Extended Abstract

In a broad definition, financial repression is state policy and regulation, which allow the government to raise extra revenue or decrease debt service cost by distorting the market mechanisms setting interest rates. Forms of financial repression are various and in general they are perceived as an indirect taxation of households or financial intermediaries (see, e.g. Reinhart, 2012). The term financial repression was originally introduced by McKinnon (1973) and Show (1973) and then widely applied to show harmful consequences of tight financial regulation for growth and development in LDCs. However, financial repression was also used in practice in developed economies after WWII before the move for deregulation. In the aftermath of the 2007-2009 crisis, under subsequent fiscal stress it increasingly became a modern phenomenon.

The aim of this paper is twofold. First, we introduce financial repression in the form of non-market placement of public debt into a simple neoclassical model to show the impact of this policy on general equilibrium. A requirement for households to hold public debt with a below-market rate of return alters optimal household allocation. Financial repression acts as a distortionary tax. In particular, it decreases propensity to consume, increases labor supply and crowds-out private capital. Second, we aim at explaining financial repression as an outcome of strategic interaction between non-benevolent government and central bank. We consider different setups of strategic interaction between policymakers (Nash equilibrium, Stackelberg leadership of either government or central bank, and cooperation) and investigate which parameters of their preferences are important determinants of the severity of financial repression.

Standard dynamic general equilibrium models typically base on an assumption that households or financial intermediaries hold government bonds voluntarily. It implies that in steady state the rate of return on government bonds equals the rate of time preference of households. Introducing additional macroprudential constraints, such as meeting capital adequacy ratio, can connect the accumulation of private capital to the government debt. However, to the best of our knowledge, macroprudential measures were not explicitly modeled as a policy instrument which the government deliberately exploit to enlarge the demand for public debt. At the same time, there is evidence (see Acharya and Steffen, 2015; Altavilla, Pagano and Simonelli, 2016; Becker and Ivashina, 2014; De Marco and Macchiavelli, 2016; Ongena, Popov and Van Horen, 2016; Van Riet, 2014, among others) that governments have the power to induce private agents to hold more public debt than they would voluntary. This evidence refers to: (1) Macroprudential regulation (Basel III), which provides preferential treatment of the public debt in a calculation of the capital adequacy ratio; (2) Introducing a taxation of transactions with private securities; (3) The government influence on captive financial intermediaries with partial or full state ownership (commercial banks, pension funds,
etc.) or heavy moral suasion; and (4) Non-market placement of public debt. While all these measures can enlarge demand for public debt regardless of its riskiness and thus decrease the cost of debt service, the central bank has also the power to keep the interest rate on public debt low for a prolonged period of time. These are explicit or implicit caps on deposit rates and various practices under the umbrella of unconventional monetary policy.

It is widely believed that keeping the interest rate on public debt low should drive interest rates on private assets down and stimulate the accumulation of productive capital. On the contrary, our model predicts that a decrease in the interest rate on public debt accompanied with the requirement for private sector to hold this debt leads to a higher rate of return on capital. We also show that this policy leads to a crowding-out of private investment, a result corroborated by recent empirical studies (see, e.g., Broner at al, 2014; Popov and Van Horen, 2015).

Various specification of the Taylor rule have a common feature: central banks allow departures of the interest rate from its natural level on a temporal basis. Why do central banks engage in financial repression by keeping real interest rate low or negative for a prolonged period of time? We provide a possible explanation of this phenomenon as an outcome of strategic interaction between the government and the central bank. We assume non-benevolent policymakers and introduce their linear-quadratic loss functions. The deviation of output from its natural levels enters into loss functions of both policymakers. Specifically, the government is concerned with the level of government purchases, while the central bank cares about levels of real interest rate and public debt. The revenue from financial repression provides an extra finance for government purchases. It is determined as the product of the gap between actual interest rate on public debt and the natural rate of interest and the level of public debt. If the government needs higher government purchases, it can increase the level of public debt by requiring households to hold it in a higher proportion to capital. Since the central bank is concerned with an increase in public debt, it can decrease the interest rate on debt, which increases the revenue from financial repression, making the government less disposed to enlarge the level of debt.