

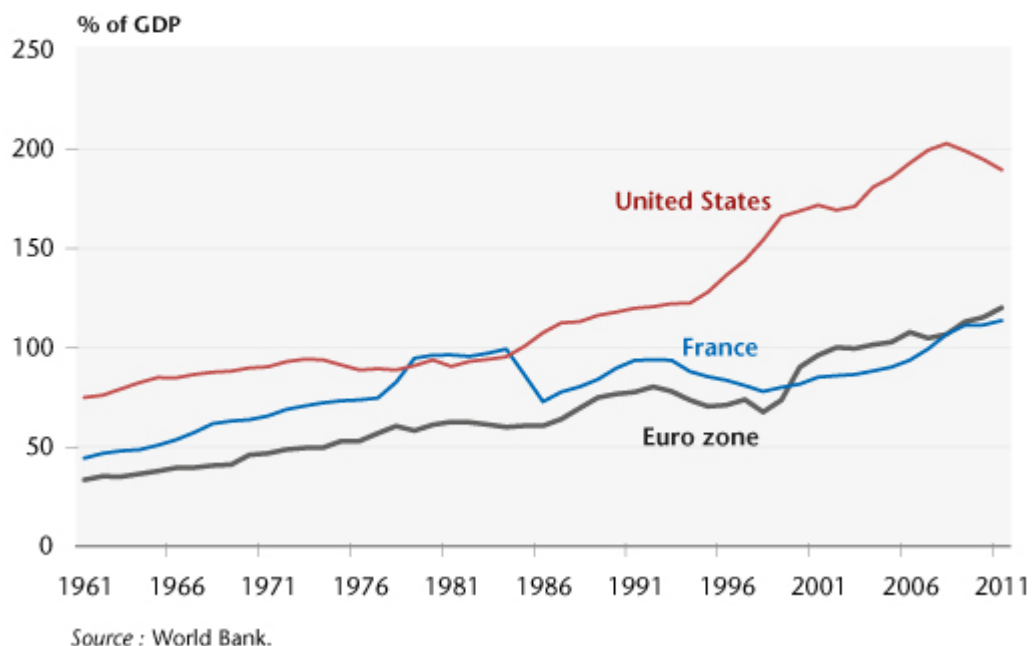
Does too much finance kill growth?

By [Jérôme Creel](#), [Paul Hubert](#) and Fabien Labondance

Is there an optimal level of financialization in an economy? An [IMF](#) working paper written by Arcand, Berkes and Panizza (2012) focuses on this issue and attempts to assess this level empirically. The paper highlights the negative effects caused by excessive financialization.

Financialization refers to the role played by financial services in an economy, and therefore the level of indebtedness of economic agents. The indicator of the level of financialization is conventionally measured by calculating the ratio of private sector credit to GDP. Until the early 2000s, this indicator took into account only the loans granted by deposit banks, but the development of shadow banking ([Bakk-Simon et al., 2012](#)) has been based on the credit granted by all financial institutions. This indicator helps us to understand financial intermediation ([Beck et al., 1999](#)) [1]. The graph below shows how financialization has evolved in the euro zone, France and the United States since the 1960s. The level has more than doubled in these three economies. Before the outbreak of the subprime crisis in the summer of 2007, loans to the private sector exceeded 100% of GDP in the euro zone and 200% in the United States.

Figure. Credit granted to the private sector by banks and other financial institutions



Arcand, Berkes and Panizza (2012) examined the extent to which the increasingly predominant role played by finance has an impact on economic growth. To understand the importance of this paper, it is useful to recall the existing differences in the findings of the empirical literature. On the one hand, until recently the most prolific literature highlighted a positive causal relationship between financial development and economic growth ([Rajan and Zingales, 1998](#), and [Levine, 2005](#)): the financial sector acts as a lubricant for the economy, ensuring a smoother allocation of resources and the emergence of innovative firms. These lessons were derived from models of growth (especially endogenous) and have been confirmed by international comparisons, in particular with regard to developing countries with small financial sectors.

Some more skeptical authors believe that the link between finance and economic growth is exaggerated ([Rodrik and Subramanian, 2009](#)). [De Gregorio and Guidotti \(1995\)](#) argue that the link is tenuous or even non-existent in the developed countries and suggest that once a certain level of economic wealth has been reached, the financial sector makes only a marginal contribution to the efficiency of investment. It

abandons its role as a facilitator of economic growth in order to focus on its own growth ([Beck, 2012](#)). This generates major banking and financial groups that are “too big to fail”, enabling these entities to take excessive risks since they know they are covered by the public authorities. Their fragility is then rapidly transmitted to other corporations and to the economy as a whole. The subprime crisis clearly showed the power and magnitude of the effects of correlation and contagion.

In an attempt to reconcile these two schools of thought, a nonlinear relationship between financialization and economic growth has been posited by a number of studies, including in particular the Arcand, Berkes and Panizza (2012) study. Using a dynamic panel methodology, they explain per capita GDP growth by means of the usual variables of endogenous growth theory (*i.e.* the initial GDP per capita, the accumulation of human capital over the average years of education, government spending, trade openness and inflation) and then add to their model credit to the private sector and the square of this same variable in order to take account of potential non-linearity. They are thus able to show that:

1. The relationship between economic growth and private sector credit is positive;
2. The relationship between economic growth and the square of private sector credit (that is to say, the effect of credit to the private sector when it is at a high level) is negative;
3. Taken together, these two factors indicate a concave relationship – a bell curve – between economic growth and credit to the private sector.

The relationship between finance and growth is thus positive up to a certain level of financialization, and beyond this threshold the effects of financialization gradually start to become negative. According to the different specifications estimated by Arcand, Berkes and Panizza (2012), this threshold

(as a percentage of GDP) lies between 80% and 100% of the level of loans to the private sector. [2]

While the level of financialization in the developed economies is above these thresholds, these conclusions point to the marginal gain in efficiency that financialization can have on an economy and the need to control its development. Furthermore, the argument of various banking lobbies, *i.e.* that regulating the size and growth of the financial sector would negatively impact the growth of the economies in question, is not supported by the data in the case of the developed countries.

[1] While this indicator may seem succinct as it does not take account of disintermediation, its use is justified by its availability at international level, which allows comparisons. Furthermore, more extensive lessons could be drawn with a protean indicator of financialization.

[2] [Cecchetti and Kharroubi \(2012\)](#) clarify that these thresholds should not be viewed as targets, but more like “extrema” that should be reached only in times of crisis. In “normal” times, it would be better that debt levels are lower so as to give the economies some maneuvering room in times of crisis.

Monetary policy and property booms: dealing with the heterogeneity of the euro zone

By [Christophe Blot](#) and Fabien Labondance

The transmission of monetary policy to economic activity and inflation takes place through various channels whose role and importance depend largely on the structural characteristics of an economy. The dynamics of credit and property prices are at the heart of this process. There are multiple sources of heterogeneity between the countries of the euro zone, which raises questions about the effectiveness of monetary policy but also about the means to be used to reduce this heterogeneity.

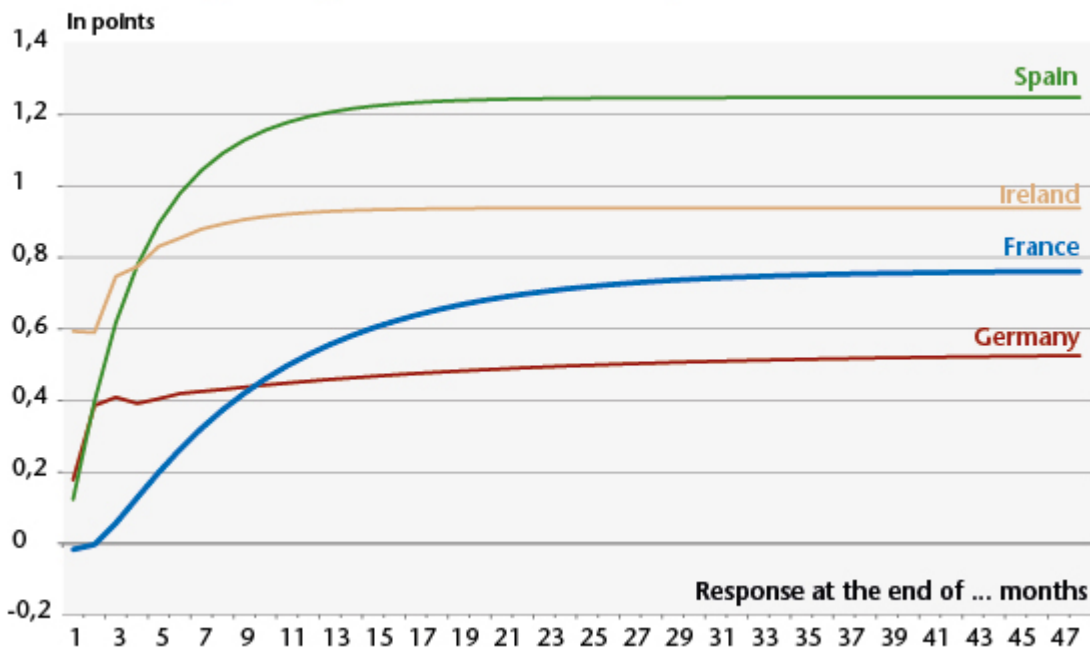
The possible sources of heterogeneity between countries include the degree of concentration of the banking systems (*i.e.* more or fewer banks, and therefore more or less competition), the financing arrangements (*i.e.* fixed or variable rates), the maturity of household loans, their levels of debt, the proportion of households renting, and the costs of transactions on the housing market. The share of floating rate loans perfectly reflects these heterogeneities, as it is 91% in Spain, 67% in Ireland and 15% in Germany. In these conditions, the common monetary policy of the European Central Bank (ECB) has asymmetric effects on the euro zone countries, as is evidenced by the divergences in property prices in these countries. These asymmetries will then affect GDP growth, a phenomenon that has been observed both “before” and “after” the crisis. These issues are the subject of an article that we published in the OFCE’s [Ville et Logement](#) (Housing and the City) issue. We evaluated heterogeneity in the transmission of

monetary policy to property prices in the euro zone by explicitly distinguishing two steps in the transmission channel, with each step potentially reflecting different sources of heterogeneity. The first describes the impact of the interest rates controlled by the ECB on the rates charged for property loans by the banks in each euro zone country. The second step involves the differentiated impact of these bank rates on property prices.

Our results confirm the existence of divergences in the transmission of monetary policy in the euro zone. Thus, for a constant interest rate set by the ECB at 2%, as was the case between 2003 and 2005, the estimates made during the period preceding the crisis suggest that the long-term equilibrium rate applied respectively by Spanish banks and Irish banks would be 3.2% and 3.3%. In comparison, the equivalent rate in Germany would be 4.3%. Moreover, the higher rates in Spain and Ireland amplify this gap in nominal rates. We then show that the impact on bank rates of changes in the ECB's key rate is, before the crisis, stronger in Spain and Ireland than it is in Germany (figure), which is related to differences in the share of loans made at floating rates in these countries. It should be noted that the transmission of monetary policy was severely disrupted during the crisis. The banks did not necessarily adjust supply and demand for credit by changing rates, but by tightening the conditions for granting loans. [1] Furthermore, estimates of the relationship between the rates charged by banks and property prices suggest a high degree of heterogeneity within the euro zone. These various findings thus help to explain, at least partially, the divergences seen in property prices within the euro zone. The period during which the rate set by the ECB was low helped fuel the housing boom in Spain and Ireland. The tightening of monetary policy that took place after 2005 would also explain the more rapid adjustment in property prices observed in these two countries. Our estimates also suggest that property prices in these two countries are very sensitive to changes in economic and

population growth. Property cycles cannot therefore be reduced to the effect of monetary policy.

Figure. Impact on bank rates of a 1 point hike in ECB rates



Source : Authors' calculations.

To the extent that the recent crisis has its roots in the macroeconomic imbalances that developed in the euro zone, it is essential for the proper functioning of the European Union to reduce the sources of heterogeneity between the Member states. However, this is not necessarily the responsibility of monetary policy. First, it is not certain that the instrument of monetary policy, short-term interest rates, is the right tool to curb the development of financial bubbles. And second, the ECB conducts monetary policy for the euro zone as a whole by setting a single interest rate, which does not permit it to take into account the heterogeneities that characterize the Union. What is needed is to encourage the convergence of the banking and financial systems. In this respect, although the proposed banking union still raises many problems (see [Maylis Avaro and Henri Sterdyniak](#)), it may reduce heterogeneity. Another effective way to reduce asymmetry in the transmission of monetary policy is through the implementation of a centralized supervisory policy that the ECB could oversee. This would make it possible to strengthen the resilience of

the financial system by adopting a means of regulating banking credit that could take into account the situation in each country in order to avoid the development of the bubbles that pose a threat to the countries and the stability of the monetary union (see [CAE report no. 96](#) for more details).

[1] [Kremp and Sevestre \(2012\)](#) emphasize that the reduction in borrowing volumes is not due simply to the rationing of the supply of credit but that the recessionary context has also led to a reduction in demand.