

REVIEW ARTICLE

Macroeconomic Volatility and Financial Architecture Instability: Institutional Considerations of the Causality

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Abstract

This paper investigates the role of institutions in explaining the causality relationship between macroeconomic volatility and financial architecture instability. We document that shocks and higher macroeconomic volatility weaken financial structure and determine the endogeneity of institutions. Examining the way by which the authorities act to build the DFAs under excessive volatility, we note that reactive policymaking models influence the timing and the order of innovations of the DFA institutions and have the potential to produce economically dysfunctional configurations in some time. We also indicate that human resources and other constraints linked to the capacity of public and private agents contribute to financial fragility in developing countries.

JEL classification: E32, G1, K20

Keywords: *Financial architecture, Institutions, Macroeconomic volatility.*

Introduction

Macroeconomic volatility is one of the characteristics which is heavily rooted in developing world. Special interest is given to these countries because the welfare cost of their macroeconomic volatilities is particularly high. Several studies tried to explain the relationship between macroeconomic fluctuations and financial sphere, in particular after being affected by financial crisis these last decades.

Financial systems of developing economies are vulnerable and suffer of insufficient depth which can be summarized as the quality of regulation and supervision, the fragility and the dominance of banking sector and the frequency of informal markets.

This volatility can stimulate financial instability which can affect, in its turn, the parameters defining stochastic process generating shocks, what entails consequently high aggregate volatility. In brief, bidirectional causality can occur between the instabilities of real and financial sectors [1].

Several researchers argue that financial approaches have many limits in the analysis of

these phenomena and emphasized the necessity of introducing political and institutional factors having proved their relevance in explaining several real and financial phenomena.

In this paper, we try to investigate the various institutional and political configurations of the causality relationship between excessive macroeconomic volatility and the instability of financial architectures.

The remainder of the paper is organized as follows: In section 2, we examine institutional determinants of macroeconomic volatility. In section 3, we study the various political measures of financial architectures. We analyze the institutional approach of the causality between excessive macroeconomic volatility and financial architectures instability.

Macroeconomic Volatility and Institutions

We examine, in this section, several links which can be exist between macroeconomic volatility and some institutions.

Political Regimes and Macroeconomic Volatility

Although the research concerning the effects of the type of political system on the average growth rates does not establish big differences between democracies and the absolute dictatorships, it could have a considerable difference between the variances [2]. In a democracy characterized by a low volatility, the constitutional and institutional constraints on the managers are similar and are strong and could so lead to completely similar economic performances [3,4]. Democracies establish not only policies via the consensus but also allows a bigger diversification of the decision-making [5], leading hence to an economic stability. Empirical studies support such arguments by confirming a negative relationship between democracy and growth rate volatility [2,6,7]. Rodrik [8] asserts that set apart its role of institution of management of conflict, democracy reduces economic performance volatility via other channels. On one hand, to choose an autocratic regime rather than democratic one can probably undertake an unsafe investment and can even stimulate the discretionary power which is risked in its turn. On the other hand, democracies allocate the constraints to political actors, so no individual policy can establish policies. For example, Henisz [3] shows that when the number of politicians having an independent right of veto concerning political changes increases, the possibilities of modifying widely policies affecting investment decisions decrease. It's to note, also, that recent works showed that the relation democracy- volatility is robust both in term of association [9] and of causality [10, 11].

Corruption and Macroeconomic Volatility

Most of the existing studies emphasized that there is an inverse effect between corruption and growth [12-14]. However, other works show that a high corruption does not inevitably imply low growth rates [15-17]. Beyond this relationship, Evrensel [18] introduces another possible effect of the corruption on another variable, namely growth rate volatility. He argues that there are many reasons to explain the positive impact of a high corruption on macroeconomic volatility. He emphasizes, in particular, two main reasons. In a first time, it's possible that corrupt bureaucracies change periodically economic rules of the game, which can entail the increase of the variance of any particular investment. By combining the observations of Friedman [19] declaring that the periods of expansionist monetary and fiscal

policies in developing countries are followed by periods of economic stabilization and, consequently, by an increase of volatility, and those of Ramey and Ramey [20] mentioning the possible effects of political instability on growth rate volatility, with the theoretical analysis of Ehrlich and Lui [16] arguing that a specific type of the bureaucratic structure could generate a growth volatility, Evrensel [18] concludes, via his empirical study, that compared to developed countries, developing countries suffer from a low degree of corruption control and from high average inflation rates as well as a high growth and inflation volatilities. He, also, concludes that the control of corruption is negatively associated with inflation rate and growth volatility can be explained by the fact that regulations can reflect the institutional characteristics of countries and contribute so to the growth volatility. Several works on banking regulations indicate that developing countries have banking regulations which seem to be strict on the real plan, but in the practice they are weakly applied [21,22].

Political Instability and Macroeconomic Volatility

Until nowadays, political instability remains a major dissuasive factor, for the international community to invest in some developing countries. The inconstancy of the voters, conduct and dates of the elections, irregular putsch, political and ideological polarization, coalition of the government and political fragmentation establish generally the main elements of this instability.

By applying the analysis of dynamics factor, Klomp and de Haan [23] examine the effect of political institutions on economic growth volatility, using data from more than one hundred countries over the period 1960 to 2005. Among some conclusions, they find that some dimensions of political instability increase economic volatility. Certainly, this result is in accordance with some assertions arguing that economic growth can be more volatile when political environment is unstable and when political instability increases political future uncertainty. Nevertheless, empirical evidence on the impact of political instability on economic volatility is ambiguous. Rodrik [8] shows that economic growth is more volatile under external conflicts. However, Mobarak [11] concludes no significant relationship between external war or anti-governmental demonstrations and economic growth volatility. On the contrary, Asteriou and

Price [24] find that there is a robust positive relation between political instability, measured by several indicators of political violence and economic volatility in Great Britain. In a similar way, Campos and Karanasos [25] find that murders, Knocks and constitutional changes increase economic volatility in Argentina, while Debrun and al. [26] find a positive effect of the fragmentation of government on economic growth volatility in OECD countries.

Financial Architectures and Institutions

We emphasize, in what follows, on the institutional and political determinants of the domestic financial architectures (DFAs) and the international financial architecture (IFA).

Political Economy of the DFAs

We develop in this sub-section the several political factors of financial infrastructure and macroeconomic regime as being two elements of domestic financial architecture.

Political Economy and Financial Infrastructure

The legal and judicial infrastructure and financial markets governance compose the financial infrastructure in this section.

Legal and Judicial Infrastructure

Several studies suggest that the differences of legal origins contribute to explain the differences of financial development. Indeed, legal origin theory (common law and civil law) argues that legal systems help to protect investor's rights. Laporta, Lopez, Shleifer and Vishny [27] (LLSV) show that the foundation of commercial law or company law of a country on the British, French, German or Scandinavian origins is important in explaining country laws concerning private property rights as well as the level of development of banks and stock exchange in a country. Although LLSV argue that the legal origin explain financial development, other researchers highlight the reason why legal origin matters. For example, North [28] finds that Great Britain possesses better institutions than France. So British colonies would inherit better institutions than French colonies. Hence, legal origin can be a proxy for institutions which are fundamentally associated to the legal system.

Governance, Financial Markets and Political Power

The most important market which adequate economic institutions are critical is the financial

market because of the characteristics of financial contracts. The wide and impersonal financial markets require not only an appropriate legal structure but also an adequate application of the rights and obligations of the parties involved in the contract. Also, the historic evidence is compatible with the idea supporting that the key economic institutions matter for financial development. For example, the famous study of North and Weingast [29] about the glorious English revolution of the 17th shows that institutions were aimed to secure property rights, protect private property and eliminate government seizure.

Perotti and Von Thadden [30] argue that governance and consequently financial structure can be influenced by political sector and that this is not limited to codified laws as long as the government can change the legislation about several questions concerning banks and shareholders. In the same context, Pagano and Volpin [31] analyzes the political determinants of the protection of investor and employment. Their model plans that electoral systems contribute to weaken the investor protection.

Political Economy and Macroeconomic Regime

The political considerations may influence macroeconomic regime via various channels. Interested by the political economy of exchange rates, Broz and Frieden [32] argue that distributional effects of exchange regime choice depend on aggregate costs and profits. The groups involved in foreign trade and investment should favor fixed exchange rates systems because exchange stability promotes business and investment [33]. However, the groups which economic activity is limited to domestic economy should prefer a floating regime which allows the government to stabilize domestic economic conditions.

The choice of exchange regime also depends on the degree of democracy application. The no democrats adopt more probably a fixed regime with the aim of having a low inflation than democracies [34, 35]. The no democrats can anchor because they are more isolated from domestic audiences, and so support more political moderate adjustment costs of the economy to the anchor.

The link between the political system and monetary system was the object of several works such as those of Peter Bernholz, Richard Wagner, Alan Reynolds and David Meiselman. For example, Bernholz argues that the absence of an

anchor since 1914 to stabilize the currency value entailed an inflationary bias of the monetary policy conduct in the United States. To face this bias, it was necessary to limit monetary powers of the government by adopting a robust monetary constitution. Bernholz emphasizes the theory of public choice and its large knowledge of the inflationary episodes to suggest how an effective monetary constitution could be implemented and maintained. He argues that by limiting the discretionary power of the government, the long term price stability can be achieved.

Political Economy and IFA

Financial crises of the 1990s make many changes in the design of the international financial system. Several studies highlight the necessity of developing a new IFA. Cartapanis [36] examines the official outlines of this new architecture. He considers that this program is only a political response introduced by the American diplomacy and G7 to face the systematic contagions of the 1990s. In his analysis, he argues that the United States stand out as an international economic and financial leadership and hence it justify its implication in the financial management of the crises, taking into account the important volume of American exports towards emerging countries.

Decisions taken by the G7 in order to improve the IFA are strengthening the international financial institutions, the improvement of the transparency; the consolidation of financial regulations in industrialized countries, strengthening macroeconomic policies and financial systems in emerging countries and improvement of crisis prevention and management by means of the private sector.

So, this alliance of private sector interests and those of the United States to reform the financial architecture was also confirmed by Underhill [37] who considers that the decisions taken concerning the financial sector can affect many interests in the society and that the preferences supporting political results are the product of a closed alliance between the private actors and autonomous government agencies which the responsibility is limited.

The action of the private sector and rich countries on financial regulations was, besides, studied in the paper of Claessens and al. [38]. He shows that the standards of Basel II were widely formulated to serve the interests of the powerful actors of the market and marginalize developing economies. Indeed, developing countries have a low influence on the formulation of new standards. Their representation in the IMF and World Bank is not

in accordance with their parts in the global economic activity. Furthermore, the costs of implementation of new standards are higher for them than for developed countries. The author underlines that for developing countries; the standards of Basel II can make domestic financing more expensive, increase the costs and reduce the access to external financing. He also argues that these standards can strengthen external financial fluctuations, although these developing countries already suffer from an excessive volatility.

This marginalization of developing countries is also asserted in the paper of Blomberg and Broz [39]. By investigating the governance structure of the IMF, they show that the power of vote is explicitly linked to the size of the financial contributions of member countries. In spite of their big parts, rich countries are characterized by a high power of vote while developing countries suffer from “democratic deficit” which minimizes their influence on the policies and programs of the IMF.

Macroeconomic Volatility and Financial Architecture instability: Institutional Configurations of the Causality

We try, in this section, to reveal the various political configurations which can explain the causality relationship between excessive macroeconomic volatility and financial architectures instability. To do it we study, in the first sub-section, the political impact of macroeconomic volatility on financial institutions. We analyze the way by which the authorities act to build the AFDs under an excessive volatility.

Political Impact of Macroeconomic Volatility on Financial Institutions

The excessive macroeconomic volatility hinders, via political effects, the development of efficient financial institutions.

Shocks and higher macroeconomic volatility weaken financial structure and determine the endogeneity of institutions. Easterly and al. [40] argue that countries in which firms are characterized by higher debt ratio and in which financial institutions are strongly slowed down can be easily confronted to shocks. They can make changes in perceptions, concerning for example economic future of the country. Easterly and al. [40] underline not only the endogeneity of institutions but they also establish a link with global shocks which refers, according to Fanelli [1], to the same context. Acemoglu and al. [41] argue that institutions are endogenous and they

are determined, partially, by the society or by one of its segments.

Macroeconomic volatility also incites some agents to violate the contractual arrangements. When a considerable disturbance occurs, *ceteris paribus*, the existing contracts cannot infuse order in transactions because they become under-optimal when information is updated. This under-optimality creates motivations for some agents to violate or ignore contracts or regulations. This, usually, is accompanied by problems for the authorities to control in a “noisy” environment which deforms information and creates a weak framework to execute regulations. Consequently, *ex post*, a good part of the existing contracts and regulations becomes obsolete, which hampers the application of governance structures and rules.

The supreme effect of a considerable shock will be, in this way, the appearance of “Broken promises” and a situation in which agents plan that the probability of changes of rules of the game is higher. To understand institutional changes under excessive volatility, we have to develop “the political economy of broken promises” as Leijonhufvud [42] stated.

Institutions Building under Excessive Volatility and Crises: Political Configurations

Several empirical studies provide sufficient evidence to assert that policy and institutional innovations affecting the DFAs are inspired by reactive models of policy making. Indeed, studies on the DFAs evolution show that it tends to have more innovations during and immediately after recessions and crises, on the one hand. On the other hand, it tends to modify the multiple political instruments and institutions in order to achieve the purposes of macroeconomic policies during these periods.

These models influence the timing and the order of innovations of institutions which build the DFA and have the potential to produce economically dysfunctional configurations in some time. For example, in Argentina, the “currency board” regime and the reforms associated with the charter of the central bank, the project of deposit insurance and the systems of financial regulation and supervision, all occurred during the brief period of two year immediately after the hyperinflation of 1989- 1990.

Certainly, it was proved that human resource and other constraints linked to the capacity of public and private agents contributed to financial fragility in recent past. Nevertheless, human

resources constraints don't affect all the agents in the same way, they are not the only problems to be confronted. A new regulatory structure requires new information systems and technologies and leads probably to a necessary reconception of services, the pricing policy and the competitive strategies by financial intermediaries.

Some researchers mention that some services such as those provided by the agencies of risk evaluation are a precondition for the proper functioning of the market. However, those services can take time to be provided by transition and development countries. Other studies assert the incapacity of some developing countries to strengthen simultaneously the different pillars of financial architecture with coherence. Argentina, for example, emerged further to ten years of relative macroeconomic stability but without making improvements on the legislations of the protection of investors and the efficiency of legal institutions. It does not mean that the reformers were incapable to detect the pernicious effects of, for example, the legal practices which hampered lender's ability to get back their capital. Rather, the argentine experience shows how it could be possible to progress to very different speeds in order to introduce formal and efficient institutions and how some reforms (for example, commercial law and legal system) can set many years to manage to join the political schedule of countries which are able to face a higher macroeconomic fluctuations.

Conclusion

We tried, in this paper, to examine the institutional approach of the causality relationship between excessive macroeconomic volatility and financial architectures. In first time, we study the links which can exist between macroeconomic volatility and institutions. We emphasize on the role of political regimes, corruption and political instability in explaining macroeconomic volatility. In second time, we study the relationship between institutions and financial architectures. We analyze political determinants of DFAs and IFA. In third time, examining political configurations of the causality between macroeconomic volatility and financial architectures, we conclude that shocks and higher macroeconomic volatility weaken financial structure and determine the endogeneity of institutions. Analyzing the way by which the authorities act to build the DFAs under excessive volatility, we note that reactive policymaking models influence the timing and the order of innovations of the DFA institutions and have the potential to produce economically dysfunctional configurations in some time. We also indicate that

human resource and other constraints linked to the capacity of public and private agents

contribute to financial fragility in developing countries.

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