“Economy in deflation: debt, competitiveness and growth”
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Introduction

Over the last six years the global economy has been suffering from a large negative demand shocks that were driven initially by a sharp decline in house and stock prices and a tightening of the financial conditions. As a consequence, output substantially declined and unemployment rose. Governments and central banks across the globe responded by introducing measures to cope with solvency and liquidity problems in financial institutions. For instance, central banks reduced the target interest rate to unprecedented levels to support the aggregate demand. Unconventional monetary policy, i.e. quantitative easing and credit easing was used in order to provide more liquidity and to reduce the risk premia. However, with nominal interest rate close to zero, output and employment below their potential levels monetary policy turned out to be unable to bust the aggregate demand. Thus many countries turned to fiscal policy. The implementation of large-scale fiscal spending programs in USA as well as in Europe gave rise to policy debate. There has been a lot of controversy among economists and policy makers regarding the effectiveness of fiscal policy in lessening the depth and the duration of the recession. Moreover, the use of expansionary fiscal policy has been put into question because of the rapidly expanding public debt.

Deflation, Liquidity trap and Economic growth. Austrian school versus Keynesians

Since the World War II and the rise of Keynesian economics, economists have understood deflation as a decrease in CPI (Consumer Price Index). Before that, the term deflation was defined as a decrease in the stock of money. Thus one problem with defining deflation as the effect, i.e. price deflation, instead of the cause, i.e. monetary deflation, is that it can mislead economist form the causes, the effects and consequently the right policy approach to deflation. Samuelson (1998), Krugman (1998), and De Long (1999) are examples of economists working in the Keynesian tradition who equate periods of deflation with economic contraction. Krugman (1998) defines “liquidity trap” as a situation in which conventional monetary policy is impotent because the nominal interest rate are close to zero. In that case private agents conceive bonds and currency as perfect substitutes. The only instrument that can be used to escape the liquidity trap is government spending. An increase in government spending, according to Keynesians, could boost aggregate demand and bring the output and employment back to their potential levels. Supporters of Austrian school argue that deflation per se should be viewed as an integral part of the economic process that helps the capitalist economy with destabilized money and credit systems recover. The price deflation is an effect; it is a part of the efficient working of the market economy and the process of economic growth. The process of deflation, where the prices of goods, commodities, labor and asset prices fall, is the process of economic recovery, where labor and capital are reallocated. According to Austrians the fear of deflation is confusion between “cause” and “effect”. This group believes that real shocks to the economy, as well as real shocks in the demand and supply of money, should be allowed to work themselves in the market, without any government intervention and that these changes should be reflected in price, value or the purchasing power of money.
Monetary versus fiscal policy as an instrument for recovery. Literature review

Main objective of many central banks is to keep inflation low. Since 1997, central banks around the world have enacted monetary policy in terms of inflation targeting. This type of monetary policy is implemented through Taylor rule. According to this rule a central bank raises short-term interest rate if inflation is above the target and if output is above economically sustainable level. There are two circumstances in which inflation targeting, using Taylor rule may run into difficulties. First, when there is a combination of high inflation together with low output. In that case the Taylor rule will require high and low interest rate simultaneously and policy-makers face the following trade-off: they should choose either that the actual inflation is higher than the target or that output is below its potential levels. Second, when monetary policy is constraint at the zero lower bound on nominal interest rate, the Taylor rule will require negative interest rate. In recent years, interest rates were very low, which brought the potential threat of deflation and a binding zero bound on the nominal interest rate into focus. In this context monetary policy is no longer in a position to further reduce the nominal interest rate or to pursue a policy of quantitative easing. By the second quarter of 2009, policy interest rate had fallen below 1% in USA, Canada, UK, Sweden, Switzerland and euro area. These developments triggered a debate on whether monetary policy can be used as an instrument to boost aggregate demand. Many economists argue that the existence of zero lower bound constraints suggests that in a financial crisis or a severe recession there may be a role for fiscal stimulus to boost aggregate demand. The first paper to study the effects of government spending at zero lower bound (ZLB) in a New Keynesian DSGE model, is Eggertsson (2001). This paper builds upon previous literature on monetary policy at ZLB, such as Summers (1991), Krugman (1998), Svensson (2001) and others. Eggertsson (2001, 2003) argues that government spending at ZLB on nominal interest rate could be expansionary. A natural proposal for a stimulus plan could be a temporary increase in government spending, temporary investment tax credit, and temporary elimination of sales taxes. Woodford (2011) also has suggested that it will be plausible that a central bank does not tighten its monetary policy in response to an increase in government spending when monetary policy is constrained at ZLB on nominal interest rate. The reason for the effectiveness of a fiscal policy in that case lies on the fact at the ZLB the nominal interest rate does not respond to an increase in government spending and the real interest rate declines. As a consequence, the inflation expectations will increase. Christiano, Eichenbaun and Rebelo (2011) argue that the government spending multiplier could be greater than one when the ZLB on nominal interest rate binds. They develop a model, where the nominal interest rate does not respond to an increase in government spending. In such economy, it will be welfare improving to increase government spending, when the ZLB on the nominal interest rate is binding. Recently Gali (2014) has suggested that in presence of nominal rigidity, money financed fiscal stimulus could increase aggregate demand by boosting the output and employment back to their potential levels without any inflationary consequences. Furthermore, such intervention does not require a reduction in the nominal interest rate, an increase in the government debt and/or an increase in taxes. According to Gali if output is sufficiently below its efficient levels, an increase in government spending my increase output even if such spending is wasteful. This paper is related to large literature on the effects of government spending on output. Much of it has focused on the size of he government spending multiplier under alternative assumptions. That multiplier is predicted to be below one in the context of standard RBC (Real Business Cycle) or New Keynesian models, but it can substantially increase in the presence of non-Ricardian households (Gali, Lopez), or when ZLB on the nominal interest rate is binding. However, to have the ability to run a fiscal deficit perhaps

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1 The Taylor rule can be written as $i = \alpha + \beta(\pi - \pi^*) + \gamma(y - y^*)$, where $\pi$ and $\pi^*$ are the actual and the target inflation rate and $(y - y^*)$ is the output gap, that is the difference between the actual and the potential output.
for several years requires fiscal rules and institutions to ensure that government finances are in robust shape in good times to allow fiscal flexibility in bad times (Wyplosz, 2005). The failure to ensure that public finances were sufficiently strong prior to the financial crisis, combined with the severity of the crisis itself means that periphery countries in euro area are now in a difficult position. Not only is the nominal interest rate close to zero but also fiscal sustainability requires a deficit reduction. In particular, governments have to deal with sizeable structural budget deficit in the aftermath of the crisis and to head off the possibility that the interest rate at which government can borrow are subject to rapidly increasing risk premia (IFS, 2010). Textbook Keynesian models and New Keynesian models with less than perfectly flexible prices, predict that spending cuts are always recessionary and that the government spending multiplier should be larger in theory than that for taxes. In a seminal paper Alesina, Favero and Giavazzi (2014) show that the spending-based (SB) adjustment is much less costly (in terms of recession) than the tax-based (TB) one. The difference between the SB and the TB adjustment is remarkable in size and cannot be explained by different monetary policy or other accompanying policy, such as supply-side policy, e.g., labor market and product market liberalization. Moreover, the difference in the output effects of the two types of fiscal adjustment is due to the response of private investment, rather than that of consumption growth.

What can we learn from history? UK versus USA

In 1930 UK economy entered a recession with unemployment rising very rapidly. The UK budgetary position deteriorated as tax revenues fell and transfer payments rose. Fiscal sustainability was threatened by falling prices and risk premia lead to an increase in interest rates on government debt. By abandoning the fixed exchange rate, UK was able to regain control over its monetary policy, eliminate the need for deflation of prices and wages, remain competitive and improve its budget. Thanks to the fiscal consolidation plan (a mix of expenditure cuts, notably on unemployment benefits and tax increase) that was implemented 1929/1930 and continued until 1933/34, the budget had returned to surplus. After 1934, as the recovery from the recession progressed, fiscal policy was eased. From 1935 deficit-financed government expenditure delivered a significant fiscal stimulus, around 3% of GDP. USA instead was marked by the era of the New Deal. The main difference between the fiscal policy in the two continents lay in Keynesian stimulus in USA compared with deficit-reduction in UK. It is well known that the New Deal was a massive fiscal stimulus. However, one should take into account the fact that it was largely financed by tax increase and that the discretionary increase in the budget deficit between 1933/36 was actually less than 3% of GDP. Fiscal consolidation in UK was accompanied by strong economic growth in 1933/34. The strong effect of this type of fiscal policy should be put in the context of supportive policy measures initiated in 1932 that offset the deflationary effect of the fiscal consolidation. Such accompanying policies include exchange rate depreciation as well as tariffs on imports and interest rate reduction that changed the expected rate of inflation. Given the adverse trends in the world economy one could conclude that the recovery in UK was based on domestic demand. By contrast, USA in 1933 gave strong message to the public: both leaving the gold standard plus the New Deal was clearly understood as a regime change very quickly and recovery started much faster.

Conclusion

The experience of 1930 gives us useful lessons for today. The key to promoting growth in 1930 in UK was to combine fiscal consolidation with other policy that helped in boosting the aggregate

\[2 \text{ See De Long and Summers 2012, Gali et al 2007}\]
\[3 \text{ See for a survey Thomas 1983}\]
demand. As part of the so-called “managed-economy strategy”, UK abandoned free trade and imposed tariffs on manufactures in 1932. The main policy stimulus that accounted for the UK economic growth between 1933/35 was the use of “cheap money” policy that consisted in reduction of the nominal and real interest rates. Cheap money was a policy package aimed at keeping short term interest rates close to zero while rising inflationary expectation through announcing policies intended to rise the price level. This strategy had a direct effect on private investments that accounted for the 23% increase in GDP and it worked because it was clearly communicated and committed to. Fiscal stimulus strategy between 1933/36 brought the USA economy out of the recession. The reason for the success of the New Deal lies on the fact that it was perceived as a credible regime change.

In the current context, the use of expansionary fiscal policy has been put into question because of the rapidly expanding public debt. It is neither feasible nor desirable to impose tariffs in the context of free and integrated market. The single currency in euro area excludes the use of currency devaluation as an option to improve competitiveness and boost export and economic growth. Given that interest rates are at the lower bound, a modern equivalent of “cheap money” policy could be appropriate if there is a risk for the economy to enter a double-deep recession. Textbook models teach us that at the zero lower bound, the real interest rate could be reduced only with a policy that can convince people that the price level will be higher in the future. Quantitative easing in its present guise is not able to do this. Thus many economists have started to think on the usefulness of fiscal policy as a tool for macroeconomic management. Textbook discussions of fiscal policy describe it as a stabilizing force of the economy. Fiscal policy can stabilize aggregate demand by adding to demand during recession and subtracting from demand during boom. However, actual fiscal policy in both USA and EU has deviated from this textbook description during the last decade. In short run, fiscal policy has magnified business cycles by subtracting from demand during recession and adding to demand during expansions (Frankel 2012). Long-run fiscal policy, in terms of the government debt relative to the size of the economy and the debt ratio in periphery countries has been allowed to increase to unprecedented levels. Predictability is an important aspect of fiscal policy and there is strong evidence that increased uncertainty about future fiscal policy has had an adverse effect on private economy (Becker et al 2013).

Policy makers should bear in mind that the key to recovery both in UK and USA in 1930 was the adoption of CREDIBLE policies to raise the price level and in so doing to reduce real interest rate and to increase inflationary expectations. The 1930’s experience tells us that to be effective a change in both monetary and fiscal policy would have to be clear and credible.

References


• Eggertsson G. (2010), "What fiscal policy is effective at zero interest rates?" NBER Macroeconomic Annual

• Erceg, J.C. and J. Linde (2010), "Is there a Fiscal free lunch in a liquidity trap?", CEPR Discussion Papers No. 7624.


http://mypage.iu.edu/~eleeper/Papers/LeeperFLandMP.pdf


• Williams, J.C. (2009), "Heeding Daedalus comment and discussion optimal inflation and the zero lower bound", Brookings Papers on Economic Activity, 2, pp. 1-37