Comments On: "Rethinking Financial Stability"

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Does It Make Sense To Have Multiple Constraints on Bank Equity Capital?

Leading example: banks face both a risk-based capital requirement and an unweighted leverage ratio. SLR has significantly tightened the latter constraint.

Arguments against:

- If leverage ratio binds, all assets are given same risk weight—distort away from safe and towards risky.
  - Clear evidence this is happening e.g. in Treasury repo, FX basis market, etc.
- If banks are heterogeneous, and constraints bind differentially, create incentives for business to migrate in a potentially inefficient manner.
  - E.g. Wells Fargo is more bound by risk-based constraint, so it starts doing more RWA-light broker-dealer type activities.
  - Goldman Sachs is more bound by leverage ratio, so it starts doing more RWA-intensive banking activities.
  - Some evidence this migration is happening as well.

Table 1: Distance from Requirements

	Distance from Requirement (%)			
	Tier 1 Ratio	**SLR**	**CCAR Tier 1 Ratio**	**CCAR SLR**
G-SIBs:				
JPMorgan Chase	2.2	1.5	2.4	0.9
Bank of America	2.1	2.0	2.4	1.3
Citigroup Inc.	4.3	2.6	3.5	1.5
Morgan Stanley	8.5	1.4	4.3	0.2
Goldman Sachs	5.6	1.5	2.2	0.1
Wells Fargo	2.3	2.6	3.0	2.3
Bank of New York Mellon	4.5	1.0	5.6	1.8
State Street	4.7	0.9	3.1	0.6
Other Large BHCs:				
U.S. Bancorp	2.5	4.3	1.9	2.2
PNC Financial Services	3.5	5.6	1.6	2.4
Capital One Financial	3.1	5.5	1.1	2.4
HSBC North America	11.6	4.3	5.6	1.0
TD Group US	5.2	4.1	5.3	2.8

Table 4: Estimated Capital Charges

- First, pick the most binding constraint (SLR, Tier 1, etc.) for each bank
- Then compute capital charge under that constraint $K_{bi} = k_b \times \omega_i$,

Capital Charge for asset i bank b

Minimum capital ratio for most binding constraint

Risk weight for i

G-SIB Banks:	Tightest constraint	C&I	Residential Mortgages	Other Mortgages	Credit Cards	Other Consumer	Treasuries
JPMorgan Chase & Co.	CCAR SLR	5.7	1.1	5.7	2.8	2.4	1.3
Bank of America Corporation	CCAR SLR	5.7	1.1	5.7	2.8	2.4	1.3
Citigroup Inc.	CCAR SLR	5.7	1.1	5.7	2.8	2.4	1.3
Morgan Stanley	CCAR SLR	5.7	1.1	5.7	2.8	2.4	1.3
Goldman Sachs Group, Inc.	CCAR SLR	5.7	1.1	5.7	2.8	2.4	1.3
Wells Fargo & Company	Tier 1 Ratio	10.5	5.3	10.5	10.5	10.5	0.0
Bank of New York Mellon Corporation	SLR	5.0	5.0	5.0	5.0	5.0	5.0
State Street Corporation	CCAR SLR	5.7	1.1	5.7	2.8	2.4	1.3
Other Large BHCs:							
U.S. Bancorp	CCAR Tier 1 Ratio	8.7	1.1	8.7	5.8	5.4	-1.7
PNC Financial Services Group, Inc.	CCAR Tier 1 Ratio	8.7	1.1	8.7	5.8	5.4	-1.7
Capital One Financial Corporation	CCAR Tier 1 Ratio	8.7	1.1	8.7	5.8	5.4	-1.7
HSBC North America Holdings Inc.	CCAR SLR	5.7	1.1	5.7	2.8	2.4	1.3
TD Group US Holdings LLC	CCAR SLR	5.7	1.1	5.7	2.8	2.4	1.3

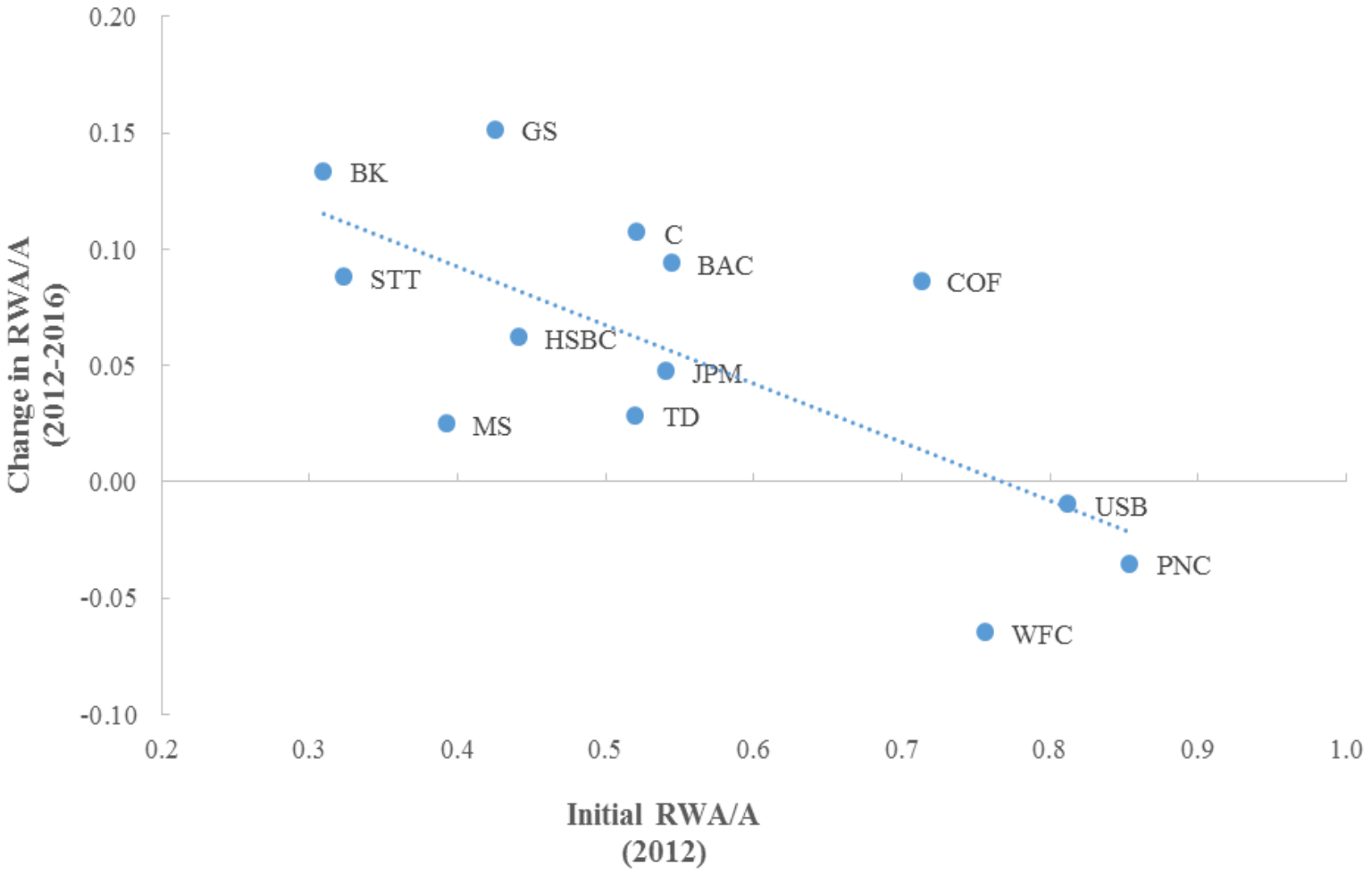
TABLE 5: *RELATIVE* RISK WEIGHTS

- **Scale by Capital Charge on C&I:**

GSIB Banks:	Tightest constraint	C&I	Residential Mortgages	Other Mortgages	Credit Cards	Other Consumer	Treasuries
JPMorgan Chase & Co.	CCAR SLR	100	19	99	49	42	23
Bank of America Corporation	CCAR SLR	100	19	99	49	42	23
Citigroup Inc.	CCAR SLR	100	19	99	49	42	23
Morgan Stanley	CCAR SLR	100	19	99	49	42	23
Goldman Sachs Group, Inc.	CCAR SLR	100	19	99	49	42	23
Wells Fargo & Company	Tier 1 Ratio	100	50	100	100	100	0
Bank of New York Mellon Corporation	SLR	100	100	100	100	100	100
State Street Corporation	CCAR SLR	100	19	99	49	42	23
Other Large BHCs:							
U.S. Bancorp	CCAR Tier 1 Ratio	100	13	100	67	62	-19
PNC Financial Services Group, Inc.	CCAR Tier 1 Ratio	100	13	100	67	62	-19
Capital One Financial Corporation	CCAR Tier 1 Ratio	100	13	100	67	62	-19
HSBC North America Holdings Inc.	CCAR SLR	100	19	99	49	42	23
TD Group US Holdings LLC	CCAR SLR	100	19	99	49	42	23

Figure 2: Convergence In Bank Balance Sheets

- Regress $\Delta_{2012\text{-}2016}$ (RWA/A) vs. $(\text{RWA/A})_{2012}$: $\beta = -0.25$; $\rho = -0.71$.
- Can instrument for $(\text{RWA/A})_{2012}$ with old $(\text{RWA/A})_{2002}$: $\beta = -0.23$.



Does It Make Sense To Have Multiple Constraints on Bank Equity Capital?

Arguments in favor (this paper):

- Knightian uncertainty: difficult to estimate correct risk weights.
  - Makes sense not to over-rely on one model. But can have a single constraint with risk weights that average over multiple models.
  - Will probably lead to generally higher risk weights for "low-risk" assets, in spirit of leverage ratio.
  - Key point: with a single constraint, all banks face the same set of averaged risk weights. With multiple constraints, different banks face different weights, each of which is individually wrong.

- Risk-based requirements can be easily gamed.
  - Any rule that is set in stone can be easily gamed! This is a fundamental problem for entirely ex ante rules-based approach. Not fixed by adding more rules.
  - Suggests using stress tests as way to fill in contingencies ex post: look where banks are growing rapidly, making abnormal profits—then stress those exposures.
  - Completely agree that should reduce reliance on banks' internal models in any risk-based regime.

General Message

- Advocates of multiple constraints—and leverage ratio in particular—raise several important issues that absolutely need to be taken on.

- But these issues can be more efficiently addressed by improving the existing risk-based regime on various dimensions.
  - More robust risk weights for "lower risk" assets.
  - Less reliance on banks' internal models.
  - More explicit use of stress tests to fill in contingencies and combat gaming.

- Maintaining a too-aggressively-calibrated leverage ratio alongside the risk-based regime creates an unnatural incentive for all players to converge towards a universal banking model.

- Finally, to the extent that tough leverage ratio reflects a general desire to be more hawkish on overall capital levels, there are better ways to go:
  - Dial up G-SIB surcharges.
  - And/or increase TLAC requirements.