# Money, Banking and Territories: A MoFiR View



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Abstract This chapter relates the experience of the Money and Finance Research Group (MoFiR) established almost two decades ago within the Department of Economics of UNIVPM. The MoFiR main research focus has been the analysis of the evolution of the financial system on the development of economic systems. This chapter synthetizes some of the authors' main contributions on three main lines of research: the international and European monetary systems, the relationship between banking structures and local development, and the potential discriminatory effects of regulatory policies. In all these issues the main point of reference has been the impact of the evolution of financial structure and regulation on different territories (countries, regions, local systems) characterized by different levels of development. The authors argue that this point of interest should be maintained in any future study on the transformations of the financial system, included the evolving situations of different territories and bank-firm relationships. What has to be always considered crucial is the understanding of how structural changes generate and distribute benefits, risks, and losses within and among economies.

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### 1 Introduction

After 25 years of research in the field of monetary economics in the Department of Economics and Social Sciences of the UNIVPM, in November 2003 Pietro Alessandrini, Alberto Niccoli, Luca Papi and Alberto Zazzaro promoted the institution of Laboratorio Banche, Imprese e Sviluppo (La.B.I.S.) with the aim of favoring a network open to researchers that operated both inside and outside the Department. The excellent results obtained in the first years encouraged the extension of the network at the international level. Hence in November 2007 they denominated the laboratory Money and Finance Research group (Mo.Fi.R.), including Michele Fratianni among the promoting members. The research focus of the group is to investigate, from both the empirical and theoretical points of view, the evolution of the financial system as the collection of financial institutions, intermediaries and markets and the real consequences for the development of economic systems. The main point of reference of our analysis is the impact of the financial structure on territories. The basic view is that the territorial playing field is not levelled. Consequently, also in presence of globalizing technologies and standardized instruments, the functioning of financial intermediaries and markets and their regulatory policies must be reasonably flexible to be adapted to territorial asymmetries. In this way the financial system could better contribute to the reduction of development gaps at regional and international levels.

From 2008 and 2018, the MoFiR group produced a relevant amount of activities with the participation of 29 members and the collaboration of several researchers from other Italian and international universities and public and private institutions. The result has been a wide consideration in the international scientific community. It is remarkable to reckon, among the other initiatives, 150 MoFiR Working Papers and 11 international conferences, of which 8 MoFiR Workshop on Banking.<sup>1</sup>

In the following sections of this chapter we will synthetize our contributions to three main lines of research: the international and European monetary systems, the relationship between banking structures and development, and the regulatory policy.

## 2 The International and European Monetary Systems

The line of research of the MoFiR group on international monetary issues has been put forward mainly by Pietro Alessandrini and Michele Fratianni. Their interest is based on the consideration of the fundamental disequilibria that persist in the international monetary world. The structural changes, aggravated from 2007 by the great financial crisis, create almost a unique opportunity to reshape the international monetary system (IMS). The big risk is a confidence crisis in the dollar, which is still the dominant currency since the end of the second world war. The consequences would be sharp realignments of exchange rates and the resurgence of protectionism

<sup>&</sup>lt;sup>1</sup>Two conferences had been held in Chicago (USA), one in London (UK), one in Kobe (Japan), all the others at the Faculty of Economics Giorgio Fuà in Ancona.

in international trade. The long run deterioration of the US position from the largest creditor to the largest debtor of the world is the consequence of its policy of benign neglect about external imbalances, benefiting from the "exorbitant privilege" of the issue of the key-currency of the world. This privilege is increasingly unacceptable and cannot persist in the long run. As the new big creditor, China is the critical player in bringing about changes. But the Chinese yuan is far from becoming the new key-currency of the international system. Nor is the euro ready yet to fully replace the dollar, in presence of the incomplete financial and political integration of the European system.

Alessandrini and Fratianni (2009a, b) advocate the creation of a supernational bank money (SBM) within the institutional setting of an international clearing union (ICU). They take inspiration from the five principles underlying Keynes' plan presented at the Bretton Woods Conference in 1943: gradualism, complementarity, multilateralism, banking approach, and symmetry of adjustment. One world money governed by a world central bank is utopian and also difficult to justify in economic terms. In coexistence with national currencies that retain their means-of-payment function, SBMs are owned by existing central banks as multilateral reserve currency vis-a-vis the ICU. Alessandrini and Fratianni's project envisages an initial cooperative agreement among a restricted group of key countries, such us USA, EU, and China, that find in their interest to share responsibility to stabilize the IMS. Hence the ICU should be initially established at the International Monetary Fund (IMF) by three leading central banks: FED, ECB and People's Bank of China. As the clearing system starts and shows its benefits, all central banks will find it convenient to adhere to the ICU. There are two channels of creation of new SBM. First, central banks obtain SBM deposits in change of low risk assets (i.e. treasury bills denominated in national currencies). So SBM has the property of a basket currency with the attendant risk diversifying characteristics. Second ICU operates on a banking principle with the possibility to create SBM allowing central banks to get overdraft facilities on their SBM account. It implies a full-fledged agreement by participating central banks on rules of the game, such as: size and duration of overdrafts, designation of countries that would have to bear the burden of external adjustment, and coordination of monetary policies. The IMF is best positioned to monitor and "enforce" these rules. In their papers Alessandrini and Fratianni analyze the benefits of the SBM proposal. In synthesis: strong reduction of the key-currency countries' "exorbitant privilege", endogenous creation of SBM, revitalized function of the IMF for a better coordination of monetary policy objectives, symmetric responsibility of adjustment shared by external deficit and surplus countries. Moreover Alessandrini and Presbitero (2012) emphasize the adoption of the SBM system, as a step forward from the Special Drawing Rights (SDR) system, in the current foreign assistance framework for a better distribution of development finance to relax the external constraints of less-developed countries.

The second line of research of the MoFiR group concerns the fragility of the Euro-area (EA) exposed to world financial crisis. Again, it is a matter of disequilibria between member countries and the connected problems of financing and adjustment. Alessandrini et al. (2014) analyze the connections between external imbalances and

sovereign debt crisis within the EA. The prevailing wisdom is that the South of the EA has been fiscally irresponsible and has failed to implement necessary supply-side policies such as liberalizing labor markets and the market for services. The second view attributes part of the responsibility of the euro crisis to external imbalances resulting from inadequate adjustment mechanisms. The North (in particular Germany) has enjoyed large current-account surpluses, while the South has accumulated current account deficits, suggesting that real exchange rates are too weak for the North and too strong for the South. The paper shows that these two views are not inconsistent. The empirical results confirm that the EA sovereign debt crisis has been as much a matter of external imbalances as of fiscal irresponsibility. At the basis of both problems lie the inadequate adjustments in competitiveness between surplus and deficit countries. Since nominal exchange rates are fixed in the EA, and given that the level of economic activity is historically low in the South, an expansion of aggregate demand in the North and less austerity in the South would have worked better than strict austerity over the entire EA.

Alessandrini and Fratianni (2015) consider that, in the absence of fiscal union, the correction of external imbalances within the EA must be taken as seriously as that of national fiscal imbalances and debt-to-GDP ratios. The EU Commission should promote set targets on current-account imbalances, applied symmetrically to both deficit and surplus countries. Moreover, the ECB should adopt a managed flexibility of the common monetary policy. On the surface, there could be a contradiction between a common monetary policy and the introduction of some flexibility. The principle of a unified monetary policy is maintained once ECB fixes the same strategy and the same basic official rates of interest for all EA countries. The specific proposal of the paper is that national central banks of the EA should add a risk premium cost to official interest rates on banks that accumulate "excessive" borrowings or deposits to compensate, respectively, for outflows and inflows of the monetary base due to the effect of external imbalances. This solution, aimed to contrast such institutional sterilization, would favor the monetary adjustment of external disequilibria.

## 3 Geography of Banking Industry, Distances and Development

Since the early nineties, research on banking and financial issues in Ancona has focused on the geographical organization of banking systems and their impact on regional development. This was an innovative line of research on which at that time an intense debate was developing at both the national and international level, spurred by the ongoing merger and acquisition processes in many banking systems around the world, and that would then find its place in the most prestigious international journals.

The common opinion among scholars and practitioners was that deregulation, advancements in information technology and financial innovations would have made

banking activity ever more transaction oriented, including a great number of non-traditional financial products. A natural consequence of this trend would be the expansion of banks on a global scale both geographically and in terms of products supplied. A supranational financial system would have emerged, populated by few global players able to offer standardized products in many different countries and regions. The importance of geographical proximity between banks and borrowers would be doomed to decline over time and 'the end of financial geography' would become a real possibility (O'Brien 1992).

Some critical voices warned against the myth of global banking, pointing out the role of banks as agents of development, and the high costs that the consolidation and geographical agglomeration of bank decisional centres would generate for peripheral regions and small local firms. Among these are the work of Alessandrini (1989) on regional financial flows, the analyses by Alessandrini (1992, 1994, 1996) and Zazzaro (1998) on the territorial articulation of the banking system in some Italian regions. Alessandrini and Zazzaro (1999) propose a "possibilist" approach taking into account cost and benefits of financial integration for the peripheral regions and indicate the need to favor processes of active integration "that are best suited to the specific and varying characteristics and adjustment capabilities.

This approach was used to warn against the specular myth of local banks. Although the informational advantages of local banks, stemming from their historical roots and "cultural affinities" with the local community, allow for sounder assessment of local firms, they do not ensure that credit is always allocated as best suits local economic development. First, in backward areas, liquidity costs may discourage local banks from financing innovative businesses. Since local banks concentrate most of their deposit collection activity in limited geographical areas, the reflux of deposits resulting from the granting of a loan will be higher, and the cost of liquidity for the bank will be lower, as greater the amount of granted credit spent locally by borrowers as happens in the case of less innovative firms, operating in domestic-demand-oriented industries (Zazzaro 1993, 1997). Second, in-depth exclusive knowledge of a single economic environment may reduce a local bank's capacity to react to novelties from the world of production, and long-term ties with local firms may drive local banks to limit the entry of new firms and the financing of highly innovative businesses. This type of attitude on the part of local banks would also end up reducing the innovative efforts of existing firms which, "protected" by the local banks, would have less incentive to introduce innovations (Zazzaro 2002).

This first strand of studies is ideally completed by the article of Lucchetti et al. (2001). In this study, they propose a novel approach for measuring financial development based on the efficiency of the banking industry, which has been widely used in the literature on finance and development. Namely, they introduced a measure of the inefficiency of regional banking systems based on the microeconomic cost inefficiency of individual banks, weighted for the respective share of bank branches in the region, and included this measure in a panel convergence regression for Italian regions. Their findings indicate that the inefficiency of the regional banking systems has a significant negative influence on regional GDP growth rates independent of the

presence of local banks, overall lending to local firms and other possible confounding factors (human capital, efficiency of the local judiciary system, and regional and time dummies).

The processes of privatization, deregulation and consolidation of banking industry in the 90s led to an increasing spatial concentration of bank decision-making centres and strategic functions in a few places within each country. At the same time, however, the geographical diffusion of banking structures and instruments expanded in almost every industrialized country (Alessandrini et al. 2009b). This spatial concentration-diffusion trend in the banking industry raised some new important issues about the role of relationship banking in the era of global banking, the real effects of the organizational structure of a local banking system, and the impact of the geographical and cultural distances between bank operational branches, bank decisional centres and borrowers on loan contracts, lending technologies and credit allocation.

Using the lens of geography of banking power, related to the spatial distribution of credit institutions involved in M&A deals in Italy, Alessandrini et al. (2005) find that, unlike what happened in the Centre-North, acquired banks headquartered in less developed Southern regions show worse performance indicators (small business lending, loan growth, bad loans and profitability) than stand-alone banks located in the same area, regardless of time elapsing from acquisition and the size of the acquired bank. Alessandrini et al. (2008) focus on the portfolio restructuring strategies of banks involved M&A deals. They show that acquisitions involving banks headquartered in Central and Northern Italy were dominated by a simple asset-cleaning strategy by the bidder bank, without changing the asset allocation of the target bank. By contrast, in the case of acquisitions of banks in the Southern regions by banks of the Centre-North, the asset restructuring strategy pursued by the acquiring bank led to a structural change in the portfolio of the acquired bank with a permanent reduction in loans to small firms and an increase in asset management activity, which was more pronounced as the cultural distance (in terms of social capital) between the provinces where dealing partners are headquartered was greater.

The changing geography of banking industry was the subject of the first international conference organized by the MoFiR group in September 2006. On that occasion, the notion of "functional distance", introduced by Alessandrini et al. (2005), was for the first time extended to local banking systems as a whole by Alessandrini et al. (2009a) who operationalized it by the index:

$$FD_{j} = \frac{\sum_{b=1}^{B_{j}} \left[ branches_{b} * \ln \left( 1 + D_{jzb} \right) \right]}{\sum_{b=1}^{B_{j}} branches_{b}}$$

where  $B_j$  is the number of banks operating in province j, branches<sub>b</sub> is the number of branches belonging to bank b in the province j, and  $D_{jzb}$  is the geographical or cultural distance to the province j where the bank b is headquartered.

In a number of contributions, it was shown that in Italy firms located in provinces disproportionally populated by functionally distant banks have less access to credit

(Alessandrini et al. 2009a), a lower capacity to maintain a long-lasting bank relationship (Presbitero and Zazzaro 2011), a lower propensity to innovate (Alessandrini et al. 2009b), and suffered from a stronger credit crunch during the financial crisis (Presbitero et al. 2014). The negative effects of the functional distance of the local banking system tend also to mitigate the positive effects for firms' access to credit and lending relationships of being located in an industrial district (Alessandrini et al. 2008; Alessandrini and Zazzaro 2009).

Finally, Bellucci et al. (2013, 2019) and Filomeni et al. (2016) analyze the role of operational and functional distance on loan contract terms and information production.

## 4 The Effects of the Regulatory Process

In recent years the attention of the MoFiR group has extended to the analysis of structural aspects of the banking sector due to a new regulatory wave. It is a known fact that new financial regulation comes in big swings. The two decades before the 2007 financial crisis had been characterized as a liberalization period from barriers between commercial banking, investment banking and insurance. The new deregulation established an environment of liberalized capital flows, facilitating the growth of large, complex and interconnected banks. More recently, as a result of the 2007 financial crisis, the deregulation/re-regulation pendulum has shifted again towards the stability of the banking sector, bringing with it a new wave of rules. Consequently, as the effects of the crisis have settled, two main aspects of a new operative scenario in banking have emerged (Alessandrini et al. 2016a).

The first aspect is the end of the liberalization process that was supposed to improve the efficiency of banks and financial markets. In fact, years of deregulation had enhanced the rise of big universal banks, unanimously considered responsible of the contagion in the crisis through the spread of the originate-and-distribute model. The second one is the introduction of a growing regulatory system (the so-called Basel III) to forestall financial risks and regain banking stability. Under the pressure of the crisis, Basel III emerged as a much stronger version of Basel II in terms of capital requirements. It also introduced non-credit risk-based measures such as ceilings on the leverage level and liquidity ratios. Basel III is actually an ongoing process that produces a constant flow of new norms and clarifying documents. But the one feature that really stands out is its complexity (Masera 2015, Alessandrini and Papi 2018). Complexity goes beyond the enormous number of pages detailing rules and interpretation. It is measured in terms of data, analytics, implementation and reporting requirements. Judged in terms of interaction alone, complex controls are at a disadvantage compared to simple controls. But while Basel III defines a forest of risk definitions, it ignores that ultimately risk is determined by the interaction of a complex system with complex controls (Caprio 2013). Furthermore, implementation and compliance costs are another strike against complexity. The effects of this regulatory evolution have been widely studied in relation to many aspects. For instance,

Fratianni et al. (2017) assess the link between regulation and the probability of a banking crisis and show how the probability depends on factors such as the kind of regulation and more interestingly on the quality of institutions.

Less studied by the economic literature and above all less considered by the competent authorities have been the consequences of the increased regulation on the structural characteristics of banking systems. A recent focus of the MoFiR research agenda is how this new regulation is affecting the structure of the banking system and, in particular, which asymmetric effects are emerging. Two kinds of asymmetries have been considered.

The first asymmetry is on bank size. While stability comes with a cost, the working principle is that this cost be distributed proportionately across different types and sizes of banking institutions. A vast and complex regulatory system is bound to alter banks behavior and a uniform regulation may end up having asymmetric effects on different types and sizes of banks. Much of regulation is a fixed cost, which creates a proportionally higher burden on small banks than on large banks. The requirements of new regulation in terms of administrative and IT costs are for all kinds of banks, whereas their impact should take into account criteria such as the size, business model and complexity of banks (Alessandrini et al. 2016b). In contrast, uniform regulation violates the important principle of proportionality which should be recognized and applied to many aspects of the regulatory process. In the presence of an insufficiently applied proportionality principle, a regulatory system of increasing size and complexity can influence the level of competition within the banking system. This effect leads to the raising of barriers to entry into the sector, imposing fixed costs from the heterogeneous effects on the various size categories of banks.<sup>2</sup>

The second asymmetry of the new regulation is on territories. In this respect, we can ask how the regulatory costs are transferred to bank customers. With regard to the credit granted, we can distinguish between a quantity effect and a price effect. The credit supply has certainly been influenced by the regulation that has innovated on the reclassifications of credits and imposed additional provisions.<sup>3</sup> The recognition in the financial statements of the new value adjustments, required by the regulation and due to the deterioration in the quality of credit, affected negatively the supply of loans. On the other hand, the price effect depends on the elasticity of the demand for credit, which in turn is a function of accessibility to cheaper alternative financial solutions. Thus it is possible that those customers that, for example, may resort to alternative forms of financing are less affected by higher banking costs, while on the contrary, households and small businesses, for which there are practically no alternatives to banking products, are probably forced to bear a greater burden. If we then consider the specialization of small banks, which focuses on SMEs and peripheral territories, we can conclude that regulatory responses to the banking and

<sup>&</sup>lt;sup>2</sup>See Alessandrini and Papi (2018) for some empirical evidence of the different regulatory burden for the different size categories of banks for the Italian case.

<sup>&</sup>lt;sup>3</sup>According to the Bank of Italy, an increase of one percentage point of the new non-performing loans in relation to total loans would correspond to an average reduction of the growth rate of loans to companies by about 1.5 percentage points (Bank of Italy 2017).

financial crisis weigh more on small businesses and those peripheral territories that will continue to depend on small local banks. Moreover, in less developed areas, banks face a higher proportion of riskier firms. Since these firms impose a higher consumption of bank capital, uniformly stricter capital-based rules are bound to amplify regional disparities.

In fact despite these clear asymmetries, Basel III treats all banks virtually the same.<sup>4</sup> This uniformity affects unfavorably the small local or community banks that are an important component of many banking systems, including the United States and several European countries, Italy first. Moreover, large banks receive a "too big to fail" subsidy from the possibility that the capital surcharge may not be adequate to prevent being rescued by governments. Without a regulatory correction, small banks are at risk of disappearing, an issue that is hotly debated in the United States, which has already implemented a dual-regulatory system, one applicable to very large banks (Advanced Approaches Banks) and another to community banks (Fratianni 2015). The latter face smaller risk-weighted capital ratios than the former and are exempt from the countercyclical capital buffer, supplementary leverage ratio, and credit valuation adjustments requirements. Furthermore, community banks in the United States are subject to lighter supervision than applicable to large banks and are exempt from stress testing and capital planning requirements (Yellen 2014). In contrast, the EU application of Basel III does not make any substantial distinction between large and small banks. In fact, with the exception of the global systematically important banks, the European regulatory approach envisages a sort of "one-size-fits-all" regulation framework relegating the implementation of the principle of proportionality basically to a different frequency of the supervisory engagement for the various size categories of banks

To conclude, regulation impacts not only risk and profitability of the banking system as a whole but also its structure. The last wave of regulation is relatively unfriendly to local banks, reflecting the position of regulators, especially European, that a consolidation of the banking system can lower systemic risk. Our belief is that it should not be the regulator to select the preferred type of bank. The task of evaluating the efficient structures should be left to the market. In general, the principles of the diversity of the structures and the proportionality of the control system must be objectives to be exploited rather than canceled, to the benefit of competition that produces efficiency and the diversification of business models that produces stability.

#### 5 Conclusions

The three main lines of research developed by the MoFiR group deal with problems that are still open. However, the results obtained will maintain their value for future researches. Everything is subject to changes. Technological innovations are the main

<sup>&</sup>lt;sup>4</sup>Except the 30 global systematically important banks (G-SIBs).

driver of structural transformations and the financial system is particularly sensitive to innovations in means of payments, financial instruments and services, structures of intermediation, and forms of control and policy. The fintech revolution is already in action.

In this rapid evolution with unforeseeable effects, it is important to maintain a clear point of reference in the method of research. This approach has produced significant results in the researches we have synthesized in this chapter. They refer to the last three decades, that had already been characterized by important transformations, like: the relative decline of the dollar supremacy, the increased role of China as a creditor country, the birth of the Eurosystem, the consolidation process of banking structures, the evolution of the lending relationships with bank customers, the epidemic impact of the great financial crisis, the consequent passage of the regulatory pendulum from a long period of liberalization to a pervasive system of regulation.

In all these problems the focus of our analysis has been the evaluation of their impact on territories (countries, regions, local systems), characterized by differences in levels of development. This point of reference should be maintained for any future transformations. What is always needed is to understand how any structural innovation will generate and distribute benefits, risks, and losses. Moreover, it is important to monitor the potential destabilizing effects of fundamental imbalances generated by excess of financing and difficulties of adjustment. This point of reference always applies in the external exchanges between countries, regions, and in bankfirm lending. And it will remain a fundamental factor of instability whatever future financial system will prevail. Finally, the regulation structure must always be flexible and not discriminatory. Flexibility is needed to obtain a difficult but necessary balance between financial efficiency and stability. The no discriminatory impact is requested to maintain a diversified structure of financial intermediaries functional to the diversified structure of firms.

### References

Alessandrini, P. (1989). I flussi finanziari interregionali: interdipendenze funzionali ed indizi empirici sulla realtà italiana. In A. Niccoli (Ed.), *Credito e sviluppo: Evoluzione delle strutture e squilibri territoriali* (pp. 223–279). Giuffrè: Milano.

Alessandrini, P. (1992). Squilibri regionali e dualismo in Italia: alcune riflessioni. *Moneta e Credito*, 47, 67–81.

Alessandrini, P. (Ed.). (1994). La banca in un sistema locale di piccole e medie imprese. Bologna: Il Mulino.

Alessandrini, P. (1996). Sistemi locali del credito in regioni a diverso livello di sviluppo. *Moneta e Credito*, 50, 567–600.

Alessandrini, P., & Fratianni, M. (2009a). Resurrecting keynes to stabilize the international monetary system. *Open Economies Review*, 20(3), 339–358.

Alessandrini, P., & Fratianni, M. (2009b). Dominant currencies, special drawing rights, and supernational bank money. *World Economics*, 10(4), 45–67.

Alessandrini, P., & Fratianni, M. (2015). In the absence of fiscal union, the eurozone needs a more flexible monetary policy. *PSL Quarterly Review*, 68(275), 279–296.

- Alessandrini, P., & Papi, L. (2018). L'impatto della bolla regolamentare sulle banche (pp. 2–20). Bancaria.
- Alessandrini, P., & Presbitero, A. F. (2012). Low-Income Countries and an SDR-based international monetary system. *Open Economies Review*, 23(1), 129–150.
- Alessandrini, P., & Zazzaro, A. (1999). A "possibilist" approach to local financial systems and regional development: The Italian experience. In R. Martin (Ed.), *Money and the Space Economy* (pp. 71–92). New York: Wiley.
- Alessandrini, P., & Zazzaro, A. (2009). Banking localism, distances and industrial districts. In G. Becattini, M. Bellandi & L. Depropris (Eds.), *A handbook of industrial districts* (pp. 471–482). Cheltenham: Edward Elgar.
- Alessandrini, P., Calcagnini, G., & Zazzaro, A. (2008a). Asset restructuring strategies in bank acquisitions: Does distance between dealing partners matter? *Journal of Banking & Finance*, 32(5), 699–713.
- Alessandrini, P., Croci, M., & Zazzaro, A. (2005). The geography of banking power: The role of functional distances. *BNL Quarterly Review*, 58(235), 129–167.
- Alessandrini, P., Fratianni, M., Hallett, A. H., & Presbitero, A. F. (2014). External imbalances and financial fragility in the euro area. *Open Economies Review*, 25(1), 3–34.
- Alessandrini, P., Fratianni, M., Papi, L., & Zazzaro, A. (2016a). Banks, regions and development after the crisis and under the new regulatory system. *Credit and Capital Markets*, 4, 536–561.
- Alessandrini, P., Fratianni, M., Papi, L., & Zazzaro, A. (2016b). The asymmetric burden of regulation: Will local banks survive? In G. Bracchi, U. Filotto, & D. Masciandaro (Eds.), *The Italian banks: Which will be the "new normal"? 2016 report on the Italian financial system.* Roma: EDIBANK.
- Alessandrini, P., Presbitero, A. F., & Zazzaro, A. (2008b). Banche e imprese nei distretti industriali. In A. Zazzaro (Ed.), *I vincoli finanziari alla crescita delle imprese* (pp. 244–266). Carocci: Roma.
- Alessandrini, P., Presbitero, A. F., & Zazzaro, A. (2009a). Banks, distances and firms' financing constraints. *Review of Finance*, 13(2), 261–307.
- Alessandrini, P., Fratianni, M., & Zazzaro, A. (2009c). Geographical organization of banking systems and innovation diffusion. In P. Alessandrini, M. Fratianni & A. Zazzaro (eds.), The changing geography of banking and finance. New York: Springer, 75–108.
- Alessandrini, P., Presbitero, A., & Zazzaro, A. (2010). Bank size or distance: What hampers innovation adoption by SMEs? *Journal of Economic Geography*, 10(6), 845–881.
- Bank of Italy. (2017). Report on financial stability, November.
- Bellucci, A., Borisov, A., & Zazzaro, A. (2013). Do banks price discriminate spatially? Evidence from small business lending in local credit markets. *Journal of Banking & Finance*, *37*(11), 4183–4197.
- Bellucci, A., Borisov, A., Giombini, G., & Zazzaro, A. (2019). Collateralization and distance. Journal of Banking & Finance, 100, 205–217.
- Caprio, G., Jr. (2013). Financial regulation after the crisis: How did we get here, and how do we get out? LSE financial market group special paper series N. 226, November.
- Filomeni, S., Udell. G. F., & Zazzaro, A. (2016). Hardening soft information: How far as the technology taken us? MoFiR working paper no. 121.
- Fratianni, M. (2015). Basel III in reality. Journal of Economic Integration, 30(1), 1–28.
- Fratianni, M., Pisicoli, B., & Marchionne, F. (2017). *Regulation, financial crises, and liberalization traps*. MoFiR working paper no.143.
- Lucchetti, R., Papi, L., & Zazzaro, A. (2001). Banks' inefficiency and economic growth: A micromacro approach. Scottish Journal of Political Economy, 48(4), 400–424.
- Masera, R. (2015). Regole e supervisione delle banche: Approccio unitari vs modello per livelli e implicazioni per la morfologia del sistema delle banche, EU e US. Working paper, Università degli Studi Guglielmo Marconi.
- O'Brein, R. (1992). Global financial integration: The end of geography. Royal Institute of International Affairs. London.

Presbitero, A. F., & Zazzaro, A. (2011). Competition and relationship lending: Friends or foes? *Journal of Financial Intermediation*, 20(3), 387–413.

- Presbitero, A. F., Udell, G. F., & Zazzaro, A. (2014). The home bias and the credit crunch: A regional perspective. *Journal of Money Credit and Banking*, 46(s1), 53–85.
- Yellen, J. L. (2014). Tailored supervision of community banks, remarks made at policy summit of the independent community bankers of America, Washington, May 1.
- Zazzaro, A. (1993). Banche locali e sviluppo economico regionale: Costi di liquidità e costi di solvibilità. *Rivista di Politica Economica*, 107–152.
- Zazzaro, A. (1997). Regional banking system, credit allocation and regional economic development. *Economie Appliquée*, 51(1), 51–74.
- Zazzaro, A. (1998). Articolazione territoriale del sistema bancario e sviluppo economico: Aspetti teorici ed alcune evidenze relative alla Campania. *Moneta e Credito*, 51(203), 295–330.
- Zazzaro, A. (2002). The allocation of entrepreneurial talent under imperfect lending decisions. *Rivista Italiana degli Economisti*—The Journal of The Italian Economic Association, 7(3), 303–330.