
Rethinking Global Economic Governance in Light of the Crisis

New Perspectives on Economic Policy Foundations

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Global banks, fiscal policy and international business cycles

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The worldwide financial crisis that erupted in 2007 has revealed the fragility of major financial institutions, and triggered the sharpest global recession since the 1930s. Before the crisis, standard macro theory largely abstracted from financial intermediaries, and macro forecasting models ignored information on bank balance sheets. The dramatic events since 2007 require a rethinking of the role of global finance for real activity, and will represent a challenge for economic research for years to come. Several of my PEGGED research projects have addressed this challenge, by presenting novel theoretical and empirical analyses of the role of global banks for business cycles in the EU and in the world economy. These contributions also highlight the stabilising role of government support to banks, during a financial crisis.

A tractable framework for analysing the interaction between banks and the real economy is provided by Kollmann, Enders and Müller (2011). That study incorporates a global bank into a two-country macroeconomic simulation model. The bank collects deposits from households and makes loans to entrepreneurs, worldwide. It has to finance a fraction of loans using equity. In equilibrium, the loan rate exceeds the deposit rate – the loan rate spread is a decreasing function of the bank's capital. Hence, bank capital is a key state variable for domestic and foreign real activity. The simulation model predicts that a loan loss shock originating in one country lowers the capital of the global banking system; this raises lending rate spreads worldwide, triggering a global reduction in bank lending and a worldwide recession. That framework can thus account for the fact that the financial crisis originated in the US, but spread very rapidly to the EU and the rest of the world – the key role of globally active European banks in the transmission of the

crisis is highlighted by that fact that credit losses of European banks during the crisis were largely due to foreign (US) loans.

In Kollmann (2012), I estimate the two-country model of Kollmann, Enders and Müller (2011); the statistical results confirm the key role of global banks in the crisis transmission. The study finds that Eurozone investment is especially sensitive to shocks to the health of global banks – about 50% of the fall in EZ investment during the crisis can be explained by shocks to the banking system. Kollmann and Zeugner (2011) present further empirical evidence that underscores the role of bank balance sheet conditions for real activity. Specifically, that study analyses the predictive power of bank leverage for real activity. The key result is that bank leverage is negatively correlated with the future growth of real activity – the predictive capacity of leverage is roughly comparable to that of the standard macro and financial predictors used by forecasters. Kollmann and Zeugner also document that leverage is positively linked to the *volatility* of future real activity and of equity returns. This finding is consistent with the view that higher bank leverage amplifies the effect of unanticipated macroeconomic and financial shocks on real activity and asset prices, i.e. that higher leverage makes the economy more fragile.

The key role of bank health for the overall economy suggests that government support for the banking system might be a powerful tool for stabilising real activity in a financial crisis. In fact, an important dimension of fiscal policy during the crisis was massive state aid for banks, e.g. in the form of purchases of bank assets and of bank recapitalisations by governments. Kollmann, Roeger and in't Veld (2012) point out that, in the US and the EU, these “unconventional” fiscal interventions were larger than “conventional” fiscal stimulus measures (temporary increases in government purchases and social transfers, tax cuts). Conventional fiscal stimulus measures in the US amounted to 1.98% and 1.77% of US GDP in 2009 and 2010. In the EU, the conventional stimulus amounted to 0.83% and 0.73% of EU GDP in 2009 and 2010, respectively. Bank rescue measures mainly occurred in 2009. In the EU, government purchases of impaired (“toxic”) bank assets and bank recapitalisations in 2009 amounted to 2.8% and 1.9% of GDP,

respectively. US government asset purchases and recapitalisations represented 1.6% and 3.1% of GDP in 2009, respectively. In both the US and the EU, these two types of bank support measures thus amounted to 4.7% of GDP, in 2009. Table 1 documents the time profile of cumulated state aid for banks in the Eurozone, between February 2009 and April 2011.

Table 1. Eurozone state aid for banks (cumulative, as % of GDP)

	Feb 2009	May 2009	Aug 2009	Dec 2009	Oct 2010	Dec 2010	Apr 2011
Purchases of impaired bank assets	0.43	0.45	0.75	2.84	2.15	2.00	1.94
Recapitalisations	1.09	1.45	1.67	1.88	2.17	2.21	2.11
Total bank aid	1.52	1.90	2.42	4.72	4.32	4.21	4.05

Source: in't Veld and Roeger (2011) Laeven and Valencia (2011).

Surprisingly, the macroeconomic effects of these sizable bank support measures have received little attention in the economics literature. Kollmann, Roeger and in't Veld (2012) and Kollmann, Ratto, Roeger and in't Veld (2012) seek to fill this gap, by adding a government to the banking model of Kollmann, Enders and Müller (2011). Government support for the banking system is modelled as a transfer to banks that is financed by higher taxes. Kollmann, Ratto, Roeger and in't Veld (2012) and Kollmann, Roeger and in't Veld (2012) show that state aid to banks boosts bank capital, and that it lowers the spread between the bank lending rate and the deposit rate, which stimulates investment and output; the macroeconomic efficacy of state bank aid hinges on its ability to lower the lending spread. Investment drops sharply in financial crises. Hence, government support for banks helps to stabilise a component of aggregate demand that is especially adversely affected by financial crises. By contrast, most conventional fiscal stimulus measures (e.g. government purchases of goods and services) crowd out investment. Kollmann, Ratto, Roeger and in't Veld (2012) and Kollmann, Roeger and in't Veld (2012) show that the GDP multiplier of state aid to banking is in the same range as conventional government spending multipliers.

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