SHADOW BANKS, FINANCIAL INCLUSION AND FINANCIAL STABILITY: DOES INSTITUTIONAL QUALITY MATTER?

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Abstract:

The role of non-banking financial institutions or shadow banks in the financial sector is much complex and controversial. While they lead to increase in financial inclusion and support economic activity, at the same time they can also lead to creation of systemic risks and instability in the financial sector due to regulatory gaps. In this study we look at the NBFC sector in three of the original BRICS economies located in Asia- India, China and Indonesia. The research question of the study is: What is the relationship between shadow banks, (interconnectedness between banks and NBFIs) financial inclusion and financial stability? (IMF 2025). Does institutional quality make a difference in this relationship? The study examines triangular relationship and explores the moderating role of institutional quality in this perspective. We examine this specifically in the case of three Asian countries: India, China and Indonesia.

Keywords: *Shadow banking, financial inclusion, financial stability, institutional quality, emerging economies*

INTRODUCTION

Non-banking financial companies or shadow banks comprise of “a diverse set of financial activities, entities and infrastructures” and include “investment funds, insurance companies, pension funds and other financial intermediaries…” (FSB 2025). They have also been defined as “registered companies, both government and non-government, which engage in credit intermediation and facilitate last-mile credit delivery to unbanked and underbanked sectors. They are also at the forefront of the digital transformation of the lending space, leveraging technology to offer tailor-made credit offerings to customers” (RBI 2024). Overall, as the above definitions show, the role of shadow banks in the financial sector is much complex and controversial. While they lead to increase in financial inclusion and support economic activity, at the same time they can also lead to creation of systemic risks and instability in the financial sector due to regulatory gaps. As the IMF Global financial stability report (2025) acknowledged, “The strong growth of NBFIs in financial intermediation can generate alternative sources of financing for firms, better capital allocation, and greater market efficiency through activity in capital markets. However, reaping these benefits requires policy steps to contain risks to financial stability”. According to the latest data available from Financial Stability Board (2024) the size of the NBFI increased by 8.5% more than twice growth experienced by the banking sector with the share of NBFIs in global financial assets rising to 49.1% while banks share has reduced over the years. This has been accompanied with increased interconnectedness between banks and NBFIs and their implications for systemic stability (IMF 2025). For example, in US the interconnectedness of banks to NBFIs increased from 10% in 2010 to 16% in 2024 (IMF 2025). Globally, about 4.31% funds of OFIs were funded by the banks and 5.48% of OFIs are exposed to the banks. Interconnectedness between shadow banks and banks can lead to financial instability and increase volatility in the domestic financial

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sector (Ghosh 2022). This can be through the channels of lending capacity, increased riskiness and sudden shifts in deposits. The NBFIs are, however, lightly regulated in most countries (Acharya et al. 2024).

In this study we look at the shadow banks in three of the BRICS economies located in Asia- India, China and Indonesia. The research question of the study is: What is the relationship between shadow banks, financial inclusion and financial stability? (IMF 2025). Does institutional quality make a difference in this relationship? Hardly few studies have examined the relationship between shadow banks, financial stability and financial inclusion. None have, however, examined the moderating role of institutions.

Our study is related to various streams of literature. Isayev (2024) for instance, examined the relationship between financial inclusion and financial stability moderated by shadow banks. Our study, on the contrary, focuses directly on shadow banks and explores its relationship to financial inclusion and financial stability. We also examine whether institutional quality makes any difference to this relationship. The institutional quality can determine not only the size of the shadow banking, but also its potential to cause financial instability. Another paper which is close to our area of interest is Vuković et al. (2024) who examine the relationship between fintech, financial inclusion and financial stability for BRICS economies. The study applied Global Vector Autoregressive (GVAR) model with Bayesian framework to analyze a monthly dataset ranging from 2015 to 2022. The authors find positive relationship between fintech and financial inclusion, but no significant effect to financial stability. Other studies such as Arora and Kashiramka (2023) examine the impact of shadow banking on financial stability on a sample of 11 EMEs for the period 2002–2020. The authors considered finance companies within the NBFIs and concluded higher the share of NBFI sector, higher the financial sector fragility. The authors build financial vulnerability index to capture financial fragility of the system. The above studies, however, have not examined the moderating role of institutional quality in this relationship.

METHODOLOGY

To examine the relationship between shadow banking, financial inclusion and financial stability our study considers data from various sources. Due to data availability constraints we consider the years 2004-2022. Following previous studies, we adopt both narrow and broad measures of shadow banking as proportion of GDP (Isayev 2024). Our choice of countries is also restricted by the availability of data as FSB data is available only for 29 countries including both developed and developing. We build index of financial inclusion taking three dimensions of penetration, outreach and usage into account (Arora 2014; Isayev 2024, Tram et al. 2024). The data on financial inclusion has been obtained from Financial Access Survey of IMF. The financial access survey is a supply side database covering 192 countries and is available from 2004 to 2023. Based on the existing literature we employ World Bank’s data on Bank Z score for financial stability. The higher the z score, lower the probability of default and greater financial stability. For our moderating variable we consider institutional quality from World Bank Governance Indicators. We construct an index of institutional quality for our purpose.

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