

Two faces of the same coin: integrated perspectives of public and private debt on the effects of interdependence on financial stability

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Abstract. *The issue of public and private debt has become one of the central themes in global economics and finance, especially in the context of the recent economic crisis and the expansion of financial markets. This paper brings together the findings of cerebral studies that explore the combined impact of public and private debt on economic growth with the focus on their interdependence as well as the implications for macroeconomic policies. Paper highlights how these types of debt influence each other and contribute to the financial stability or instability of both developed and emerging economies. Over the past decades, debt accumulation has become a key driver for economic development supporting investment in infrastructure and innovation. However these benefits come with significant risk, particularly when the level of indebtedness exceeds certain critical thresholds. Public debt is generally used to finance long-term projects and stimulate the economy during recessions, and private debt which contributes to consumption and private sector development are not easily isolated from one another. These two forms of debt interact in ways that can generate both positive synergies and amplify the negative effects. This paper brings together the conclusions of several studies that explore the combined impact of public and private debt on economic growth focusing on their interdependence and the implications for macroeconomic policies. Throughout the analysis of various perspectives ranging from critical debt thresholds to spillover effects between regions, the paper aims to provide the number of how that can become a systemic risk factor. Moreover, it explores the relationship between sovereign debt and the financial sector which can amplify vulnerabilities during crisis periods and presents the policies needed to manage these risks.*

Keywords: private debt, public debt, spillover, policy, dependency.

JEL Classification: F34, G51, H63, H68, G18.

1. Debt Growth and Interactions Between Public and Private Debt

After the 2008 global financial crisis public and private debt has reached record levels in many development economies. These increases were justified by the need to stimulate the economy in the recession and support the financial sector. However recent statistics showed that at a certain point, the simultaneous accumulation of public and private debt becomes the generator of economic growth contributing to the creation of vicious cycle financial vulnerability. studies highlighted that the total debt threshold both public and private leading to negative effects on economic growth is approximately 20% of the growth domestic product. Below this threshold public debt stimulates growth through investment in infrastructure and public good while private debt supports innovation and consumption. Above this threshold interactions between the two types of debt become negative, amplifying economic risks and reducing the fiscal space available for counter cyclical-fiscal interventions (Reinhart et al., 2012).

Public and private debt are not isolated from each other. there is a bidirectional relationship between them. increasing public debt can affect private debt because interest rates may rise when governments compete with the private sector for financial resources. This makes credit more difficult to access and more expensive for households and firms, a phenomenon known as “crowding out”. At the same time high levels of public debt can reduce investor confidence which negatively affects private sector financing. increased public debt may also lead to higher tax or reduced public spending in the future, bi-affecting economic activity and private sector investment decisions. On the other hand, private debt influences public debt, especially during financial crises. The rapid growth of private debt can lead to financial vulnerabilities and the need for government intervention to bail out the private sector which results in an increase in public debt. History demonstrated that excessive private debt accumulation could destabilize the economy and governments had to increase public borrowing to support the banking system and the economy as a whole. This complex relationship between public and private debt has also been illustrated in the context of the economic crisis. Rapid accumulation followed by severe downturns have led to significant increases in public debt during the recovery period; this phenomenon is known as a “fiscal crowding-out.” What's the need for policies that monitor and manage debt accumulation before triggering economic instability (Cecchetti et al., 2017).

2. Financial Spillover and Debt Dependency

Apart from World Trade Organization subsidy treaties and free trade agreements that inherit and complement these subsidy rules, there are no domestic subsidy control systems in the US, Canada and China (Djankov and Miner., 2026). Finally, Chinese competition law prohibits administrative authorities from abusing their administrative powers by eliminating or restricting competition through various means, with a focus on local administrative abuses. It prohibits any exercise of administrative powers that (1) hinder the free movement of goods between regions; (2) participation of parties located elsewhere in the PRC in local calls for tender; or (3) local investments by parties located elsewhere in the PRC. Differences in policy objectives and enforcement tools available to regulators

have profound implications for the degree with which jurisdictions can enforce their competition rules. EU regulators are generally considered to take a more aggressive stance than other authorities when examining similar issues (Amighini, 2018). This has become more evident in recent years as the EU has taken action against the growing market power of big tech companies. Trade remains the most problematic aspect of EU-China economic relations, although challenges need to be addressed in a number of areas (Franchino et al., 2022). There is almost no trade in services between the EU and China, but the value of products traded from Asian areas is increasing (it is mainly discussed about existing products, stocks and fixed assets from China) (Dür et al., 2023). The added value of Chinese exports and competition on third markets are increasing. In terms of investment, while EU companies have attracted more foreign direct investment to China than vice versa, Chinese investment in Europe is growing and largely focused on technology (Chaisse, 2018). This raises the question of whether the EU should fear losing its technological edge, especially if Chinese state-owned enterprises could distort competition not only in China but also abroad through acquisitions. Finally, looking at the importance of the BRI from a European perspective. The BRI offers potential trade gains for Europe by improving physical connectivity with countries along the route to China, but also presents challenges for the EU. The biggest challenge is China's growing soft power, which is felt in the EU's neighbourhood and even in a growing number of EU countries. Strengthening EU countries' bargaining power in relations with China requires a more unified approach to managing EU-China economic relations (Djankov and Miner., 2026). The EU has adjusted its trade defence rules, in particular its methodology for calculating dumping margins. This is particularly relevant for the EU's trade policy stance towards China, as the EU has removed specific rules for calculating anti-dumping duties for China and other non-market economy countries. A detailed analysis of the difference between market economy status (MWS) and market economy status (NMES) goes beyond the scope of this chapter.

Another dimension of the interdependence between public and private debt is related to the financial spillover effects across different regions. Studies show that locally accumulated debt has the potential to amplify original financial volatility and transmit risks across various regions in the Economic sectors. For instance in the case of a local default, the effect can revert berate in other regions through supply chains and in the regional financial linkages. This dependency emphasizes the importance of good coordination between local and central governments to reduce contagion risks. Moreover, coordination must include both proactive measures to prevent default and crisis plans for efficiently managing the impact of a potential local financial collapse. without such coordination there is an increased risk that local financial problems will spread affecting the stability of the entire economy. It is also important to know that spillover effects are not limited to the local economic context but extend to the social level as well. Financial instability in One region can lead to the decrease of confidence in local governments and the deterioration of living conditions for residents, thus generating immigration and social instability. These effects can Accelerate tensions between regions and lead to economic polarization, where effective regions become increasingly dependent on government transfers and aid to survive. Therefore, it is essential to adopt integrated measures that combine economic interventions

with social measures to limit the negative impact on the population. Furthermore, the other important dimension of this build over fundamentals refers to the interaction with the international financial markets. locally accumulated debt can influence not only the immediate region but also external markets through international trade and financial linkages. Local financial volatility can affect foreign investors causing capital white draws and generating additional pressures on the economy. This effect can be amplified by global interdependencies especially in countries with high trading financial openness where risks can propagate rapidly throughout international markets. In this context the importance of international macro-prudential policies must be emphasized as well as the need to maintain constant dialogue with global financial institutions to prevent contagion and cascading effects. Ideally the implementation of common measures and the exchange of information between States could help prevent the amplification of financial problems (European Stability Mechanism, 2023).

To combat these risks governments should also consider creating regional or inter-regional support mechanisms that can intervene quickly in the event of a local crisis. such mechanisms could include intervention funds, preventive credit lines and public private partnerships to provide the necessary resources to stabilize emergency financial situations. coordination between strengthened banks and other financial institutions is also vital for responding quickly and effectively to fluctuations in international markets, thereby limiting spillover effects that could impact other countries. institutions must diversify funding sources in the pendants on centralized transfer. strict credential policies must be implemented at the local level, financial reserves for emergencies must be created and local bundle markets must be developed to mitigate impact of financial volatility. In addition, it is crucial to adopt sustainable physical policies to ensure that public debt is kept within limits that do not negatively affect the local economy. Improving budget transparency and financial risk management is also necessary to increase municipalities' resilience to economic shocks. strengthening local administrative capacities for better fund management in improving the supervision mechanisms of financial markets are also important measures for consolidated economic stability. Furthermore, Close collaboration with the private sector must be ensured to stimulate investments and diversify the local economy making it more capable of observing external economic shocks. To extract an original stability it is visible for authorities to adopt a comprehensive approach that includes both short-term and long-term measures. In the short-term local economic stabilization can be achieved through Direct financial interventions such as liquidity support and measures to ensure price stability. In the long term it is essential to promote economic diversification in Courage investments in infrastructure and support human capital development. investments in education and vocational training can play a crucial role in creating a more resilient local economy that is better able to adapt to Global environmental changes (Cepparulo et al., 2024).

Therefore, to prevent and limit the negative effects of financial spillovers on the economy, a combination of well coordinated economic policies, strict credential measures and development of effective crisis response mechanisms is essential. The implementation of these measures can ensure that local financial shocks do not spread and destabilize other regions or even the global economy, thus maintaining a stable economic environment that

is conducive to sustainable development. Moreover, another important Dimension of this pill is phenomenal relates to the interaction within international financial markets. locally accumulated debt can influence not only the immediate region but also external markets through international trade and financial linkages. Local financial volatility can affect foreign investors causing capital white roles and creating additional pressures on the economy. This effect can be amplified by global interdependencies especially in countries with high trade and financial openness where risks can propagate rapidly through international markets. Therefore, it is essential for the government to implement macro credential measures to limit exposure to risks and protect the economy from the negative effect of financial spillovers. Institutions must diversify funding sources and reduce dependence on centralized transfers. Street credential policies must be implemented at local level, financial reserves for emergencies must be created and local bond markets must be developed to mitigate the impact of financial volatility. In addition, it is crucial to adopt sustainable physical policies to ensure that public debt is kept within limits that do not negatively affect the local economy. Improving budget transparency and financial risk management is also necessary to increase municipalities' resilience to economic shocks. strengthening local administrative capacities for better fund management and improving the supervision mechanisms of financial markets are also important measures for consolidating Economic stability (European Central Bank, 2020).

3. The role of financial institutions and public policies in Risk Management

A crucial element in analyzing the relationship between public and private debt is the role of financial institutions and their development in the context of debt accumulation. Studies on sovereign crises have highlighted that economies with larger banking sectors suffer greater economic losses during that crisis. extensive banking intermediation increases the economies exposure to risks associated with public debt especially when debt reaches levels that put pressure on fiscal resources. The banking sector can also play a role as a stabilizer for the economy during times of crisis if it is well capitalized and regulated which underscores the importance of the effective regulation of the financial sector. Additionally, the rapid development of banking sectors can lead to an increase in their dependence between public and private debt, amplifying risks when unexpected economic shocks occur. This complex link between the banking system and public debt requires careful management to avoid vulnerabilities that can lead to major financial crises. an appropriate macro prudential oversight strategy is essential for monitoring the accumulation of risks and for intervening preventively so as to limit the negative effects on the economy (Edinson, 2003).

A clear example from the analysis of sovereign debt restructuring shows that primitive restructure and strategies in which crises are avoided by renegotiating deaths before default significantly reduced the negative impact on economic growth and the stability of the banking system. preemptive restructuring helps maintain economic stability, allowing governments to adopt physical adjustment measures in an organized manner in order to avoid major confidence losses from investors. In contrast, post default restructuring has a severe effect on GDP and the economy's credit capacity, amplifying losses in cases of high

private debt levels. This restructuring undertaken after the economic damage has already occurred, lead to a significant decline in investments and a drastic limitation of access to long-term external financing. In the case of developed economies that have implemented preemptive restructuring strategies negative effects have been considerably reduced. By applying proactive debt renegotiation measures and implementing prudent fiscal policies, these countries have managed to avoid severe instability and maintain relatively stable banking systems. This has allowed for the continuation of both public and private Investments fas maintaining and healthy level of economic growth. Moreover, the imprint is a strategy that allows for a more efficient redistribution of financial resources within the national economy, ensuring that critical sectors are adequately founded and avoiding major disruptions in the Economic activity. Conversely, other economies that chose to delay restructuring until after the crisis had erupted experienced much more severe impact on GDP. refinancing costs to Rose considerably and economic losses were amplified by the need for delaying government intervention. high levels of private debt combined with post default interventions led to a significant decline in credit capacity and long-term economic instability. These economies also faced substantial losses in investor confidence, which related to hiring borrowing costs and limited economic recovery capacities. Moreover, losing access to external financing had the last effect on the ability to make public and private Investments contributing to long-term economics technician (IMF, 2020).

The impact on firms is also very significant ranging from changes in capital fractured to major difficulties in accessing credit, a study of European firms and the influence of digitalization on their debt maturity showed that the digitalization could facilitate access to long-term credit and reduce in for informational asymmetry. However political uncertainty and economic volatility can compromise these benefits, causing firms to prefer short-term debt to mitigate refinancing risks. This tendency to avoid long-term commitments can affect firm;s ability to plan and invest in strategic development projects, thus limiting the economy's growth potential. Additionally, the effects on the private sector are not limited to access to finance. Increasing public debt levels can also tighten credit conditions for small and medium-sized enterprises, which are often the most vulnerable to economic fluctuations and change in fiscal policies. Firms with limited access to capital tend to reduce investments in innovations, research and development, which affects productivity and competitiveness in the long term. Companies also face increased uncertainty, which prompts them to adopt cost-cutting measures such as reducing the number of employees or saling back expansion activities. To counter these negative effects, it is essential that government policies focus on creating a stable and predictable lending environment That encourages long-term investments and facilitates firms' access to financing. Additionally, developing robust Capital markets and implementing strict credential measures to ensure the stability of the financial system are crucial for maintaining investment levels and protecting the economy from external shocks. strengthening public private partnership and supporting the development of innovative financial solutions such as green financing or social bounds, can significantly contribute to diversifying funding sources and reducing dependence on short-term debt (Czarnitzki, 2006).

The solutions for maintaining these risks are complex and they need to be implemented at both the National and local levels. The reviewed studies emphasize the importance of a

coordinated approach between fiscal policies and macro credential measures to limit the simultaneous accumulation of public and private debt and to avoid exceeding critical thresholds. For example, increasing transparency regarding implicit debt and limiting the use of balance sheet financing channels are considered essential measures to reduce financial risks. For emerging economies and those with underdeveloped financial markets such as those analyzed in the study on sovereign debt and financial development, it is necessary to reduce the dependence on public borrowing to enable the development of the private sector. Financial crowding out reduces the credit available to the private sector which can hinder economic development during a crisis. Another essential aspect is the efficient management of public debt which not only supports fiscal stability but also promotes financial development by attracting private investments and reducing the risks associated with volatile capital flows. Studies show that countries with solid management policies that Direct higher volumes of private investments and benefit from more favorable borrowing conditions fast contribute to sustainable economic development. In addition to managing public debt, emerging economies must create a more robust financial infrastructure which should include the development of local bond markets for a diversification of funding sources. International coordination is also essential to support countries going through that crisis and international institutions such as the IMF can play a critical role in facilitating preemptive restructuring, thereby avoiding the severe consequences of sovereign default. Potential debt crisis in developed economies studies suggests the implementation of preventive fiscal consolidation policies during economic expansion periods. These policies are necessary to create an adequate fiscal space that can be used during recession periods. Fiscal consolidation reduces public debt which allows for counter cyclical interventions during crises without putting excessive pressure on financial markets (Eyraud et al., 2017).

4. The Effects of Open and Closed Economies in Public and Banking Debt During Crises

Open and close the economy's react to differently to financial crises especially when it comes to public and banking debt levels. open economies characterized by international integration and free access to Global Capital markets face a distinct set of challenges compared to closed economies. During a crisis, open economies are often vulnerable to the volatility of international capital flows which can lead to a sudden increase in financing costs and reduction in access to external credit. Furthermore, foreign investors widen their capital quickly from the economies during times of uncertainty creating pressure on foreign exchange markets and on the government's ability to finance public debt at sustainable cost. In addition, open economies must carefully manage the risks associated with short-term capital flows which, although necessary to maintain liquidity, can amplify vulnerabilities during a global confidence crisis. Under these circumstances central banks in open economies play a crucial role in stabilizing financial markets through interventions in the foreign exchange market and monetary Policy measures adapted to the international context. On the other hand, the economies which are less integrated into the global financial system are not affected to the same extent by foreign capital movements. However, these economies have a more limited capacity to access external financing to cover deficits

during crisis periods which can lead to the rapid accumulation of the domestic debt and significant pressures on the National banking sector. In the absence of diversified funding sources, the economies are often first to rely on debt financing through local banks which can impact the banks ability to support the private sector thereby amplifying negative effects on economic growth (Salamaliki and Venetis, 2024).

Furthermore, in close economies financial authorities rely more heavily on administrative interventions to control the distribution of credit which can lead to distortions in the resources allocation and limit the financial efficiency of the economy. In the context of a crisis these administrative measures, while they may prevent capital flight, can limit economic flexibility and the ability to adapt to the new financial conditions. In open economies exchange rate fluctuations are Critical factors that influence public and banking debt. depreciation of the national currency can increase the real value of debt denominated in foreign currency thus amplifying the burden of public debt and reducing the government's ability to manage the crisis efficiently. Moreover local banks which often hold significant foreign currency exposures can become vulnerable to currency risks which can affect their solvency and ability to provide credit to the real economy. To manage these risks, many open economies use foreign reserves as a buffer to support the national currency during periods of increased volatility. However, the use of forming reserves is often limited by the available level of reserves and the pressure to maintain a balance of payments equilibrium. Consequently, the economies having less exposure to this currency risks are protected from external fluctuations but this comes at the cost of limited access to liquidity and external financial resources. Thus, in closed economies, the resource deficit can become a significant barrier to financing infrastructure projects and supporting the private sector during periods of recession (Claessens and Van Horen, 2015).

Thus in the context of crises, open and closed economies face distinct types Vulnerabilities related to public and banking debt. In open economies the main challenge is managing international capital flows and maintaining exchange rates stability as well as mitigating the negative effects of exchange rates of volatility on public and banking debt. In close economies the central issue is ensuring sufficient internal financing without negatively impacting the banking sector and its capacity to support the economic growth while properly managing the distribution of internal resources to minimize economic distortions. Both economic models require appropriate policies to navigate these challenges and mitigate the impact of the crisis on public and banking debt. In open economies monetary and fiscal policies must be flexible and coordinated to respond quickly to external shocks.

5. Conclusion

Public and private debt represents two sides of the same coin when it comes to the impact on economic growth and financial stability. The studies reviewed in an integrated manner in this review on the interdependencies between these types of debt highlighting that their accessible accumulation quickly becomes a source of economic vulnerability. economic policies should be directed towards monitoring death thresholds, developing groups of financial markets and maintaining physical transparency to prevent financial instability

risks. coordination between fiscal and prudential policies is essential to prevent the simultaneous accumulation of public and private debt. Moreover, the development of effective debt restructuring mechanisms, the Promotion of financial transparency and the use of macro credential policies to reduce the risks associated with that growth are key factors for ensuring sustainable economic growth.

Whether more in the global economy, countries must focus on reducing dependence on public financing by developing diversified financial markets capable of observing economic shocks. supporting the emerging economies in strengthening financial infrastructure and their ability to access long-term private financing will contribute to reducing global vulnerability to financial crisis. This paper emphasizes the importance of effective coordination between fiscal and prudential policies while underscoring the crucial role of financial transparency and prudent management to ensure the long-term sustainability of economies, whether developed or emerging. Additionally in an increasingly integrated global economy international collaboration and solidarity among states are essential to overcome the challenges of debt crisis and to ensure sustainable economic growth. Thus national and international policies must be designed to prevent escalation of debt levels to the point where they become a burden of economic development. a balanced microeconomic framework, the support of strong end diversified financial markets as well as the development of effective debt restructuring strategies are essential elements for ensuring prosperity and stability in the complex and interconnected global economy.

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