



Comments on M. Gordy and B. Howells “Procyclicality in Basel II: Can we treat the disease without killing the patient?”

by

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* The views expressed here are those of the author and do not necessarily reflect those of the BIS.



Introduction

- Paper on important subject by distinguished authors
 - Gordy's model is basis for quantitative framework of Basel II
 - procyclicality (P): core interest for BIS research for a long time
- Very nice piece of work
 - blend policy focus with technical excellence
 - Pillars 1 and 3 interaction
 - very stimulating
- Agree with thrust of conclusions
 - degree of P of Basel II hard to gauge ...
 - ... but merits watching
- Have some reservations about
 - how to assess "excessive"?
 - priorities and shape of research agenda



Structure of remarks

- What do the authors do?
- Focus on three aspects
 - benchmark for measuring P
 - benchmark model of risk
 - benchmark for assessing corrective measures
- Way ahead?



What do the authors do?

- Simulate loan portfolio for banking system
 - focus on change in Economic (EC) (“true” capital) and Regulatory (RC) capitalwhere
 - EC = “Standard” point-in-time ratings model
 - RC = Basel II
- Consider 3 smoothing adjustments to:
 - “inputs” : Through-The-Cycle (TTC) ratings
 - “outputs” : Bank-specific partial adjustment (AR)
 - “outputs” : State-specific (macro factor), common across banks
- Assess adjustments based on co-movement with EC
 - the higher the better



Specific conclusions

- Previous studies have overestimated P
- Better to smooth outputs than inputs
 - TTC ratings co-move little with PIT
 - not possible to infer EC from RC



1. The benchmark for measuring P

- Reservation 1: choice of “benchmark” to assess degree of P is not quite adequate
 - 3 reasons: does not consider impact of
 - 1 - default-driven losses on RC
 - 2 - RC on lending behaviour
 - 3 - lending behaviour on macroeconomy
 - Closes off by fiat the core concern with P (Borio et al 2001, Borio 2003)
 - amplification of cycle (“endogeneity of risk”)
- ⇒ “Hamlet without the Prince”



Explanation

$$\Delta RC = \frac{\partial RC}{\partial E} \Delta E + \left[\frac{\partial RC}{\partial E} \quad \frac{\partial E}{\partial RC} \right] \left[\frac{\partial RC \Delta E}{\partial E} \right]$$

E = Economy; L = Loan portfolio

Paper considers (1); excludes (2)

- When RC declines because of (2) conclusions can be perverse
 - partial vs general equilibrium
- Ultimate metric for P should be based on (2)



The benchmark for the experiment (ctd)

- Remedies?
 - 1st best: general equilibrium
 - 2nd best: historical simulation + judgement (eg. Segoviano and Lowe 2002)
 - alternative: fixed portfolio simulation + judgement (Kashyap and Stein 2004)
- But agree that additional P of Basel II is hard to gauge (“Lucas critique”)
 - foster better risk management
 - Pillars 2 and 3 can help



2. The model of risk

- Reservation 2: model of risk used may be part of the problem rather than solution
 - 2 reasons:
 - too “random walk”, no meaningful “cycle” element
 - indicators exploiting conditional mean reversion can help to predict crises (Borio and Lowe 2002, 2003)
 - 1-year horizon for risk quantification is too short
 - Corollary
 - standard models can exacerbate P
 - further refinements could add to this (eg. Lowe 2002)
- ⇒ need to move from coincident to true leading indicators of risk



3. Evaluation of smoothing devices

- Reservation 3: evaluating smoothing devices based on co-movement of RG with EC is not quite appropriate
 - 2 reasons
 - EC may fail to capture risk properly (“risk perceptions gap”)
 - response to EC itself may be destabilising (“incentives gap”) → externality
- ⇒ “excessive” P is property of the financial system, not of regulation per se
- Bottom line: if excessive P is an issue, objective of regulation (RG) is to encourage build-up of cushions in good time to run down in bad times



Evaluation of smoothing devices (ctd)

- Remedies
 - derive optimum adjustment from general equilibrium model
 - link to accounting is key (Borio and Lowe 2001, Borio and Tsatsaronis 2004)
 - need to consider practical implementation issues
- TTC ratings should not be ruled out a priori
 - not necessarily as input-smoothing device
 - but as basis for output-smoothing
 - nothing prevents EC to be disclosed too (and it should)



Conclusion

- Very useful addition to the literature
- Some reservations about analysis
- Agree with broad thrust of conclusions but not with specific ones
- Suggested a complementary research strategy



References

- Borio, C (2003): “Towards a macroprudential framework for financial supervision and regulation?”, *CESifo Economic Studies*, vol 49, no 2/2003, Summer, pp 181-215, (also available as *BIS Working Papers*, no 128).
- Borio, C, C Furfine and P Lowe (2001): “Procyclicality of the financial system and financial stability: issues and policy options”, in *Marrying the macro- and micro-prudential dimensions of financial stability*, *BIS Papers*, no 1, March, pp 1-57.
- Borio, C and P Lowe (2001): “To provision or not to provision”, *BIS Quarterly Review*, June, pp 36-48.
- Borio, C and P Lowe (2002): “Assessing the risk of banking crises”, *BIS Quarterly Review*, December, pp 43-54.
- Borio, C and P Lowe (2003): “Securing sustainable price stability: Should credit come back from the wilderness?”, paper prepared for ECB Workshop on “Asset prices and monetary policy” in December 2003, *BIS Working Papers*, forthcoming.
- Borio, C and K Tsatsaronis (2004): “Accounting, prudential regulation and financial stability: Elements of a synthesis”, paper prepared for the maiden issue of the *Journal of Financial Stability*, April.
- Kashyap, A K and J C Stein (2004): “Cyclical implications of the Basel II capital standards”, *Economic Perspectives*, Federal Reserve Bank of Chicago, First Quarter, pp 18-31.
- Lowe, P (2002): “Credit risk measurement and procyclicality”, *BIS Working Papers*, no 116, September.
- Segoviano, M A and P Lowe (2002): “Internal ratings, the business cycle and capital requirements: some evidence from an emerging market economy”, paper presented at the Federal Reserve Bank of Boston Conference on “The impact of economic slowdowns on financial institutions and their regulators”, *BIS Working Papers*, no 117, August.
- Tsatsaronis, K (2003): “Systemic financial risk and macroprudential supervision”, paper presented at the Bocconi University Centennial conference on “Risk and stability in the financial system: what roles for regulators, management and market discipline?”, *BIS Papers*, forthcoming.