

Discussion

Bank Intermediation Activity in a Low Interest Rate Environment

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SUERF/Banca d'Italia E-Workshop: "The effectiveness of monetary policy in a low interest rate environment", 18-19 November 2020.

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Low Interest Rates and Balance Sheet Effects (Brei, Borio and Gambacorta, 2019)

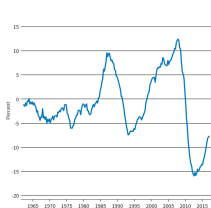
Challenging themes and v/interesting results in both papers

- With compressed profit margins banks move away from traditional loan-making business to other **earning assets** (e.g. stocks, bonds).
- They hold more **liquid assets**, as central banks tend to increase the volume of excess reserves in the system, which banks are forced to absorb.
- Rely more on stable forms of funding, such as **deposits** and fixed-rate long-term debt, rather than on short-term variable-rate funding.
- Readjustments lead to **lower risk profile and risk-weighted assets**.

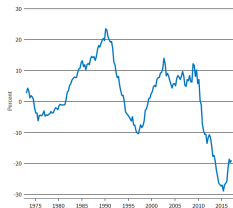
Low Interest Rates and Dividends (Gambacorta, Oliviero and Shin, 2020)

- With perspective compressed profit margins the **price-to-book ratio of equity falls** so banks have a greater propensity to **pay out dividends**.
- Consequences: **capital erosion**.
- Regulatory solution: suspend dividend distributions and share buybacks to restore capital requirement standards. Role of **endogenous capital requirements** and role of bank capital (Gambacorta and Shin, 2016).
- Counterfactual: Over the period 2008–20, bank lending capacity would have been around 9% greater with dividend suspension.

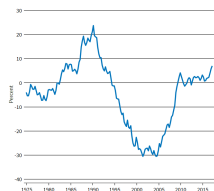
Financial Cycles: Credit-to-GDP Gap (BIS)



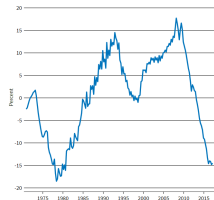
(a) US



(b) UK



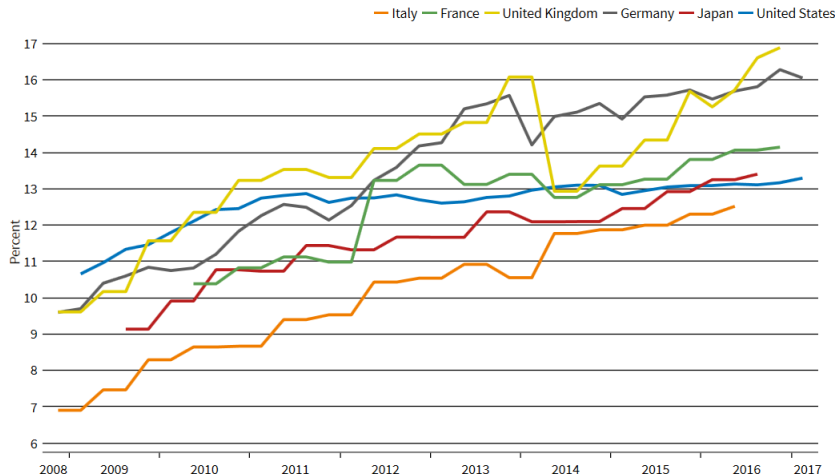
(c) JP



(d) IT

Source: BIS

Tier1 Capital to Risk Weighted Assets



Source: BIS.

Bank Equity in a Low Interest Rate Environment (Corrado and Schuler 2019, ECB WP 2019)

- Bank profits depend on interest rate margins, adjustment costs related to deviation from capital requirement, τ_t , and monitoring costs, $w_t m_t$.

$$\Pi_t^B = R_t^L \frac{L_t}{P_t} - R_t^D \frac{D_t}{P_t} - \frac{\kappa_e}{2} \left(\frac{e_t}{L_t} - \tau_t \right)^2 - w_t m_t \quad (1)$$

- The share of profits, ϕ_Ψ , paid out as dividends

$$\Pi_t^\Psi = \phi_\Psi \Pi_t^B \quad (2)$$

- The remaining share, $(1 - \phi_\Psi)$, is booked into bank's Tier 1 equity e_t . With a higher fraction of dividends, ϕ_Ψ , there is more capital erosion

$$e_t = e_{t-1} + (1 - \phi_\Psi) \Pi_{t-1}^B \quad (3)$$

Capital Erosion: Actions

How to avoid capital erosion in a downturn:

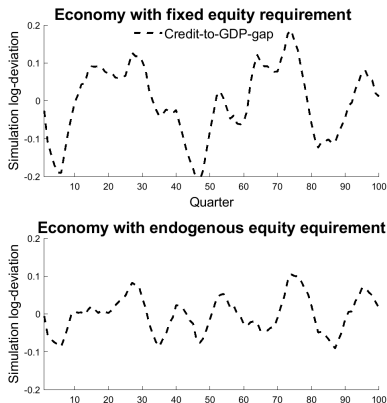
- Dividend suspension ($\phi_\Psi = 0$): direct but could be problematic in terms of policy versus banks' shareholders.
- Countercyclical Capital Requirement (CCyB):

$$\tau_t = \bar{\tau} + \kappa \left(\frac{L_t}{Y_t} - \frac{L}{Y} \right)$$

Indirect effect of CCyB on price-to-book ratio (*PTB*), dividend payments and equity (*e*)

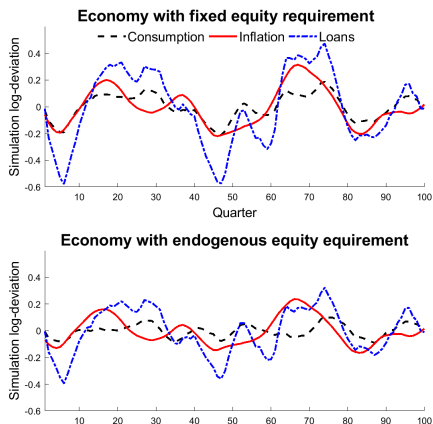
$$\frac{L_t}{Y_t} \downarrow \tau_t \downarrow \Pi_t^B \uparrow PTB_t \uparrow \Pi_t^\Psi \downarrow e_t \uparrow$$

Endogenous Capital Req. and Financial Cycles -Corrado and Schuler ECB-WP



Note: Two-year moving average of deviations in total credit-to-GDP.

Endogenous Capital Req. and the Macroeconomy



Note: Two-year moving average of deviations in consumption, inflation and loans (Corrado and Schuler, ECB WP 2019).

Endogenous Capital Req. and Welfare

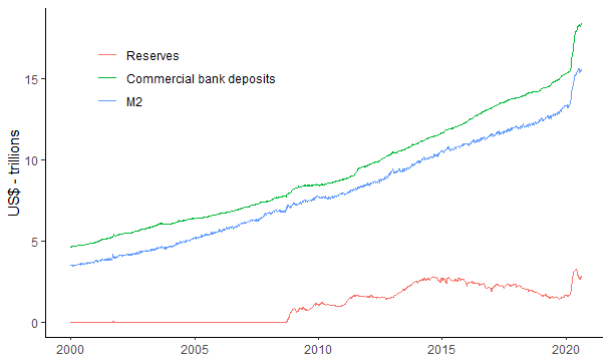
- Superior welfare outcome of endogenous capital requirement

	Output volatility	Inflation volatility	Welfare loss	Δ Loss ^[1]
Benchmark	0.148	0.052	0.054	-
Monetary Policy Reaction	0.159	0.052	0.057	1.1%
Fixed Capital Req.	0.161	0.053	0.048	-14.7%
Endogenous Capital Req.	0.113	0.041	0.041	-27.8%

^[1] Relative to Benchmark. (Corrado and Schuler, ECB WP 2019)

Evidence during the Pandemic (Chadha et al., 2020)

- US broad money (M2) increased by 20% in 6-months
- Bank deposits which increased 16%
- Reserves increased by 100% over the same period



Note: US Money Aggregates (Chadha et al., 2020).

Conclusions

- Very interesting papers. The empirical results suggest a way forward in macro-models.
- Present results are driven by financial sector supply side shock.
- But in the most recent juncture shocks come from the real sector.
 - Because of the shutdown shock the reduction in loans is demand-driven.
 - Because of the lockdown shock velocity of money has gone down: hence, the increase of deposits is supply-driven.
 - Effects on profit margins? Are they going up? Impact on PTB ratio, dividend and equity.
- Interesting to see how the analysis on balance sheet effects and dividend payment policy unfold with more recent microdata.
- Effects of large-scale asset purchases and fiscal stimulus (Coenen, Montes-Galdon, Smets (2020), ECB EWP 2352)

Thank you

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Corrado, L. and Schuler T. (2019): Financial cycles, credit bubbles and stabilization policies. ECB Working Paper No 2463

Chadha, J, Corrado, L., Meaning J and Schuler T. (2020): Policies in a Pandemic: a Quantitative Evaluation, mimeo.

Model: Corrado and Schuler 2020

