Is Swiss Public Debt too Small?*

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Abstract

This paper reviews a recent literature showing that the supply of liquid and safe public assets can increase production and welfare. This asset scarcity occurs in models with credit-constrained consumers or entrepreneurs. The implications to the open economy and to a liquidity trap are also discussed. In this context, the decline in Swiss public debt in the last decade is not desirable for the Swiss economy. It is also likely to extend the period of very low interest rates. One proposal would be to create a Sovereign Wealth Fund financed by new public debt.

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1. Introduction

Swiss authorities seem particularly proud to have reduced the level of public debt in the last decade.[1] This contrasts with a sharp increase in debt in most other developed economies. Figure 1 shows the striking difference in the evolution of the debt-to-GDP ratio between Switzerland and other OECD countries in the last twenty years.[2]

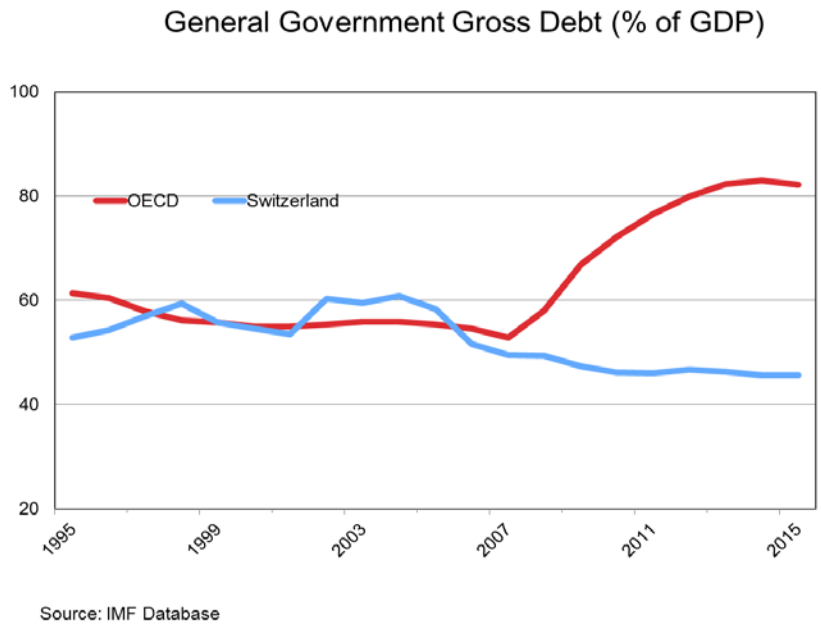

Figure 1

However, this debt reduction has occurred in a particular context. Since the outset of the global financial crisis, the global net demand for safe assets has substantially increased. One the one hand, there has been a flight to safety by many types of investors. On the other hand, there appears to be a decline in the supply of both public and private safe assets. A notable example is sovereign debt from Southern European countries, including Greece, which was considered as safe before the financial crisis. Many private safe borrowers have also been downgraded. Moreover, the macroeconomic environment of the

[1] For example, the Swiss Finance Minister wrote: "Switzerland holds up well in an international comparison, with a debt ratio of well below 40%. In contrast to the majority of advanced economies, Switzerland managed to reduce its debt ratio further in the aftermath of the financial and debt crisis, ..." (Federal Department of Finance, 2016, p.4).

[2] Notice that the debt level presented in Figure 1 comes from the International Monetary Fund (IMF), which uses a different methodology than the Swiss federal administration. IMF-computed gross debt is about 10 percent higher than the debt computed in Switzerland. The OECD line is computed as a simple average over 28 OECD countries.

Swiss economy has also been special. Beside a substantial appreciation of the Swiss franc, the Swiss economy has fallen into a liquidity trap. Figure 2 shows the evolution of the short term interest rate (3-month Libor) and of real money supply (M1/P). Very low short-term interest rates since late 2008 have coincided with a substantial increase in money demand. In this context, one can wonder whether it was the right time to reduce the supply of public debt in Switzerland.[3] In this paper, I will argue that this is not the case and that there are good arguments in favor of increasing Swiss public debt. I also argue that such an increase could be combined with the creation of a Sovereign Wealth Fund.

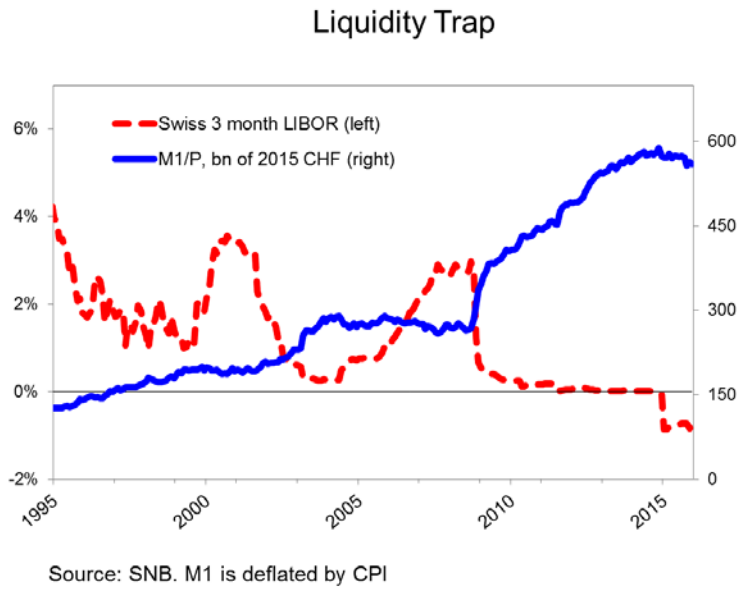

Figure 2

It is actually difficult to understand the motives leading to a reduction in Swiss public debt. It has implied a period of fiscal austerity in a time of recession or low growth. Instead of being counter-cyclical, fiscal policy has worsened the economic slowdown. Focusing on the federal level, the debt reduction can mainly be attributed to the so-called debt brake, a system adopted to stabilize federal debt. However, the implementation of this system has led to a significant reduction, rather than stabilization, in debt. Practically every year since the start of this system in 2000, Swiss federal authorities have

[3] Tille (2016) also raises this issue.

missed their target by either overestimating expenditure or underestimating revenues.[4] The fact that debt reduction occurred because of systematic prediction errors means that it was not intended and not part of an optimal policy plan.

2. On Some Benefits of Public Debt

Debt has a bad press, especially in German-speaking countries where the same word is used for debt and for guilt or blame (Schuld). It is often argued that public debt is a burden on future generations that have to repay. But this argument is incorrect, because future generations will also be happy to hold public debt and there is absolutely no need to reduce a reasonable level of debt. Another argument is that there could also be a risk of sovereign debt crisis, if debt becomes unsustainable like in Greece or Argentina. But debt would have to increase to incredible levels for it to pose a threat to the Swiss economy.[5] Although public debt could potentially crowd out investment, this is not the case in a liquidity trap. Overall, it is difficult to find economic arguments for why sovereign debt should be reduced when it stands below 60% of GDP.

On the other hand, there are arguments that favor a relatively high level of debt. There is a literature showing that a liquid market for debt is beneficial, in the sense that it can improve output, consumption and welfare.[6] Various authors have shown the desirability of providing public debt in presence of borrowing constraints (e.g., see Woodford, 1990, Aiyagari and McGrattan, 1998 or Holmstrom and Tirole, 2011). When agents face volatile needs for funds for their production or their consumption, they need to save in liquid assets. For example, consumers would like to smooth their consumption over time. If they could, they would borrow when their income is low and repay when it is high. But if they cannot borrow, they can save in liquid assets when their income is high and sell these assets when their income is low. In this environment, the supply of public debt enables consumption smoothing and if the supply of public bonds is reduced, consumers are worse off. It is important that debt is safe and liquid as it is used to fill temporary income gaps rather then used for their return.

[4] E.g., see Beljean and Geier (2013) for a description. The International Monetary Fund recently wrote: "Despite a goal of structural balance, some aspects of the ["debt brake"] rule could lead to some underspending. This tendency could place additional pressure on monetary policy during periods of below trend growth." *Concluding Statement of the 2016 Article IV Mission, September 26, 2016*.

[5] Debt increased sharply in the nineties, but it stayed below 60% of GDP.

[6] Debt is also found to be beneficial in "dynamically inefficient" economies where there is overinvestment. But this case does not appear relevant for the Swiss economy.

Similarly, entrepreneurs face fluctuating investment needs as both their cash flow and the productivity of their projects fluctuates over time. The logic is similar to the case of consumers. Entrepreneurs may not need all their funds when they do not undertake new projects. Instead, they would like to save to have more funds available when they face a new productive project (assuming again that they cannot borrow as much as they would like). Providing public debt therefore allows for more productive projects to be undertaken and increases output. In these models, a large public debt could completely eliminate the distortions implied by credit constraints. When the supply of debt is not sufficient, however, it means that there is a scarcity of assets. This can be called an asset-scarce economy. Caballero and Fahri (2016) talk about a *safety trap*, which is created by an insufficient supply of safe assets. Introducing nominal rigidities in that context, they show that the supply of safe assets can influence aggregate demand. Therefore, an increase in public debt can increase economic activity.

Typically, the literature on asset-scarce economies is of theoretical nature, as it is difficult to quantify the extent of credit constraints and to identify the relevant level of heterogeneity. However, in a relatively old paper, Aiyagari and McGrattan (1998) calibrate a model to the US economy where agents receive idiosyncratic shocks to their labor productivities. As in Woodford (1990), public debt helps consumers smooth their consumption. But it also creates a crowding out with investment. Taking into account the trade-off between costs and benefits, Aiyagari and McGrattan find an optimal level of debt for the US economy of 2/3, i.e., 66% of GDP.

3. Extensions to the Open Economy

The above reasoning applies to a closed economy and abstracts from foreign capital flows or foreign assets. Consider first a small open economy with assets scarcity, but assume that there are sufficient assets in the rest of the world. In that case, domestic public bonds become less important as domestic agents can buy foreign assets. This could lead to a net capital outflow or current account surplus. Actually, in Bacchetta and Benhima (2015), we argue that surpluses from Emerging Asian countries, including China, can partly be explained by a need for liquid assets by firms. As firms in these countries were growing fast, their need for liquid assets was strong and larger than the supply of domestic debt. This mechanism can explain the puzzle that fast-growing and less developed economies are actually lending to richer and less productive economies.

It is useful to notice that foreign bonds are not necessarily bought directly by private agents. An interesting case is China before the Great Recession (see Bacchetta et al. (2013) for an analysis). Tight capital controls prevented the private sector from buying foreign assets, so that Chinese firms and households mainly deposited their funds at commercial banks. Since the demand for funds was large, banks had excessive funding and deposited them at the central bank, which in turn bought foreign, mainly US, government bonds. Therefore, commercial banks and the central bank served as intermediaries between the private non-financial sector and international bonds markets.

However, the above discussion assumes that there is an ample global supply of liquid assets. Currently this is not the case, so it is not so relevant to the current situation of the Swiss economy. The more relevant scenario of the open economy is the case with global assets scarcity, i.e., where the world demand for liquid and safe assets is larger than its supply. In that case, the global demand for liquid assets is channelled to the safer countries that can offer such assets. These countries experience capital inflows and an upward pressure on their currency. Gourinchas and Rey (2016) call this phenomenon the *curse of regional safe asset providers*. This is obviously the case for Switzerland. Notice that this phenomenon can come from both residents and non-residents. If residents initially hold foreign assets that become more risky (e.g., southern Eurozone debt), they may repatriate their funds and hold safer domestic assets. Also notice that sound banking sectors in safe countries can also generate safe assets. Domestic and foreign investors can deposit their funds in the financial system. Financial intermediaries can then use these funds to buy assets or deposit them at the central bank.

In this context, safe countries attract capital and face a downward pressure on the domestic interest rate and an upward pressure on the exchange rate. Increasing the supply of public assets should therefore decrease this pressure. Overall this also provides a global benefit as this relaxes the global scarcity of assets. But to the extent that there is some preference for domestic assets, residents benefit more from this increase in supply.[7]

[7] This discussion is based on current research in progress.

4. The Special Case of the Liquidity Trap

As illustrated in Figure 2, the Swiss economy entered a liquidity trap in late 2008. This has implications for the analysis of public debt. First, there is a larger fiscal multiplier, which means that fiscal policy is potentially more effective and restrictive fiscal policy is more damaging. But more importantly, in a liquidity trap, bonds and money become almost equivalent since the interest rate is close to zero on both. This implies that in a world of scarce assets, money can play the role of liquid assets (see Bacchetta et al., 2016, for a formal analysis). Actually, firms and households have substantially increased their holdings of money. Similarly international capital flows towards Switzerland can take the form of bank deposits rather than asset purchases. In this context, monetary policy works through a different channel by providing safe assets. Thus, the substantial monetary expansion in the last few years can be seen as satisfying the increase in the demand for safe assets, as the private sector prefers bank deposits to more risky foreign assets. In the presence of nominal rigidities, it can be argued that these monetary expansions have avoided a deeper recession. With an accommodative monetary policy, increasing the supply of public debt does not necessarily have an impact on the real supply of safe and liquid assets: an increase in the supply of bonds could simply be offset by a decrease in monetary holdings. Thus, as long as the economy is in a liquidity trap, public debt plays less of a role and can be substituted by central bank liabilities.

However, the supply of public debt has an impact on the *shadow* (or natural) interest rate, which is the interest rate that would prevail without the lower bound on interest rates in the liquidity trap. The lower the shadow rate, the deeper the liquidity trap in the sense that it is more difficult to exit the trap and return to more normal times. Thus increasing the supply of public debt in a liquidity trap may not have a direct impact on the supply of safe assets, but it moves the economy closer to the exit of the trap. In this context, operations of quantitative easing make a trap deeper as the central bank reduces the supply of debt available to the private sector in exchange of increasing the monetary base. In the Swiss context, however, this is not an issue since the central bank is only buying foreign assets, so that the increase in monetary base is not matched by a decline in the supply of domestic bonds to the private sector.

Once the economy exits the liquidity trap and interest rates start to increase, money is no longer attractive and investors prefer bonds. At that stage, the supply of bonds becomes the main source of liquid assets. Moreover, the crowding out effect of public debt comes back and should be taken into account in determining the optimal level of public debt.

5. Policy Implications

Theories focusing on the scarcity of safe assets have important policy implications for Switzerland. First, the reduction in Swiss public debt is contributing to the scarcity of safe assets in the global economy. Second, the debt reduction is making the liquidity trap deeper and puts a downward pressure on the real interest rate. In fact, this reduction is partly responsible for the need for negative interest rates[8] and makes monetary policy more challenging. Importantly, it contributes to postpone the exit of a liquidity trap and the return to positive interest rates. Since there is no good justification for the decline in sovereign debt in the last decade, it is obvious that public debt should be at a higher level today.

The argument can be pushed further and it could be argued that Swiss debt should be increased substantially higher than its pre-crisis level. Actually, the proposal to increase debt has also been made elsewhere, in particular in the United States. For example, Kocherlakota (2015), with arguments similar to those described above, considers an increase in public debt to increase the shadow interest rate.[9] Similarly, for the Swiss economy, the debt increase will put upward pressure on Swiss franc interest rates and will make it easier for the SNB to increase its policy rate.

One obvious question is how to use the funds raised by issuing debt. They could be used to reduce taxes or finance public expenditure. For example, investing in public infrastructure and education would certainly be beneficial for the country. But the decisions on fiscal policy could be separated from the debt decision: the state could simply invest the funds raised by issuing debt. This scheme would be similar to a *Sovereign Wealth Fund* (SWF). The Swiss federal government could borrow at a favorably low interest rate and invest in assets with a higher return. If the scheme is large enough, the return could be substantial. For the sake of illustration, assume that the interest margin between borrowing and investment is 2 percentage points and that the increase in debt is 50 percent of GDP. This would imply an increase in government revenue by 1 percent of GDP or about 3 percent of total government revenues. Obviously, the return on investments may be risky and fluctuations in returns should be taken into account by fiscal authorities.[10] While risk may be relatively high on annual basis, it decreases

[8] It is obviously very difficult to quantify this effect.
[9] De Long (2015) also favors an increase in US government debt, but his arguments are more opportunistic as the US can benefit from being a reserve currency and issue debt at a low interest rate.
[10] See Gourinchas and Rey (2016) for a discussion about the trade-off between this riskiness and the benefits of increasing safe assets.

rapidly with the investment horizon. The gain from the investment margin should then be added to the benefit of increasing the supply of safe assets.

To summarize, the creation of a debt-financed a SWF has a double benefit: an increase in the supply of safe assets and increased government revenues from the interest rate margin. This proposal of SWF should be contrasted to the proposal of creating a SWF from existing Swiss National Bank reserves. The latter would have no benefit since it does not increase available liquid assets or interest rate revenue. The proposal can also be compared to SWF based on commodity revenues, such as those found in Norway and in Arab countries. These other funds are of a different nature as they are based on real resources, rather than on debt or on central bank liabilities. A debt-finance fund has a positive impact on government revenues only to the extent that Switzerland can benefit from a safe haven interest rate margin. On the other hand, there is no benefit from public debt in a SWF based on commodities.

Can such a scheme realistically be implemented? The answer is clearly negative. Most policymakers in Switzerland are "allergic" to debt and would strongly oppose such a proposal. Still, it would be valuable to move away from such an allergy and to have more rational discussions on the issue of public debt and also consider the benefits of supplying government debt. This would definitely improve economic policy in Switzerland and would be important to consider in future recessions.[11]

[11] In its 2016 Concluding Statement, the IMF writes: "Switzerland has ample fiscal space to respond to a prolonged recession with discretionary fiscal stimulus in order to support growth and inflation. This could also avoid overburdening monetary policy."

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