

## Should core countries financial regulators internalize the cross-border spillovers of their macroprudential policy in the euro area?

Based on “Cross-border spillovers of macroprudential policy in the euro area”, forthcoming in *The Quarterly Review of Economics and Finance*, 2020 <https://doi.org/10.1016/j.qref.2020.01.005>



**Cristina Badarau**

*Associate Professor, University of Bordeaux*

**Marcos Carias-Flores**

*Eurozone Economist, COFACE -Paris*

**Jean-Marc Figuet**

*Professor, University of Bordeaux*

### Policy Recommendations

Under national stabilization regimes, countercyclical capital regulation in core countries can produce potentially destabilizing spillover effects on the euro area periphery via interbank lending. Our recommendation for the regulator in the core is to internalize the spillover if and when his counterpart in the financially dependent periphery can no longer absorb it.

Financial flows between heterogeneous member states of the euro area were crucial drivers of the imbalances that culminated in the Euro crisis. Macroprudential instruments, by affecting the behavior of international banks, can have secondary effects on the financial cycles of other member states. However, countercyclical tools like the Basel III capital buffer are mostly set by independent authorities with national stabilization mandates. Should regulators coordinate macroprudential policy, and if so how? Using a small two-country NK model with financial frictions, we show that macroprudential responses in core economies can have destabilizing spillover effects on a financially dependent periphery through interbank lending. We subsequently evaluate a policy rule in which the core regulator internalizes these spillovers and we compare it to prevailing national stabilization rule. While national rules deliver a good performance in general, under certain conditions internalization becomes preferable.

## Introduction

Internal imbalances between heterogeneous member states are essential for understanding the Euro crisis (Lane, 2013; Hobza & Zeugner, 2014). Following unification, capital owed from mature core economies to the less developed periphery where the common policy stance resulted in looser real financial conditions (Couppey-Soubeyran & Dehmej, 2016). This created persistent current account imbalances that facilitated unsustainable accumulations of debt (Lane & McQuade, 2014; Unger, 2017; Hobza & Zeugner, 2014) both in the state (Greece and Portugal) and in the private sector (Ireland and Spain). As highlighted by Poutineau & Vermandel (2015), the blunt of these core-to-periphery flows of financing took place on the interbank market. Indeed, the creation of the EMU suddenly gave periphery banks access to cheap and abundant market funding, which fueled the excessive credit expansions that would lead to the crisis. Therefore, it is important for policymakers to anticipate how cross-border interbank lending could condition

the conduct of countercyclical macroprudential policies.

This paper focuses on the Basel III countercyclical capital buffer (CCyB), a supplement to the traditional capital requirements ratio that is built up during booms and released in downturns to strengthen resilience and lean against the credit cycle. The CCyB is mostly set by national regulators whose mandate is to ensure financial stability within their borders; but due to certain aspects of its design it could create cross-border spillovers, which would raise important questions. Will setting the CCyB along national lines always be enough to safeguard the financial stability of the Euro area as a whole? While a framework for coordination exists between national regulators and supranational institutions, what happens if spillovers imply a trade-off between the national stability of two member states, and therefore a trade-off between national and union-wide stability?

## Our contribution

The question of whether regulators should target national or area-wide stabilization is at the center of the recent literature on macroprudential policy in the EMU (Brzoza-Brzezina et al., 2015; Poutineau & Vermandel, 2017; Dehmej & Gambacorta, 2017; Rubio, 2018a). In general, the findings favor setting macroprudential policy at the national level: it acts as granular stabilizer to the destabilizing effects of the one-size-fits-all monetary stance. We notice that these models differ in their apprehension of cross-border financial flows, with only Poutineau & Vermandel (2017) according a central role to interbank lending integration.

We seek to contribute to this literature by reevaluating the claim that strictly national implementation of macroprudential policy is invariably preferable in a heterogeneous monetary union. To do so, we use a small static core-periphery model calibrated to the Euro area, based on the well-known 3-equation New Keynesian model and introducing a banking sector in the vein of the IS-LM-CC framework of Bernanke & Blinder (1988). Our model is close in spirit to Poutineau & Vermandel (2017), insofar as they also accord a fundamental role to credit market integration, but features some key conceptual differences.

# INFER Policy Brief Series

Volume 3, Issue 1, March, 2020



First, we account for banking system heterogeneity by making the periphery structurally dependent on the core for refinancing.

Second, by assuming that raising the CCyB incites core banks to increase outward interbank lending, the spillover effect accelerates the periphery's credit cycle in our model.

Third, we introduce a new approach to modeling the alternative rule against which the national stabilization rule is compared. Instead of using a "federal" or "supranational" rule by which macroprudential policy in both countries is set to stabilize area-wide aggregate credit, as is

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commonly done in the literature, we formulate a rule in which the core regulator internalizes the spillover if and when the periphery's CCyB reaches its upper bound. It is found that this

alternative rule outperforms the national rule regime when the union is subjected to strong and synchronized booms. While the national rules regime delivers the best credit stabilization performance in most scenarios, there are certain scenarios that call for internalization of spillovers.

If core banks respond to tighter capital standards at home by substituting with interbank lending abroad, then periphery countries might once again face excessively lax funding conditions, making it difficult for the regulator to successfully stabilize domestic credit. Considering that the common currency makes the financial stability of member states deeply interdependent, a localized crisis can quickly spread. A basic calibration of our model shows that, in the scenario of a strong and synchronized boom, there comes a point where internalization by the core country regulator becomes the preferable option. Indeed, limiting the regulation in the core country would conduct to a better stabilization of financial cycles in the union. This finding brings nuance to the consensus view supporting strictly national policy rules.

## Conclusions and Policy Implications

Through our simple static modeling exercise, we have shown that countercyclical capital regulation can, under national stabilization regimes, produce potentially destabilizing spillover effects between members of a heterogeneous monetary union, via interbank lending. We have then studied how alternative macroprudential regimes perform to mitigate such destabilizing effects. We thus complete the previous literature by proposing an alternative regime when the regulator in the core would internalizes the spillover of its policy. We find that the national regimes currently in place still perform best in most states of nature. However, under synchronized financial booms, the

internalization of spillovers by the core regulator is suitable if and when his counterpart in the financially dependent periphery can no longer absorb it.

More broadly, our policy recommendation should be further examined by considering elements outside of our stylized framework. While the CCyB is the most discussed macroprudential tool, mortgage market instruments such as dynamic limits on the loan-to-value ratio of new loans are also a pillar of countercyclical regulation. As such, they may allow for a wider stabilization margin to absorb any potential spillover. However, the

institutional framework around these tools is distinctly less European: there is no harmonizing legislative framework in the image of CRD IV, ex-ante coordination protocols are less mapped out and authority over them remains strictly national. In fact, because of their very tangible distributive effects and intertwining with housing policy, in many countries the government retains significant influence over them, potentially creating political economy issues. In sum, while regulators have more power than suggested in our model, whether that power is large enough to undermine the conclusions of our thought experiment remains an open question. Another important

institutional question is who makes the decision to internalize. As the only authority with a supranational financial stability mandate, the ECB is the natural candidate. National regulators could therefore continue to apply domestic mandates, with the ECB imposing a different policy stance if the area's stability calls for it. However, under the current legislation, the ECB has the power to demand a higher CCyB, but not a lower one. As such, responding to the interbank spillover scenario would require expanding the ECB's "top-up" to make it symmetrical; a reform that, to our preliminary judgment, presents little obvious drawbacks.

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