Thoughts on policies and the policy framework after a financial crisis

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Abstract

Attention from policymakers tends to concentrate on the short-term effects of crisis policies on growth and financial stability. This paper investigates side-effects of current crisis policies from the perspective of the classic debate between Keynes and Hayek. It argues that three issues remain largely unaddressed: a lack of confidence, a distorted structure of the economy and policy framework, and too high debt levels. Continuing expansionary and unconventional policies may be counterproductive and it may be better to shift the focus of policies towards real and financial adjustment.

Keywords: Policy framework, financial crisis, unconventional policies, Keynes, Hayek

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1. Introduction

Until recently, the policy framework in advanced economies seemed based on clear and simple principles: market allocation based on the price mechanism; responsibility for sustainable fiscal policy, making fiscal support from other countries or from monetary policy unnecessary; and a clear separation of fiscal and monetary policy from debt management. The validity of those principles is no longer obvious. Important financial market segments – the money market, bond markets and housing finance – have been dysfunctional for considerable periods of time, and have been subject to heavy policy intervention that distorts market-based pricing. Debt is on an unsustainable path in many countries, and has made outside support necessary for several countries. Monetary policy has increasingly come under pressure to intervene for the sake of financial stability and to perform quasi-fiscal roles.

Policymakers' attention has concentrated on the short-term effects of crisis policies on growth and financial stability. But by now macroeconomic policies have been in crisis mode for several years, and a quick exit is not foreseen. Thus, we shift attention here to the side effects of this new policy configuration, and explore the road ahead.

The context is one of high debt and low growth. Full separation in macroeconomic policy no longer holds, and distortive side effects of crisis policies are increasingly visible. Section 2 of this paper focuses on side effects that have already occurred. Section 3 analyses the current policy choices from the perspective of the classic debate between Keynes and Hayek in the 1930s.

Our main message is that policy response to the financial crisis so far has benefited from one lesson of the Great Depression, in that monetary and fiscal policies have been highly expansionary. This has contributed to avoiding another Great Depression and a total collapse of the financial system, but has come at a cost, and has not yet restored sustainable growth. Three other problems remain unsolved and largely unaddressed: lack of confidence, distortion in the structure of the economy and in the policy framework, and excessive debt levels that may ultimately threaten social and political stability. Continuing expansionary and unconventional policies may be counterproductive, and it may be better to shift the policy focus towards real and financial adjustment.

2. Side effects of current policies

Fiscal and monetary response to the credit crisis incorporates the lesson from the Great Depression that monetary and fiscal policies should be expansionary when crisis hits. This worked well, since depression and systemic collapse of the financial system were prevented. Still, growth remains moderate, in line with historical evidence on low growth in the aftermath of financial crises (Reinhart and Rogoff, 2010). The highly expansionary response to the crisis has so far not changed this pattern.

At the same time, it has become clear that these policies have important side effects. Crisis policies are meant to be temporary, as are expected to be their side effects. The continuation of macroeconomic policy in crisis mode, however, implies lasting side effects. We discuss: (i) their emergence during the credit crisis, and (ii) their increasing presence during the debt crisis.

Side effects, phase 1: credit crisis

The side effects of low monetary policy rates and unconventional policies are well recognized (for a full overview, see van den End et al, 2009). In a market environment, banks need to screen each other, and banks with riskier investment strategies pay higher interest rates on

the interbank market. Full allotment in combination with low rates, however, distorts the functioning of the price mechanism. All banks – risky or not – pay the same rate. The banks that benefit the most are those that would pay the highest rates in the market, or that would be cut off from market liquidity. Continued unconventional policies will reduce incentives for de-leveraging or de-risking. Distorted pricing decreases efficiency in the channelling of liquidity across the banking system. Moreover, it leads to indirect monetary financing of government debt, insofar as banks pass liquidity on to the government. It provides an incentive for banks to demand short-term government debt, to match the maturity of the full allotment by the central bank.

Insofar as low policy rates spill over to the rest of the yield curve (see below), they favour borrowing over saving. This creates an incentive for banks to delay balance sheet repair, for governments to delay deficit reduction. Decreasing returns also stimulate risk-taking in search for yield.

The side effects of expansionary fiscal policy occur – at least initially – at the long end of the yield curve, that is in the government bond market. Changes in the perception of debt sustainability lead to sovereign risk premiums. Through the benchmark role of government bonds, these increases in risk premiums spill over to the corporate bond markets and other parts of the financial system, and ultimately to the real economy (CGFS, 2011). Countries that are considered safe havens, on the other hand, experience inflows to their bond markets that decrease interest rates because of the safe haven effect (see Nickel and Vansteenkiste, 2011, for a quantification of this effect for the euro area). This may decrease the return on saving to below 'normal' market interest rates. Again, this implies re-pricing in favour of borrowing over saving.

Turner (2010, p. 102) describes how '*very large debt defines the yield curve*'. This phenomenon includes the role of financial regulation in requiring banks to hold government debt, and the effect of public debt management on yields. In a context of dysfunctional markets, central bank operations at the short end of the yield curve do not necessarily spill over to the long end of the curve. As a result, quantitative easing becomes potentially effective in stimulating aggregate demand by reducing long interest rates (see the US and UK experience). Over time, this translates into a risk that persistent credit easing will distort rather than support the markets in which the central bank intervenes. In different countries this applies to markets such as mortgages, covered bonds, equity, corporate bonds and government bonds.

Moreover, public debt management will have macroeconomic implications, since it can affect relative prices along the yield curve. As a result, public debt management should no longer be guided by cost minimisation principles, since the yield curve is not exogenous, but by principles of prudent financing (Hoogduin et al, 2011). The side effect that we are interested in here is the mixture in the macroeconomic policy framework, since the traditional separation of monetary policy and public debt management no longer holds. Views on the consequences of this differ. Some argue in favour of more operational co-operation (CGFS, 2011) while others encourage central banks to revert to their role of managing the national debt (Goodhart, 2010, p. 26).

Side effects, phase 2: debt crisis

The debt crisis starts at the point where bond markets become dysfunctional due to doubts about debt sustainability and a corresponding increase in sovereign risk. This leads to systemic risk due to negative feedback loops from sovereign risk premiums to fiscal positions and to financial institutions that hold government bonds. It puts pressure on the central bank to intervene in the bond markets to prevent a systemic crash. Interest rates of 'riskier' sovereigns are pushed below market rates. This reduces the incentive for fiscal adjustment. It may also further depress long rates in 'safe havens'. To the extent that sovereign risk spills over to the interbank market – due to uncertainty about losses on sovereign exposures – this

puts pressure on the central bank to continue or resume unconventional policies, with side effects as discussed above.

From our perspective, the relevant point is that price signals along the entire yield curve get distorted. This means increasing redistribution from savers (wealth) to borrowers (debt) without recourse to the democratic decision-making process – a phenomenon immediately visible for pension funds and insurance companies, which face a decrease in their return on assets, and increases in the value of their liabilities due to low interest rates,

In a context of high debt, fiscal, monetary and financial stability operations become strongly intertwined. We conclude that the side effects during phase 1 – the credit crisis – were characterised by an increasing distortion of financial markets and the end of full separation between macroeconomic policies. Side effects have widened in phase 2 and caused a further interdependence between macroeconomic policies. High debt has triggered an ongoing process in the direction of fiscal dominance over financial stability and monetary considerations.

The key principles of the macroeconomic framework do not hold any more. We are in uncharted territory without a clear, articulated policy framework. This leaves the private sector with less of an anchor on which to base its expectations. Lack of confidence, postponement of investment, and short planning horizons may be a result of this. At the same time there is an incentive to continue and even intensify expansionary and unconventional policies as long as growth remains lacklustre. The question is whether this is the right choice, given the costs of these policies.

Where to go from here? One response is to argue that, since expansionary and unconventional policies work, they should be continued and even intensified. Continue to apply Keynes's lesson from the 1930s, and 'double the dose' as it were. But there is another possible response. Demand management addresses only one element of the impact of a financial crisis. Its impact is limited, and if applied too long it may cause other problems and hamper final resolution of the crisis. Continuing expansionary policies could be a grave mistake. The situation calls for a discussion that revisits the 1930s debate between Keynes and Hayek. Keynes won, but are we not discovering today that Hayek had a point too?

3. The policy debate between Keynes and Hayek, and the resulting policy framework

In the early 1930s the key debate in economics was between Keynes and Hayek (see Cochran and Glahe, 1994). Keynes argued that the economy is not automatically self-adjusting. It can get stuck in equilibrium with less than full employment. The level of production and employment are determined by the principle of effective demand. Demand management can bring the economy back to full employment from an equilibrium that includes unemployment – clearly an improvement in welfare, for everyone benefits and there are no apparent costs. Thus, there seems after all to be a free lunch in economics – known before Keynes as the 'dismal science'.

Hayek's view was fundamentally different. In his theory, the market system provides a mechanism for moving to a unique equilibrium. In this equilibrium there is not only full employment, but also equilibrium of the structure of production and the balance between consumption and saving. However, the optimum is not always attained. Hayek focused on disequilibria between saving and investment and in the production structure. These were brought about by deviations of the market interest rate from the natural interest rate.

The distinction between these interest rates had already been introduced by Wicksell. But in Wicksell's theory a deviation between the natural and market interest rates causes inflation or deflation, since the deviation leads to what we would today call an output gap. Keynes

builds on Wicksell in the sense that he too focuses on aggregate demand. New Keynesian theory is even more Wicksellian. There is not only a focus on aggregates, but a revival of the concept of the natural interest rate, which Keynes rejected.

In Hayek's theory the financial sector is at the heart of disequilibria by virtue of setting the market interest rate. If the market interest rate deviates from the natural rate, a cyclical process develops. Let us assume that the market rate is too low. This leads to overinvestment relative to future consumption demand. The capital structure becomes distorted. This will only become clear in the future, when it is revealed that there is more capital available than required for consumption demand. Unemployment develops, and total production falls. Now the economy has to adjust to correct its structure. Hayek assumes that entrepreneurs operating in free markets will succeed in doing this, although the adjustment itself can be painful and will take some time.

In Hayek's view, unemployment is not the result of a lack of aggregate demand, but of disequilibrium in the structure of the economy. An overly expansionary monetary policy does not only, or even primarily, result in an increase in the general price level, but distorts relative prices. In particular, the relation between prices of current consumption and future consumption can become distorted, as reflected in too low an interest rate (or, *mutatis mutandis*, too high an interest rate). Expansions of money and credit are not neutral. They affect the structure and level of production. They thereby also affect a society's distribution of income and wealth and the level and distribution of debt, although Hayek did not pay as much attention to these issues as to the capital and production structure.

Hayek's response to Keynes was in essence that Keynes's policies would ultimately not work, and would make things worse by postponing the inevitable adjustment and increasing the necessary degree of adjustment.

Keynes won the debate and laid the ground for aggregate demand management. Over time, a synthesis with the classical view was established and much of Keynes's original revolutionary view went by the board. The New Keynesian model became the workhorse of monetary policy (NKM). In short, deviations from full employment are now seen as the result of so-called market imperfections, which can be remedied by macroeconomic policy. Money is neutral in the long run. Inflation can be and should be controlled by an independent central bank setting a short-term interest rate. The required separation between monetary and fiscal policies follows directly from this view. Independent public debt management can be added if fiscal policies are fully sustainable – which should be the policy objective – and if the central bank is fully credible in maintaining price stability. In that case government assets are risk free and public debt management does not influence the interest rate on long-term government debt, which is determined by expectations about future monetary policy. Not only is money neutral in the long run in the underlying theoretical framework, but financial variables more generally do not play an important causal role. Finance is ultimately passive. As a result, macroeconomic and financial stability are seen as identical. Keeping output and prices stable should also keep the financial system stable as long as individual institutions are healthy. The latter issue is covered by micro prudential supervision. There is no need for macro prudential policy. Therefore, we end up with three independent macro policies: monetary policy focused on (flexible) inflation targeting; fiscal policy, which can contribute to output stabilisation but should focus on remaining sustainable; and public debt management focused on cost minimisation given a certain level of risk tolerance. Structural policies are seen as important to limit market imperfections as much as possible. Debt levels and income and wealth distribution do not play a role in the NKM.

As argued above, this policy framework has been shaken by the financial and government debt crises. There appears to be consensus on the need for macro prudential policies, but the strategy for such policies and their place in the new policy framework still require a great deal of work. There is also consensus that micro prudential policies have to be strengthened, that the 'too big to fail and/or save' problem must be tackled and that financial institutions

have to hold higher capital and liquidity buffers. There is no consensus on whether monetary policy should also have financial stability as an objective.

Otherwise, the implicit idea seems to be to return to the old policy framework where the different policies are clearly separated. The use of the term unconventional policies suggests this. The policies are meant to be temporary. However, before the exit can begin, the general view is that some these policies may have to be intensified until growth has been brought back to the desired level.

In our view, there is every reason to reflect before going forward on this road, drawing lessons from the recent experience with expansionary (unconventional) policies and Hayek's arguments in the 1930s. Experience with the unconventional policies and expansionary monetary and fiscal policies seem to be in line with Hayek's theoretical concerns about them. Yes, Hayek scores some points too.

4. Reflection on Hayek and recent experience

Keynes's lesson about the importance of aggregate demand should be heeded as we move into the future. But recent experiences with respect to the side effects of expansionary policies, as well as Hayek, tell us that there are other matters, which have been neglected at potentially high cost in the current policy environment. Economic developments are more complex than suggested by the NKM. Our ability to control the economy is less than (implicitly) assumed. It may also have to be accepted that adjustments after financial crises are inevitable and painful.

The most important elements that have to be brought back into our macro analysis and policies are: finance; distributional issues; structural issues; political economy considerations; and the role of fundamental uncertainty and confidence. Thus, a very full and exciting research agenda awaits.

These considerations should also lead to reflection on whether the adjusted policy framework as described above is the right one to return to in the long(er) term. If money is not neutral, and financial and real variables cannot really be separated, it is an open question whether the policy assignment and distribution of responsibility in the old (adjusted) policy framework are appropriate. Deciding on the new policy framework and making it explicit is urgent. The well-articulated and definitive policy framework of the pre-crisis era no longer exists. This has created a lot of uncertainty, making it difficult for the private sector to adjust and take long-term decisions. Providing guidance on the new policy framework and the strategy for its implementation should speed up the adjustment process.

The most pressing issue is what the appropriate policies are for reducing debt ratios and for making structural adjustments. Reinhart and Sbrancia (2011) discuss the options for reducing debt ratios:

1. Reviving economic growth
2. Fiscal adjustment/austerity
3. Explicit default or restructuring
4. A sudden unexpected burst in inflation
5. A steady dose of financial repression

The current approach, as described above, is as follows: Try to revive growth as much as possible, using expansionary macro policies in combination with financial repression (since that is what unconventional policies amount to). Make fiscal adjustments if inevitable, but if you can credibly postpone them do so, since that helps to revive growth. Explicit default and restructuring of government debt should be avoided unless inevitable. However, in the EU

there is also a view that government debt should be restructured 'earlier'. This is the debate about so-called private sector involvement. Inflation is not seen as a solution.

Recent experience, as well as Hayek, suggest that the emphasis should be put more on austerity and less on reviving growth by stimulating demand and conducting financial repression. This would mean not extending unconventional policies, but rather leaving them behind while at the same time more rapidly normalising conventional policies.

Such a path would contribute to making markets function properly again, to creating the conditions for the resumption of sustainable growth and to restoring government debt as a safe form of assets. But this would take time. Inflation should remain taboo. However, this would make the distributive consequences of adjustment after a financial crisis even more visible and explicit. It makes it even clearer that adjustment after a financial crisis is not solely, or even primarily, a technical economic problem, but rather a political problem. How can support be mustered for the distributive consequences of adjustment policies, societal cohesion be maintained, and fragmentation and conflict be avoided?

Recent experience and a Hayekian analysis may reinforce the case for making government debt restructuring an *ultimum remedium* rather than part of any government adjustment programme as advocated by those in favour of private sector involvement. The discussion about private sector involvement in the euro area has stimulated contagion and weakened the banking sector, and such a path would make it more difficult for countries with an adjustment programme to return to the financial markets. Adoption of this principle would fundamentally change the functioning of financial markets and the relation between fiscal and monetary policy. The markets would have to function without the anchor of a safe asset in the form of government debt. This would have consequences for investment policy and thereby for the functioning of the economy. It may change the rules of the game between debtors and creditors more generally, also creating uncertainty and unintended consequences. Debt management could no longer be operated separately from monetary policy, and prudential supervision would have to attach risk weights to government debt. This also raises issues about the future policy framework, and in the meantime it would prolong regulatory uncertainty.

A Hayekian approach would put more emphasis on adjusting the structure of the economy. This would, for example, call for more attention to adjustment in Europe's banking sector and in the housing markets of the United States and Spain. Adjustment has both a real and financial side. It is not only about deleveraging, but also about shrinking the size of some sectors and increasing the size of others, and about the emergence of new sectors and activities.

Adjustment of global and regional imbalances should not be analysed only in a crude Keynesian framework as it often is. It is argued that deficit countries with balance of payments deficits and overly expansionary fiscal policies should consolidate public finances, while countries with balance of payments surpluses should run more expansionary fiscal policies to maintain world aggregate demand at a sufficient level. The first part of this is true, but the second is a logical *non sequitur.* A country with a balance of payments surplus may well have an excessive government deficit. The government has to consolidate, yet the export and import-competing sectors must shrink, and the rest of the economy must grow. The real policy issue for the surplus country is to facilitate this adjustment.

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Comment

Christophe Chamley

These three remarkable papers span a wide set of fascinating issues on the management of government debt and interest rates. Even if we leave aside the volumes that have been written on the subject, one can only add here a few short remarks which should be viewed as complementary. The common ground between the papers is the management of the government debt and its impact on the yield curve and in particular on the long-term interest rate. The papers provide essentially a broad and stimulating historical perspective, from World War I until shortly before the current crisis, that is overwhelmingly rich in the description of the events, the policies and the evolution of policy thoughts.

There is a theoretical problem that is not mentioned by the authors. In the world of the Modigliani-Miller theorem (MM), which does not require complete markets, a change of the composition of the government debt through trading has no impact on the real allocation of resources. Private agents undo the trading of the government.

Of course, the neutrality of MM does not hold when the financial policies entail transfers or when there are liquidity constraints, two issues that will be discussed here. However, MM provides a stylised benchmark that is a useful warning for the analysis of the management of the public debt, either by the government or by monetary policy. One should also emphasise that according to MM, a change of the composition of the debt has a first order effect on the price of assets with different maturities. But that first order effect does not translate into an impact on real allocations, ie aggregate investment. The argument should also serve as a reminder that one may not consider only the relation between investment and the long-term interest rate. For example, the short-term rate has an impact on the opportunity cost of delay, which matters when firms under uncertainty choose the timing of their investment (Chamley and Gale, 1994).

Some changes in the composition of the debt have real effects because they are not restricted to trading and entail transfers. An example, which is considered in the papers of Allen and of Tily, is the conversion in mid-1932 of the third war loan that was issued in 1917 at 5 percent, which had been redeemable since 1929 (Internal War Loans of Belligerent Countries, 1918), into a long-term bond at 3.5 percent. The move was supported by Keynes, as described by Tily. That policy took advantage of the low level of the interest rate and the opportunity to refinance the public debt at a lower interest rate. The practice had been standard in England since the 18th century. If we first neglect the uncertainty on interest rates, the policy entails a transfer from the rentiers (who hold the high interest rate debt) to the tax payers, who benefit from the reduction of the cost of the public debt. That significant change in transfers explains why such a policy is always resisted by a lobby and deemed as risky (Chamley, 2011). Indeed, the pressures on financial institutions to facilitate the conversion (Allen) are just a manifestation of the power game that takes place.

The conversion of a callable war loan to a long-term bond that is not callable for another 20 years also alters the maturity of the government debt and its risk properties. As emphasised by Allen, the old loan has a price that cannot rise much above the par because agents are aware of the redeemability of the loan. The “anchor” of the par provides a stability in the price and the old debt, although it can be extended perpetually, has a price behaviour that is similar to that of a short-term bond (at least if the short-term interest rate is low, as in the 1930s).

As highlighted by the three papers, the management of the government debt through trading is done by the fiscal and by the monetary authorities, with no clear separation. As shown by

Allen, sometimes the two authorities work together, sometimes they pursue different objectives. And the MM critique applies as well to the portfolio theory of monetary policy of Tobin (1969) (Chamley and Polemarchakis, 1984).

As is well known, MM is not valid when agents are trade-constrained. These constraints may arise because of habitat (Vayanos and Vila, 2009), or because of liquidity. Liquidity has more than one definition, especially today. For example, the refinancing of the public debt in long-term bonds makes its price more sensitive to changes in long-term expectations, but that does not affect the neutrality of MM. However when this change of composition affects the reserve requirements of financial institutions, as emphasised by Allen, then there is no neutrality. That issue is especially important today with the evolution of the Basel rules on financial institutions.

In the "real world" with constraints on transactions, the composition of the government debt may have an impact on investment. Ignoring the previous caveat on the determination of investment from both the long-term and the short-term rates, it is then natural to focus on the long-term interest rate. It would be good to have more quantitative evaluations of past experiences, although such evaluations are notoriously difficult. One should not forget that the long-term rate depends also on expectations about real activity in the future, especially without future markets for goods (Chamley, forthcoming). As Keynes was well aware (Tily), low expectations of future activity depress future rates, and future expectations depend very much on current fiscal and monetary policies.

A number of empirical studies have tried to measure the impact of debt management policies on the yield curve. They have been surveyed recently by Krishnamurthy and Vissing-Jorgensen (2012). See also Turner (2010), D'Amico and King (2010), Gürkaynak and Wright (forthcoming).

Tily describes how Keynes emphasised the impact of monetary management on expectations about the long-term interest rate. This effect is documented and analysed in Krishnamurthy and Vissing-Jorgensen (2012). They take five announcements by the Federal Reserve implementing QE1, from 25 November 2008 (intent to purchase $500 billion of MBS and $100 billion of debt) to March 2009. The impact on the forward market of the federal funds rate does show a lowering of the entire yield curve, in the span of 3 to 24 months, which is limited by the existence of the forward markets. The measured effect is small, less than 0.5 percent. Note that this effect is in general equilibrium: bond holders may expect the policy to generate a positive impact on future activity which would dampen the decrease of the rate.

The trading of government assets by a policy maker can be a useful commitment device to a future policy. As discussed by Allen, when the Federal Reserve purchases long-term assets (as in QE1), it constructs a portfolio that would suffer a capital loss if rates were to increase in the future. There are a number of examples to be found in past policies. In the 1980s, Margaret Thatcher advocated inflation indexed bonds as "inflation policemen". Indeed, the private sector did not believe in the commitment of the government to reduce inflation, and bought these bonds at a high price that generated a handsome profit for the government.

In a similar experience, the private sector bought war bonds during the war of the Austrian succession in 1744-1748 under the expectation that interest rates would be high for a long time. But the war did not last as long as expected and the government earned a profit in the early conversion to a low rate such that ex post its rate during the war was about the same as during the peace, at 3 percent (Chamley, 2011).

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