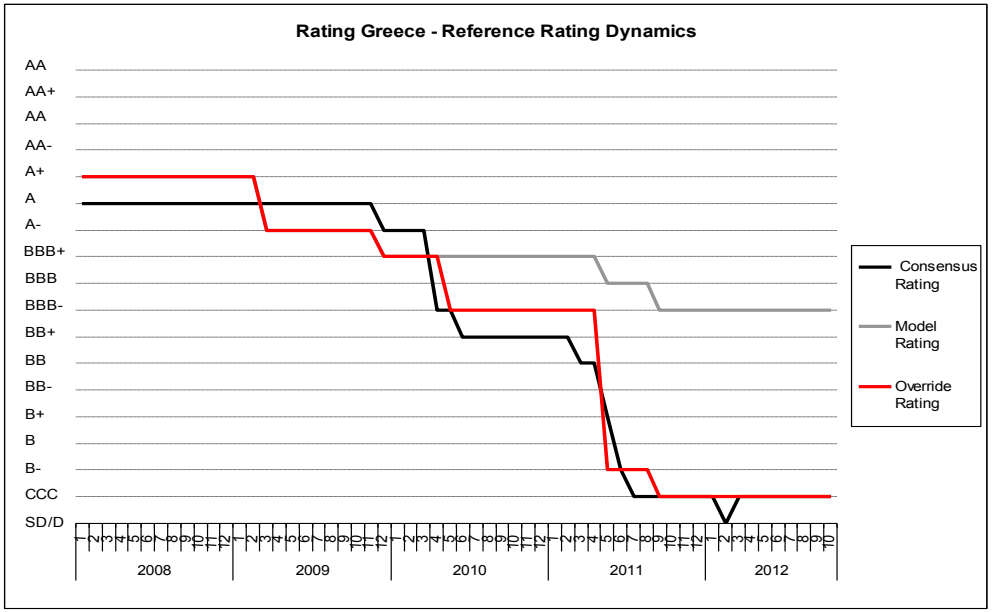
. Sovereign:	78,2%
. Banks:	72,4%
. Multinational Corp.:	69,0%

Models application is embedded in rating assignment processes, introducing qualitative/expert inputs

Qualitative modules improve the overall ordering capability allowing the estimation to factor in soft facts

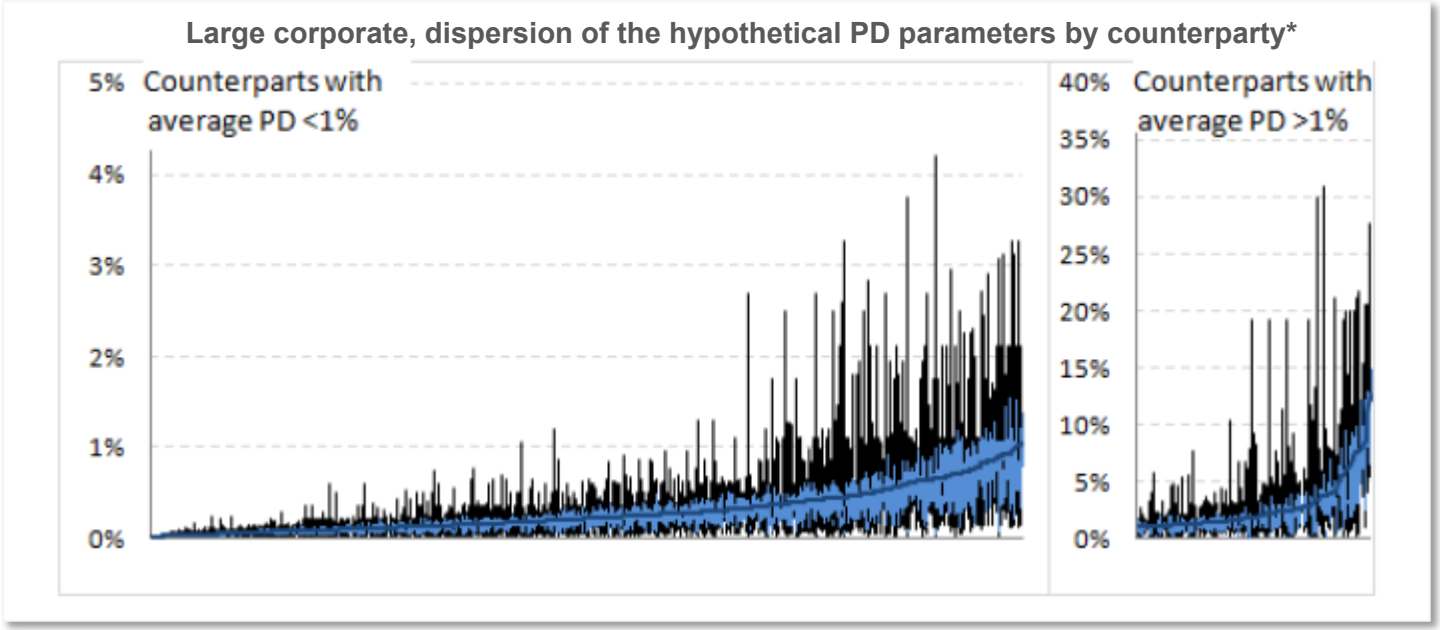


Qualitative modules and overrides allow a **timely/dynamic update of rating** in some cases **anticipating behaviour from external agencies**



….while calibration might be a source of volatility…

Significant differences have been observed in the absolute PD level for the same counterpart in the sample, especially for Large Corporate portfolio. This is attributable both to a different risk perception as well as to methodological choices.



Despite their utility, benchmark exercises present unavoidable weaknesses: a trade off exists between sample representativeness and comparability across banks.

There is the need to deepdive benchmarking analysis avoiding any simplistic and potentially misleading conclusion

** *Interim results update of the EBA review of the consistency of risk-weighted assets – Low default portfolio analysis, August 2013*

Solutions should be identified accordingly

If low default models are capable of high performances in risk level discrimination, why should we dismantle them?

Since RWA volatility has to do with the absolute value of risk perceived and assigned to such portfolios, the solution implies defining clear rules on calibration, e.g.:

- the integration of the economic cycle (TTC vs PIT)
- the reliance on external data for calibration
- the suggested granularity level of rating scale
- clear rules to map internal ratings to external ones

"if incremental capital, or higher margin of conservatism are the underlying objective, they could be pursued more simply and transparently via an increase in the buffers, applied to internal model based capital requirements, or by a consistent implementation of (Pillar 2 and other) adjustments"

IIF, ISDA Reply to BCBS Discussion Paper – The Regulatory Framework: Balancing Risk Sensitivity, Simplicity and Comparability

Conclusions

While the proposal to abandon internal modelling, starting from Low Default portfolios, would represent a huge step back, both industry and Regulators should contribute to reduce RWA volatility within a risk sensitive framework through:

- Precise and comprehensive guidelines to reduce methodological uncertainty
- Consistent validations of internal models (we have great expectations on the role SSM will play in this)
- Reduction of national discretions as well as current margins of interpretation of the regulation in force
- Enhancements in supervisory disclosure and transparency by the banks about RWA related information
- Industry to play an active role in supporting Regulators to identify main areas of modelling divergence as RWA volatility source