

Hoffmann, Andreas

Article

Beware of Financial Repression: Lessons from History

Intereconomics

Suggested Citation: Hoffmann, Andreas (2019) : Beware of Financial Repression: Lessons from History, Intereconomics, ISSN 1613-964X, Springer, Heidelberg, Vol. 54, Iss. 4, pp. 259-266, <https://doi.org/10.1007/s10272-019-0833-0>

This Version is available at:

<https://hdl.handle.net/10419/213226>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

Andreas Hoffmann

Beware of Financial Repression: Lessons from History

As austerity policies are unpopular with voters and high debt levels are a drag on growth, several economists, most famously Carmen Reinhart and Kenneth Rogoff, have suggested that governments might have to consider an extra dose of financial repression as a way out of the low growth-high debt trap. I argue that the history of advanced economies under Bretton Woods and the liberalisation experience of the lagging countries suggest that an exit from financially repressive policies is the better alternative to promote growth and the sustainability of government finances.

Government debt levels in many advanced economies, especially in Southern Europe, the US and Japan, have reached peacetime records. As austerity policies are unpopular with voters and high levels of debt are considered a drag on growth, economists discuss a return to financial repression¹, i.e. policies that artificially raise the demand for government bonds to lower the borrowing costs of governments, as a way out of the debt trap. The resulting lower yields on bonds are supposed to make it easier for governments to service the debt. If, in addition, central banks add a dose of inflation such that repressed bond yields turn negative in real terms, government debt is even liquidated and the real value of the debt is reduced.

Underpinning the success of financial repression in liquidating debt in advanced economies, for example, Reinhart and Sbrancia have pointed to the decline in debt-to-GDP ratios during the Bretton Woods period.² Since ad-

vanced economy governments often made use of repressive measures to deal with high levels of debt in history, Reinhart, Reinhart and Rogoff suggest that governments consider all options available when they face difficulties in financing.³

Building on these ideas, Chari et al. provide an economic mechanism on how an 'optimal' level of financial repression may improve outcomes.⁴ Forcing banks to hold debt allows the government to borrow more than what would be possible based on reputation only (without tax increases). Governments that would otherwise not be in a position to commit to servicing the debt may gain credibility via financial repression by raising the macroeconomic costs associated with a potential default on outstanding liabilities to the domestic banking sector. The credibility gain allows the government to place additional debt on the market as banks prefer holding debt to losing net worth. They show that – in such a situation – financial repression may be optimal as long as gains from tax smoothing exceed the crowding-out costs in financial markets associated with repressory measures.

Financial repression may seem like a good idea if politicians have a hard time cutting spending or bringing structural reforms that would allow the economies to prosper again. This paper emphasises the danger of financial repression, arguing that financial repression undermines productivity growth. Analysing the post-war experience in industrialised countries as well as in lagging economies, or emerging markets, first, I find that financial repression

1 Financial repression is an umbrella term originally referring to policies that impede the proper functioning of capital markets, see R. McKinnon: *Money and Capital in Economic Development*, originally published 1973, Reprint 2010, Brookings Institution Press. Since governments typically pursue such policies to achieve fiscal goals, the term "financial repression" is typically used to refer to policies that artificially raise the attractiveness of government bonds. Modern financial repression can take the form of macro-prudential policies, in which government bonds receive preferred treatment (e.g. capital requirement regulation), bond yield caps that are guaranteed by central banks ("Whatever it takes policy") or captive regulation (for instance by forcing pension funds to hold a large portfolio of government bonds). The IMF has recently come out to support some forms of prudential regulation formerly known under the umbrella of financial repression.

2 C. Reinhart, M. Sbrancia: *The Liquidation of Government Debt*, IMF Working Paper 15/7, 2015.

3 C. Reinhart, V. Reinhart, K. Rogoff: *Dealing with Debt*, in: *Journal of International Economics* Vol. 96, Supplement 1, 2015, pp. S43-S55.

4 A. Chari, P. Henry: *Is the Invisible Hand Discerning or Indiscriminate? Investment and Stock Prices in the Aftermath of Capital Account Liberalizations*, NBER Working Paper No. 10318, 2004.

Andreas Hoffmann, Leipzig University, Germany.

is unlikely to lead to a stable period of debt liquidation. Second, the study suggests that engaging in potentially inflationary repression means leveraging measures and undermining the growth potential of the economy.

I maintain that an exit from financial repression-like policies is the better alternative to promote growth and sustainability of government finances. Ending such policies will provide incentives for governments to engage in reforms that free up resources necessary to help put the economies back on the growth-path.

The return to financial repression

Rising debt levels in advanced economies

In history, high levels of debt were often associated with war-time spending. The call for financial repression to stem the debt burden these days, however, is a result of gradually built government indebtedness that seeks financing. As governments failed to engage in counter-cyclical fiscal policies over longer periods, government revenues fell short of their expenditures. Deficits were all but odd. In many countries, the average fiscal deficit-to-GDP ratios were twice as high as the average GDP growth since the 1990s. When the financial crisis swept the advanced economies, bailout measures added to the debt mountain (Figure 1).

The global financial crisis of 2007-08 contributed to a descent into a high debt/low interest rate trap in Europe and the US. Following the Lehman collapse, the Fed decided to provide liquidity to the banking system via emergency lending operations on a large scale. In doing so, the Fed concealed which banks were insolvent and which were not. Policy interest rates fell toward zero and quantitative easing was implemented to push down long-term interest rates. Like the Fed, the ECB cut policy interest rates to historically low levels when the financial crisis hit Europe to accommodate financing needs of banks. The Eurosystem provided liquidity to financial institutions that were illiquid and has accepted dubious collateral ever since.

Even more than the Fed, the ECB was pushed into the passive role of government financier of last resort. The ECB stood ready to purchase bonds in secondary markets in order to lower bond yields whenever there was pressure. The ECB bought, for example, government securities via its Security Markets Program (SMP). Because fear in markets depressed bond values and rendered low-yield bonds (of the periphery countries of the euro area) untradeable, the ECB famously announced an unlimited government bond-purchasing scheme – the Outright Monetary Transactions (OMT) program in July 2012. In

Figure 1
Government debt levels in historical perspective



Source: Data from IMF Historical Public Database.

2015, the ECB started its 'expanded asset purchase program' (APP). The ECB continues to buy bonds of all sorts to this day. Not surprisingly, banks started to hold more government bonds. There is evidence that during the crisis period additional bond purchases crowded out corporate lending in Europe.⁵

Although it was announced as policy to reach financial stability and bring inflation toward the target, the ECB's very own Peter Praet included the fall in bond yields by more than one percent since 2014 and the rising interest of domestic banks in holding euro-zone government bonds among the successes of QE.⁶ In addition, Europe has tightened financial regulation and provided incentives to banks to hold more bonds than they otherwise would willingly. Such regulation, which has branded government debt by and large risk-free despite widening bond spreads within the euro area, has signalled the silent return to financial repression in Europe.⁷

In the 1970s, Buchanan and Wagner explained that debt relief by means of inflation is politically easier to get by

5 B. Becker, V. Ivashina: Financial repression in the European Sovereign Debt Crisis, in: *Review of Finance*, Vol. 22, No. 1, 2017, pp. 83-115.

6 P. Praet: Speech given by Member of the Executive Board of the ECB, at ECB and Its Watchers XVII conference organised by Center for Financial Studies, Frankfurt, 7 April 2016.

7 V. Acharya, S. Steffen: The "Greatest" Carry Trade Ever? Understanding Eurozone Bank Risks, in: *Journal of Financial Economics* Vol. 115, No. 2, 2015, pp. 215-236.

with than tax increases and spending cuts.⁸ Fiscal austerity makes unpopular decisions necessary. There are some obvious losers. Inflation, on the other hand, creeps up and is therefore less noticeable. Particularly in Europe, where debt cuts are highly unpopular in large parts of the population and economic growth in many countries has remained sluggish, governments of heavily indebted states favour a longer period of low interest rates, which gives them air for breathing. The latter is already ensured for loans from the rescue programmes. The ESM has extended the duration of the loans to Greece for more than 30 years. The already low interest payments were thus fixed and the interest rate risk for parts of the Greek government debt was eliminated.

Financial instability concerns in emerging markets

The low interest rate environment in the advanced economies went along with a hunt for yield in emerging markets. Excessive financial inflows during the 2000s and since the global financial crisis of 2008 increased the likelihood of future capital flow reversals and thereby vulnerability to rapid exchange rate depreciation and crisis.⁹

Increases in vulnerability caused by the rise in bank lending and asset prices in emerging markets were revealed, for example, when Ben Bernanke announced that he might taper bond purchases in May 2013. U.S. bond yields immediately rallied up one percent and worldwide asset markets showed signs of turbulence.¹⁰ In order to be able to act as a lender of last resort, central banks in emerging market countries (in which most borrowing includes foreign loans) have accumulated a significant amount of dollar reserves to preserve financial stability in case of a sudden reversal.¹¹

Triggering financial instability, policies in advanced economies may arguably impose financial repression upon emerging markets.¹² Indeed, economists at the IMF suggest that there are additional benefits from reintroducing

capital controls in a low interest rate environment, resulting in an update in the IMF view on capital controls. Empirical evidence suggests that emerging market central banks used legal reserve requirements with low remuneration rates or capital controls in order to stem financial inflows and resulting rises in asset and consumer price pressure.¹³ Financial instability concerns certainly provided politicians with new arguments to interfere in markets.

Financial repression under Bretton Woods

Debt liquidation

The debt situation of the governments of many large economies is reminiscent of the post-war period (Figure 1). In the 1940s, debt in most industrialised countries accounted for well over 100% of GDP (over 250% in the UK). While, for example, Germany liquidated debt via monetary reform, the majority of the countries applied means of financial repression.

Central banks contributed significantly to debt liquidation in the post-war era. On behalf of governments, central banks kept the nominal interest rates below the inflation rate. Reinhart and Sbrancia show that many countries had a period of abnormally low real interest rates – compared with the period before the wars and after the 1980s.¹⁴ They find that the average real US Treasury bill rate, which the Fed purchased most frequently, was negative between 1945 and 1980. Negative real interest rates (along with debt conversion programmes) allowed governments to liquidate the market value of debt accumulated during World War II.

Reinhart and Sbrancia report an annual debt liquidation effect for the US and UK government of about three to four percent of GDP during the Bretton Woods period.¹⁵ Figure 2 illustrates the decline in debt-to-GDP ratios during Bretton Woods for the US and the UK. Given the rates of annual consumer price inflation, the liquidation effect was even larger in countries like Australia and Italy. As a consequence, after a strong decline during the Bretton Woods period, public debt levels in the major economies reached about 20 to 40% of GDP in the 1970s.

8 J. Buchanan, R. Wagner: *Democracy in Deficit: The Legacy of Lord Keynes*, Indianapolis 1977, Liberty Fund.

9 G. Calvo, C. Reinhart: *Fear of Floating*, in: *Quarterly Journal of Economics*, Vol. 107, No. 2, 2002, pp. 379-408; C. Reinhart: *Goodbye Inflation Targeting, Hello Fear of Floating? Latin America after the Global Financial Crisis*, MPRA Working Paper 51282, 2013.

10 A. Hoffmann: *Zero-Interest Rate Policy and Unintended Consequences in Emerging Markets*, in: *The World Economy* Vol. 37, No. 10, 2014, pp. 1367-1387.

11 A. Steiner: *How Central Banks Prepare for Financial Crises – An Empirical Analysis of the Effects of Crises and Globalisation on International Reserves*, in: *Journal of International Money and Finance*, Vol. 33(C), 2013, pp. 208-234.

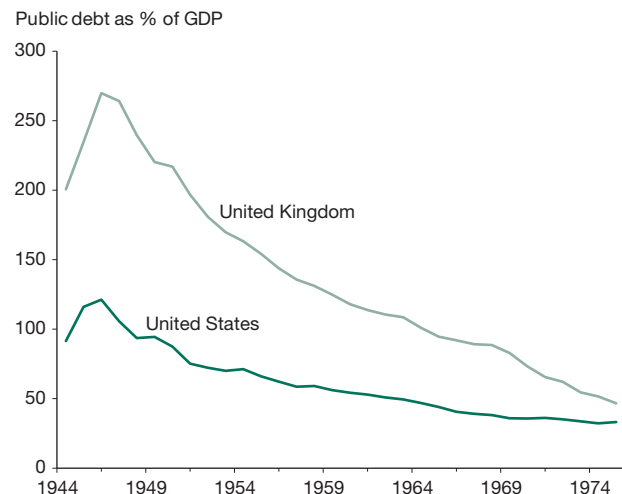
12 R. McKinnon, G. Schnabl: *China's Exchange Rate and Financial Repression: The Conflicted Emergence of the Renminbi as an International Currency*, in: *China & World Economy*, Vol. 22, No. 3, 2016, pp. 1-34.

13 A. Hoffmann, A. Loeffler: *Low Interest Rate Policy and the Use of Reserve Requirements in Emerging Markets*, in: *The Quarterly Review of Economics and Finance*, Vol. 54, No. 3, 2014, pp. 307-314; A. Jara, R. Moreno, C. Tovar: *The Global Crisis and Latin America: Financial Impact and Policy Responses*, in: *BIS Quarterly Review*, June 2009, pp. 53-68.

14 C. Reinhart, M. Sbrancia, op. cit.

15 Ibid.

Figure 2
Declining debt levels in the US and UK

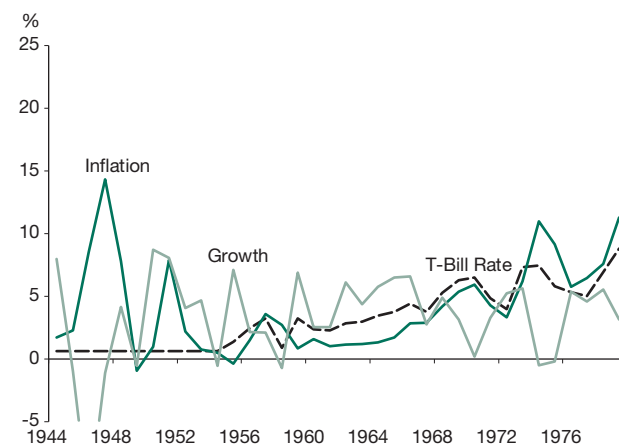


Source: Data from IIMF Historical Public Database.

In light of the aforementioned studies, financial repression may seem attractive. However, Bretton Woods differed substantially from today's financial markets. Under the Bretton Woods System, capital controls – albeit not perfectly binding – ruled out much of international capital flows as there was an agreement among leaders in the world, including the architects of the Bretton Woods System, that current account convertibility, which was considered a main goal of all involved, might be at risk without controls. Keynesian demand policies had become too important, and were at risk of being undermined by the free flow of capital; the fixed exchange rate system was too important, which did not allow for devaluations. Preventing speculative capital flows that might undermine the stability of financial markets and give rise to political interventions against free trade became all important and financial markets were largely regulated. In Europe, foreign exchange controls (including regulations on gold holdings), capital outflow restrictions, comparably high levels of legal reserve requirements, government debt funded pension schemes and/or interest rate regulation were applied.

The main repressive policies under Bretton Woods were a relic from the inter-war period. In the US, Roosevelt had already prohibited the private holding of bullion or gold coins – effectively an exchange control – in 1933. To finance the war efforts in 1942, long-term interest rates were capped at 2.5%, a policy that remained untouched until 1951. To be sure, during this period financial re-

Figure 3
The US under Bretton Woods



Source: Data from Datastream, measuringworth.com.

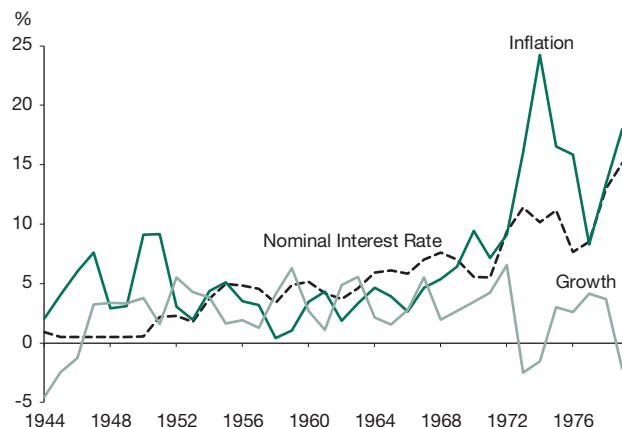
pression was allowed to liquidate debt as Reinhart and Sbrancia have outlined. In the US, debt-to-GDP ratios halved, falling from 122% in 1946 to 66% in 1955. At the time, however, Bretton Woods was still dysfunctional and plagued with payment and convertibility problems. Financial markets were underdeveloped and the level of international trade was low.

Inflation, conflicts and the exit from financial repression

Rather than having to prevent a new Depression, after 1945 and even more so with the beginning of the Korean War in June 1950, the over 20% rise in inflation rates soon lead to a conflict between the Fed and the US government about the Fed's responsibilities. The Fed argued that government debt monetisation prevented it from stemming inflation. The conflict was finally settled in the Fed-Treasury Accord of 19 February 1951, which was supposed to end fiscal dominance and give the Fed a higher degree of independence. The Fed was now an 'agent of Congress', but the Treasury would remain in a position to influence the Fed's Board of Governors.¹⁶ To allow for a smooth transition to market-determined yields, the Accord of 1951 also included a debt conversion swap that extended the maturity of outstanding debt at low rates.

¹⁶ R. Timberlake: Monetary Policy in the United States, 1993, University of Chicago Press, p. 316.

Figure 4
United Kingdom under Bretton Woods



Source: Data from Datastream, measuringworth.com.

According to Homer and Sylla, the US soon thereafter experienced its “second greatest bond bear market” of all time.¹⁷ Corporate bond and government bond yields increased from just 2.5% in 1946 to over 15% in 1981. Over the same period, fiscal policy had grown in importance in the US. Anticyclical policies were largely absent and fiscal deficits remained large.

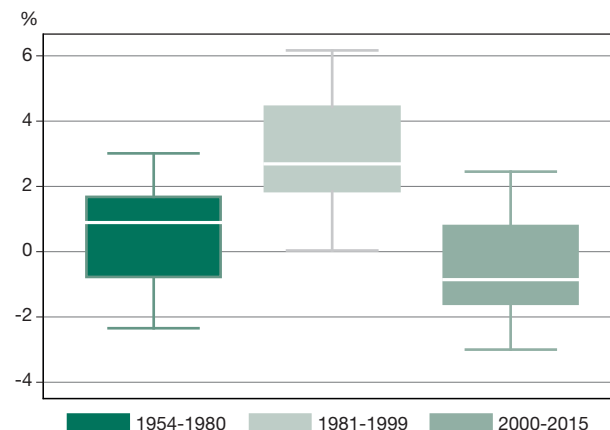
During the 1950s and 1960s, which were the heydays of the Bretton Woods System, real interest rates were positive in the US and UK particularly when current account convertibility was reached (see Figure 3 and 4). The growth rate of the economy – rather than financial repression – allowed financing of sustainable government deficits. Figure 5 shows that the average real T-Bill rate was half a percentage from 1951 to 1980 – when official interest rate caps were removed in the US. That is a low interest rate; but it was positive. Thus, the negative average interest rate reported by Reinhart and Sbrancia is merely an artefact of the pre-convertibility/low growth period.¹⁸ Since the 2000s, interest rates have been lower on average than during the convertibility period of the Bretton Woods system.

In contrast to the current belief that low growth results in necessary financial repression, growth considerations

17 S. Homer, R. Sylla: A History of Interest Rates, 3rd ed., 1996, Rutgers University Press, pp. 366-368.

18 C. Reinhart, M. Sbrancia, op. cit.

Figure 5
Box plot chart for real T-Bill interest rates in the US



Note: Author's own calculation using t-bill rates from Datastream and subtracting annual inflation rates to get real rates. The box plot represents the distribution of data. The line is the median. the box shows the interquartile range.

Source: Data from Datastream.

and market forces led to an exit from financial repression during the Bretton Woods period. First, New York and London were world financial centres. Global financial centre status was in conflict with capital controls. The US opposed foreign exchange restrictions, which were often associated with capital controls, from the very beginning of Bretton Woods as dollar hegemony and the importance of US financial markets depended on being able to convert dollars into other currencies. Although Britain used capital outflow controls, this allowed for the development of the euro-dollar market in London to cement the city as a financial centre. This also allowed for the circumvention of capital outflow controls that were only weakly enforced.¹⁹ Today, international financial markets are highly integrated.

Second, internationalisation strategies of firms were in conflict with prevailing capital controls. Until the 1960s, large firms with a sound industrial base that were the champion of their industry were at the heart of the post-war growth model. These ‘centre firms’ aimed to exploit economies of scale through large production plants and

19 Britain did have foreign exchange restrictions and capital outflow controls from 1947 to 1979 (Reinhart and Sbrancia 2012, op. cit., p. 17). The US accepted these restrictions with regard to the pound when the pound came under depreciation pressure in the Sterling crisis of 1949 but was eager to remove exchange restrictions rapidly for the benefit of international trade and finance. See B. Eichengreen: Globalizing Capital: A History of the International Monetary System, 2008, Princeton University Press.

economies of scope via global distribution and marketing channels.²⁰ They benefited from Marshall Fund subsidies and the move to current account liberalisation under Bretton Woods. American industry in Europe expanded rapidly. The euro-dollar market brought about the stabilisation of financing needs as multinational corporations deposited dollars in Europe to be able to exchange them quickly if necessary.²¹

The move towards capital account openness in the mature economies during the 1970s and 1980s allowed for financial integration and a gradually evolving international financial order. Firms started to develop portfolio diversification and hedging strategies to insure against risks. Financial integration provided incentives to governments to deregulate financial markets step-by-step. The Bundesbank, e.g., gradually lowered reserve requirements in the 1980s to allow German banks to compete with foreign banks on equal terms. The deregulation of financial markets spurred financial development in the large industrialised economies. The shift in policies is considered a driver of a 'great reversal'.²²

In the advanced economies, financial integration did not necessitate the ad-hoc build-up of new institutions and privatisation on a large scale. The banking systems were mostly private, property rights were widely enforced and international financial markets had already started to develop during the Bretton Woods period. Therefore, the removal of capital controls did not cause major disruptions in markets, which brought about a new era of financial globalisation.

Looking at the development of the debt-to-GDP ratios during the Bretton Woods period, we see that the most rapid decline occurred in the immediate aftermath of the war when financial markets offered few alternative investment possibilities. When current account convertibility was achieved, inflation stopped liquidating debt in the UK and US. Real rates were positive. As markets have further developed and investment possibilities have multiplied since the liberalisation of the 1970s and 1980s, proponents of further repressive measures therefore must aim

for substantial interventions that are likely to undermine the functioning of financial markets.

Lessons from financial repression in the lagging economies

Government revenues and financial repression

Governments of many lagging economies in East and Southeast Asia, Latin America and Central and Eastern Europe experimented with financial repression between the 1960s through the 1990s. In the 1960s and 1970s, governments wanted to use industrial policies and import substitution strategies to catch up with the West. To finance state-led industrialisation, governments channeled additional funds to themselves.²³ Trade barriers protected the subsidised industries from international competition.

As the tax revenues were insufficient for such ambitious plans, state-controlled banks were forced to hold large shares of their portfolio in unproductive assets such as government loans, or finance certain state-selected sectors, such as replacing a subsidy or holding reserve funds, which undermined productivity in the banking industry and produced a high demand for government papers as well as base money (seigniorage) by banks. Companies were queuing for the subsidised loans. Banks forwarded the costs to savers, lowering the deposit rate.

To shield state banks from (price) competition, entry was limited and interest rate ceilings on assets were installed. Capital in- and outflow controls limited investment choices for domestic savers and the borrowing options of domestic firms. The resulting financial conditions reflected those of an insulated economy and were easily influenced by governments. Capital controls went along with higher rates of inflation, low real interest rates and a higher share of seigniorage in terms of tax revenue for incumbent governments.²⁴ As savers could not invest abroad and interest rates in the domestic economy were capped, bonds became the most attractive investment choice.

Crises, stagnation and exit from financial repression

Although the literature on credit market imperfections suggests that some interventions in the credit market may be favourable to an economy if implemented carefully, in developing and emerging markets, governments'

20 J. Baskin, P. Miranti: *A History of Corporate Finance*, 1st ed. Cambridge (U.K.), New York 1999, Cambridge University Press, pp. 213-218.

21 *Ibid.*, pp. 243-244. In the 1960s and 1970s, conglomerates emerged. Following developments in portfolio theory, they diversified their firm holdings by buying a number of different firms that could use synergies in the application of techniques for different product lines. The size of these firms allowed them to engage in regulatory arbitrage and improved negotiation power with banks (*Ibid.*, pp. 273-275, 280).

22 R. Rajan, L. Zingales: *The Great Reversals: The Politics of Financial Development in the Twentieth Century*, in: *Journal of Financial Economics*, Vol. 69, No. 1, 2003, pp. 5-50.

23 A. Giovannini, M. de Melo: *Government Revenue from Financial Repression*, in: *The American Economic Review*, Vol. 83, No. 4, 1993, pp. 953-963.

24 V. Grilli, G.-M. Milesi-Ferretti: *Economic Effects and Structural Determinants of Capital Controls*, in: *IMF Staff Papers*, Vol. 42, No. 3, 1995, pp. 517-551.

financial repression undermined the smooth functioning of financial markets, distorting the efficiency of allocation of capital and incentives to accumulate wealth. As a result, the financial distortions lowered the rates of growth of economies in which the state and its firms played a key role.

Ronald McKinnon was among the first to analyse the role of well-functioning capital markets in economic development.²⁵ McKinnon suggested that developing countries suffered from a so-called “intervention syndrome”. He argued that government-controlled credit allocation created inefficient production structures that could only survive in the presence of capital market and trade restrictions. Repressive policies undermined the ability of capital markets to channel available funds from savers to those investors with the best investment projects. Capital controls, interest rate caps and credit rationing policies forced savers and banks to provide cheap funding to the government and its affiliated businesses. The resulting financial distortions prevented the full utilisation of resources and assets available in the economies. The consequences of interventions in capital markets seemed to make further interventions in other markets necessary and economic development stagnated.

Financial repression in the lagging economies did not end voluntarily. However, in the 1960s, Japan and some small tiger states (Hong Kong, Singapore, Taiwan) provided evidence that opening up markets was a source of prosperity. South Korea and later a growing number of new tiger states followed their example. In Latin America, severe debt crises forced reforms upon governments in the 1980s. In Central and Eastern Europe, the socialist economies were on the brink of collapse in the 1980s. After the fall of the Iron Curtain, many economies like Poland had undergone a transition process toward opening up markets. China has been experimenting with gradual reforms as a way out of its economic deadlock.

Growth accelerated following reform efforts that “reduced distortions in the economy and led to a reallocation of resources across sectors and plants.”²⁶ However, as noted by McKinnon, the “road back from socialism” was not without bumps. To allow for a rather smooth return to market mechanisms and to prevent financial instability,

the sequencing literature emphasises the importance of stability-oriented monetary and financial policies.²⁷

The experience in the emerging economies with financial repression and their withdrawal should be considered both an opportunity and a warning. Although ending financial repression helped trigger growth, the longer financial markets were repressed to the benefit of the government, the greater the distortions that affected the dynamics following liberalisation.²⁸

Monetary dominance as an exit strategy

Because the scope of financial markets and investment opportunities has widened substantially since the 1980s, it is harder to implement financial repression today. Note that although the balance sheet expansions of central banks and the prolonged period of low interest rates seem to benefit governments by reducing debt-servicing costs, inflation remains remarkably low in many highly indebted countries (Italy, Greece, Japan, even the US). Moving the real yields of Italian or Greek government debt into negative territory to repeat the postwar debt liquidation scenario would necessitate substantial regulatory efforts and even more aggressive monetary policy interventions, which threaten to distort markets.

If financial repression cannot achieve a comprehensive debt relief without creating substantial distortions, government debt might have to be cut. Following World War II, Germany and Japan experienced debt cuts. Germany used a monetary reform to lower the debt level. Government bonds, cash and/or sight deposits would lose real value. Life insurance companies, pension funds and banks, which hold the majority of bonds, would be heavily affected. Governments might have to tax real assets such as real estate and shares to lift the burden of those that hold primarily nominal assets (i.e., government bonds, cash and sight deposits). As it is hard to hide such costs, this appears to be the least attractive option for policymakers.

An alternative is a return to monetary dominance. As long as monetary policy accommodates government financing needs, fiscal policy dominates monetary policy and governments have incentives to postpone reforms that allow a take-off of the economy and continue to run deficits.

25 R. McKinnon: Money and Capital in Economic Development, in: The Economic Journal, Vol. 84, No. 334, 1974, pp. 422-423.

26 F. Buera, Y. Shin: Financial Frictions and the Persistence of History: A Quantitative Exploration, in: Journal of Political Economy, Vol. 121, No. 2, 2013, pp. 221-272.

27 R. McKinnon: Spontaneous Order on the Road Back from Socialism: An Asian Perspective, in: The American Economic Review, Vol. 82, No. 2, 1992, pp. 31-36; S. Edwards: Sequencing of Reforms, Financial Globalization, and Macroeconomic Vulnerability, in: Journal of the Japanese and International Economies, Vol. 23, No. 2, 2009, pp. 131-148.

28 F. Buera, Y. Shin, op. cit.

However, this need not be the case. Both the ECB and the Fed enjoy a high degree of *de jure* independence from governments. Monetary dominance over fiscal policy makes fiscal adjustments and reforms urgent.²⁹

Central banks could credibly signal a new stance in monetary policy. To prevent a financial meltdown, central banks could end purchasing bonds on secondary markets and/or raise key target rates. In a coordinated effort, the major central banks could increase policy interest rates gradually over an extended time horizon. A monetary tightening would force overburdened states, shaky financial institutions and companies to clean up.

To have a permanent impact on expectations, a credible exit could follow a rule that allows market participants to predict the next steps. To prevent immediate financial turmoil and the need for central banks to come to the rescue, upper limits on bond yields – such as those during times of war – could be (temporarily) implemented. Like in the 1950s, officially announced upper limits should then be gradually removed to allow prices to be determined by market forces.

In a fascinating essay, Benn Steil and Manuel Hinds postulate that the (ab)use of monetary sovereignty by governments for their own benefit is historically associated with international conflicts, crises and protectionist measures. By contrast, periods in which money was, by and large, shielded from government influence, and in which monetary policy was less concerned with governments' fiscal situations, were more conducive to international trade and finance and, consequently, global prosperity.³⁰

Recent debates on 'currency wars', tariffs or trade deficits indicate that nationalist policies are still considered a mean to benefit the domestic economy. To avoid beggar-thy-neighbour incentives and major disruptions in the international monetary order, policy coordination should replace monetary nationalism. A concerted exit by the major central banks from low interest rates is advisable to prevent financial repression from further damaging the economies.

29 T. Sargent, N. Wallace: Some Unpleasant Monetarist Arithmetic, Federal Reserve Bank of Minneapolis, Quarterly Review, 1981.

30 B. Steil, M. Hinds: Money, Markets and Sovereignty, 2009, Yale University Press.