

**Economic
Policy
Papers****EXECUTIVE SUMMARY**

“Financial repression”—policies that allow a government to place its debt with financial institutions at relatively low interest rates—has been used widely for centuries. This essay focuses on one important form of repression: requiring financial intermediaries to hold more government bonds than they would if policies didn’t require it.

We argue that this policy should only be used when the government has an urgent need to issue debt and has difficulty issuing new debt because of potential lender doubts about the government’s ability to repay.

This research suggests that policies that allow financial institutions to hold only small amounts of their own country’s government bonds may not be desirable.

Financial Repression: Evidence and Theory

Banks should be required to hold government debt at low interest rates only under limited conditions

V. V. Chari

University of Minnesota
Federal Reserve Bank of Minneapolis

Alessandro Dovis

Pennsylvania State University

Patrick J. Kehoe

University of Minnesota
University College London
Federal Reserve Bank of Minneapolis

Introduction

“Financial repression” refers to a wide array of policies that allow a government to place its debt with financial institutions at relatively low interest rates. This essay focuses on one important part of financial repression: requiring banks and other financial intermediaries to hold more government bonds than they would if policies didn’t require it.¹ We argue that such financial repression policies should only be used when two conditions are met: The government has an urgent need to issue debt and, because of worries about its willingness to repay its debts—that is, concerns about financial credibility—it has difficulty issuing such debt.

Historical precedents

The idea that governments use banks to help raise funds is a conventional one among historians of banking who have persuasively argued that the Bank of England, for example, was founded specifically to raise funds for war expenditures. The Bank

was then governed and regulated to ensure that the government had access to a stable source of funding beyond national defense. Similar needs led to the creation of the Banque de France. Scholars also suggest that when the U.S. federal government needed funds for Civil War expenses, it set up a system of national banks permitted to issue bank notes *only* if they held government debt to back them.²

Financial repression was common immediately following World War II as well. Facing large postwar debts, many Allied countries practiced it on a large scale and ceased to do so only when their debts were reduced.³ Financial repression in this period involved regulatory measures requiring financial institutions to hold government debt and restricting international capital flows, thereby limiting the ability of consumers and financial intermediaries to invest in substitutes for their own government's debt.

The policy has appeared more recently in the wake of the recent Great Recession when, in the face of severe fiscal stress, numerous countries reinstated various measures of financial repression.⁴

For developed countries, the urgent need to issue debt typically results from a sharp increase in government expenditures that occur in wartime. For emerging market economies, this same urgent need often results from a "sudden stop" in the willingness of foreigners to lend money to their domestic government. Calvo and Mishkin (2003) argue that, for example, during the crisis in 2001 in Argentina, "banks were encouraged and coerced into purchasing Argentine government bonds to fund the fiscal debt."⁵

Other scholars have observed, relatedly, that banks in the periphery countries of the European Union have sharply increased their holdings of their own governments' debts in the wake of the recent crisis.⁶ They document that, by the end of 2013, the share of government debt held by the domestic banking sectors of eurozone countries was more than twice that held in 2007.

A number of authors have also argued that banks have increased their holdings of their own government debt due to increased pressure and portfolio regulations by their own governments.⁷ In particular, these authors argue that zero-risk weighting of sovereign debt, even when the spreads of this debt are wide, amounts to a type of financial repression. One view is that this increased pressure is a response by periphery country governments to the reduced willingness of foreigners to lend to these governments.

Framework for analysis

In our research, we created a framework to analyze these issues in which banks, representing all financial intermediaries, channel resources from households to firms. For this analysis, we assume

that the banks face a collateral constraint that limits the deposits they can raise from households. Therefore, the resources banks have available to fund investments depend on their net worth. The government raises revenues to finance government expenditure using taxes and issues debt that can be held by households, banks and, in an open economy, foreigners. The government can practice financial repression by forcing banks to hold a certain fraction of their assets as government bonds. Finally, the government must treat all holders of its debt symmetrically in the event of a default. In particular, it cannot default on debt held by one group of holders, such as households, and not default on another group, such as banks.

In this framework, financial repression is a way to purchase debt-repayment credibility, meaning that financial institutions the government borrows from will more fully believe the government will repay debt because it has the means to raise funds (through repression, in this instance). Defaulting on the debt held by banks reduces the net worth of banks. Because of their collateral constraints, banks cannot replace all of their lost net worth; therefore, banks are forced to curtail future lending for productive projects. Requiring banks to hold more government debt than they otherwise would increases these default costs for banks and thus allows the government to credibly issue more debt. Banks would rather hold more government debt than lose net worth, curtail investment and sacrifice profits.

Obtaining greater credibility is valuable to governments because the increased ability to issue debt allows for greater tax smoothing. Tax smoothing—keeping tax rates from varying much over time—is a way to reduce the overall tax distortions on citizens who must pay for a given path of government spending.

However, financial repression is a costly way for a government to purchase this credibility. Why? Because—due to collateral constraints—banks can raise only a limited amount of funds from depositors. Forcing banks to allocate a greater share of these limited funds to government debt rather than to fund productive investments reduces the total amount of investment in a national economy. In this sense, financial repression has crowding-out costs—it reduces aggregate output by driving down private investing.

Model predictions

Our model thus suggests that governments should practice financial repression whenever the tax-smoothing gains exceed the crowding-out costs. Since these gains are largest when government expenditure needs are unusually high or funds from foreign investors suddenly dry up, our model implies that it is during times of high expenditure or “sudden stops” that governments are most likely to practice financial repression. The framework further implies that even once fiscal needs have

returned to normal levels, a government will prefer to continue financial repression until its debt has fallen to a sufficiently low level.

But while the prediction of continued repression beyond immediate fiscal needs is consistent with the evidence presented above (especially with regard to war debt), it differs from the model prediction when the government is perfectly committed to repaying its debts. (By “perfectly committed,” we mean the public believes that the government will definitely not default.) In such an environment, the government will spread the burden of financing its spending needs perfectly through time by keeping its tax revenues constant.

In this case, when economic conditions are such that the government finds it desirable to practice financial repression and issue large amounts of debt, it adds extra costs to keeping debt high. These extra costs imply that it is desirable to increase taxes relatively more when spending needs are high. This tilting of taxes to be higher earlier is the force that drives the running down of debt and eventually ceasing financial repression, and it resembles the patterns seen after World War II.⁸

Policy implications

Our findings have two important policy implications.

First, they suggest that policies that allow financial institutions to hold only small amounts of their own country’s government bonds may not be desirable.⁹ Under such a policy, governments would be more tempted to default, and thus the amount of debt could not exceed that supported solely by reputation.

Second, this work casts a different light on policies to protect banks from “moral hazard” (the tendency to take on greater risk when insured against loss). During the recent financial crisis, European governments undergoing severe fiscal stress found it optimal to pressure banks to hold more government debt to enhance their credibility not to default. While conventional wisdom and practice is to regulate bank portfolios to guard against the moral hazard of investing in overly risky projects simply due to deposit insurance, governments in fact found it beneficial to pressure banks to hold their own country’s debt though that debt was becoming increasingly risky.¹⁰ This suggests that policymakers need to balance moral hazard concerns against debt-financing concerns.

In closing, we should acknowledge that there are many motives for governments to want banks to hold government debt. This analysis has simply focused on a newly recognized and previously unstudied reason.

Endnotes

¹ We refer to policies beyond those implemented for standard safety and soundness reasons, and specifically those intended to help finance government spending through issuing debt.

² See Homer and Sylla (1996) and Calomiris and Haber (2014).

³ See Reinhart and Sbrancia (2011)

⁴ See Kirkegaard, Reinhart and Sbrancia (2011).

⁵ See Calvo and Mishkin (2003, p. 100).

⁶ See Becker and Ivashina (2014) and Broner, Erce and Ventura (2014).

⁷ See Acharya and Steffen (2015).

⁸ See Reinhart and Sbrancia (2011).

⁹ See, for example, Weidmann (2013).

¹⁰ The high interest rate “spreads” (or differences) between risk-free bonds and sovereign bonds were clear evidence of such perceptions of rising risk.

References

Acharya, Viral V., and Sascha Steffen. 2015. “The ‘Greatest’ Carry Trade Ever? Understanding Eurozone Bank Risks.” *Journal of Financial Economics* 115 (2): 215-36.

Becker, Bo, and Victoria Ivashina. 2014. “Financial Repression in the European Sovereign Debt Crisis.” Mimeo, Harvard Business School.

Broner, Fernando, Aitor Erce, Alberto Martin and Jaume Ventura. 2014. “Sovereign Debt Markets in Turbulent Times: Creditor Discrimination and Crowding-Out Effects.” *Journal of Monetary Economics* 61, 114-42.

Calomiris, Charles W., and Stephen H. Haber. 2014. *Fragile by Design: The Political Origins of Banking Crises and Scarce Credit*. Princeton University Press, 2014.

Calvo, Guillermo A., and Frederic S. Mishkin 2003. “The Mirage of Exchange Rate Regimes for Emerging Market Countries.” *Journal of Economic Perspectives* 17 (4): 99-118.

Chari, V. V., Alessandro Dovis and Patrick J. Kehoe. 2015. “On the Optimality of Financial Repression.” Mimeo, Federal Reserve Bank of Minneapolis.

Homer, Sidney, and Richard Eugene Sylla. 1996. *A History of Interest Rates*. Rutgers University Press.

Kirkegaard, Jacob F., Carmen M. Reinhart and M. Belen Sbrancia. 2011. “Financial Repression Redux.” *Finance and Development* 48 (1): 22-26.

Reinhart, Carmen M., and M. Belen Sbrancia. 2011. “The Liquidation of Government Debt.” Working Paper 16893, National Bureau of Economic Research.

Weidmann, Jens. 2013. “Stop Encouraging Banks to Buy Government Debt.” *Financial Times* September 30.

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