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Exit Strategies

NOTE

Abstract

The end and eventual reversal of non-standard monetary policies promises to be another experiment previously untested. It will consist of lifting interest rates from the zero floor and in reducing the balance sheets of central banks from their currently massive sizes.

One question is whether the balance sheets will return to their initial levels and compositions. This is unlikely. The commercial banks will be constrained by Basel 3 rules and are likely to play a reduced role in providing credit. The impact on the size of the money base is ambiguous. Banks will need more liquidity, provided by the central banks, but the banking system will be smaller. It is also likely that central banks will retain some of the long-term assets that they have acquired during the crisis because they have found it useful to intervene along the yield curve and will want to retain this possibility in the future.

The ECB will face a particularly challenging task. Exit should start when there is a risk of rising inflation, which is quite far off at the present stage. But exiting will raise borrowing costs, which will hurt highly indebted governments and banks that remain fragile. Ideally, monetary policy will not have to be engaged into exit until after the sovereign debt crisis is over and all weak banks have been restructured. If not, the ECB will have to proceed carefully, especially regarding the relinquishing of public bonds.

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EXECUTIVE SUMMARY

The major central banks have innovated in very many ways during the Great Financial Crisis and, for the EBC, during the Eurozone sovereign debt crisis, which is not yet over. When the situation normalizes, monetary policies will also normalize. But will the "new normal" be the same as the "old normal"?

Exit will have to combine two normalizations: raising the interest rate and reducing the size of the balance sheet. The issues at stake include the scheduling of the two processes and the speed of action.

The ECB's and Fed's balance sheets increased in similar proportions but at different speeds and for different reasons. As a consequence, while the Fed will want to reduce the size of the balance sheet when it considers that monetary policy does not need to be expansionary, the ECB will move when the sovereign debt crisis is over and when the interbank market is not fragmented anymore.

The increase in interest rates rise will impose valuation losses in central banks, which is likely to lead to considerable caution. The exit strategy will also be constrained by its impact on public debt sustainability: if the interest rate rises faster than the growth rate, the debt GDP ratio will become unstable.

Is one objective of exit to bring the size of the balance sheet back to its pre-crisis level? The liability side is the money base, so the question is whether after the crisis the base will play the same role as it did before. There is no reason to presume that this is the case, although it is much more difficult to detect in which direction the change could go.

The other big question concerns the withdrawal of central bank support to governments and segments of the private sector. The ECB will not want to increase government borrowing rates by quickly disposing of the debt instruments that it holds if these governments have not recovered market access.

The ECB may wish to restore a unified interbank market, without which the Eurozone cannot operate as a real monetary union. It has already taken a step in that direction by announcing the OMT program, but large differences remain. Any determined action in this respect will require the ECB to hold significant amounts of public debts issued by the (former) crisis countries.

Central banks may well decide to keep longer-term assets. Because forward guidance will remain more art than science, the central banks are likely to continue the practice of intervening at longer maturities to affect the corresponding long-term interest rates.

Central banks no longer claim that their sole objective is price stability. They now accept that they bear some responsibility for financial stability. This does not imply that flexible inflation targeting is a strategy of the past, however. But it means that there will be periods when the flexible inflation targeting strategy must be suspended, or at least qualified, which will not be easy to implement.

A key weakness of the flexible inflation targeting strategy is the risk of hitting the zero lower bound. The uneasy implication is that "normal" inflation should be somewhat higher than the pre-crisis norm of 2%.

1. INTRODUCTION

The major central banks have innovated in very many ways during the Great Financial Crisis and, for the EBC, during the Eurozone sovereign debt crisis, which is not yet over. When the situation normalizes, monetary policies will also normalize. But will the "new normal" be the same as the "old normal"? This question covers many aspects: the size and composition of their balance sheet as well the monetary policy strategy including the objectives to be pursued. In addition, the road to normalization involves decisions about the speed of actions and the relative timing of asset sales and interest rate hikes. There are no ready-made answers to these questions because the exit strategy will be as innovative as the policies pursued during the crisis. Travelling one way was a step into the unknown, travelling back will also imply moving into uncharted waters. In spite of the reassurance that they know how to proceed, central banks have no firm answers either, they well know that they face a totally new set of issues.

In brief, this note argue that the new normal will be different from the old normal, that the mandate of central banks has changed radically, and that the exit will be an ongoing experiment. The note starts by briefly defining exit. Section 3 asks whether central bank balance sheets will be returned to their pre-crisis sizes and compositions, comparing the US and Eurozone situations. Section 4 describes the changes that will characterize monetary policies after the crisis and what is means for interest rates and balance sheets. These changes affect the central bank mandate, an issue discussed in Section 5. Section 6 offers a brief conclusion.

2. EXIT AND ITS CHALLENGES

Exit will have to combine two normalizations: raising the interest rate and reducing the size of the balance sheet. The issues at stake include the scheduling of the two processes and the speed of action. It is essential to note that these two actions are complementary in the sense that they are both contractionary. The reason is that they both contribute to raising the long-term interest rates, to an exchange rate appreciation and, most likely, to reducing asset prices. Increasing the policy interest rate impacts the long-time rates through the well-tested channel of expectations. This is in turn *ceteris paribus* reduces asset prices and raises the exchange rate. Asset sales by the central bank directly lower their prices; by draining liquidity, they raise interest rates.

On the other hand, the two instruments have different effects at a more detailed level. Given that central banks hold a variety of assets – partly as collateral in the case of the ECB – they need to decide which ones are relinquished first, and then next, etc. Since assets were acquired to support particular sectors, e.g. covered bonds or government bonds, the scheduling choice will have to take into account the health of these sectors. In particular, if the sovereign debt crisis is not fully resolved, selling of specific country government bonds – the bulk of the Eurosystem' asset increase – will be either impossible (if the country has not recovered market access) or dangerous. This means that the exit strategy will have to follow a clear end of the sovereign crisis.

In fact, the ECB will have to act very prudently. The risk is the following. Consider the situation of public debts may seem stabilized as all governments have recovered market access and interest rate spreads are low. The ECB then sells the corresponding public debts. The markets absorb these instruments but re-impose some moderate premia. This could trigger a new wave of panic, forcing the ECB to reverse direction. Having to abort exit would be disastrous.

The next question is what happens if a recovery picks up speed and justifies starting to exit, but some governments have not yet recovered market access. The logical answer is not to delay exit and not to relinquish the corresponding debt instruments. An alternative is to start the interest normalization before the balance sheet normalization.

3. BALANCE SHEETS

3.1. Size: Eurozone vs. the US

The ECB's and Fed's balance sheets increased in similar proportions but at different speeds and for different reasons, as described in my previous *Briefing Note*. The ECB moved first, providing ample liquidity to the interbank market when it seized up in August 2007. But these actions involved swaps and were sterilized under the "separation principle", which claims that liquidity provision is strictly different from monetary policy. The Fed, moved forcefully later when it became clear that many financial establishments were collapsing because they were holding "toxic assets", essentially products guaranteed by mortgages, including subprimes. The Fed bought, without sterilizing, large amounts of toxic assets. Then the Fed engaged into quantitative easing (QE), acquiring vast amounts of Treasury debt and of privately issued instruments; the intention was to expand the money supply when monetary policy could not be more expansionary because the interest rate was its zero lower bound. The ECB acquired, either as collateral or through outright purchases public debts of crisis countries, not to expand the money supply but to deal with the sovereign debt crisis. It also sought to compensate for the breakdown of the euro interbank market by providing liquidity to banks, also using the emergency liquidity assistance (ELA) facility. The payment settlement system, TARGET 2, was another channel that circumvented the interbank bank market, in effect using the system to borrow from surplus liquidity banks and lend to banks with a shortage of liquidity.

This means that the Fed will want to reduce the size of the balance sheet when it considers that monetary policy does not need to be expansionary, or just less expansionary, that QE is not needed anymore. The ECB, on the other hand, will reduce its own balance sheet when the sovereign debt crisis is over and when the interbank market is not fragmented anymore. For the ECB, this is the logic of the separation principle, at least. Yet, the ECB must be clearly aware that exiting its support to governments and banks will have a contractionary monetary policy effect. An implication is that the ECB exit strategy will not be identical to the Fed's.

3.2. Composition

The non-standard central bank interventions also modified their balance sheet composition.[1] The two main changes are a lengthening of the maturity of bonds and the presence of assets of lower quality. Both characteristics matter. Before the crisis, central banks mostly held high-quality, short-term bonds. Part of the reason is that the monetary policy instrument was the very short-term interest rate (Fed Funds in the US, the marginal refinancing rate in the Eurozone); the instruments were thus the closest to the instrument, which guaranteed the ability of central banks to precisely control the instrument. Another reason is that these assets were subject neither to maturity risk nor to valuation risk.

This will matter for exit. When long-term interest rates rise, the value of long-term bonds will decline, imposing book losses to the central banks. In addition, some of the lower quality assets may become impaired, another possibility of losses. In the case of the ECB,

[1] For details, see my September 2013 Briefing Note.

these less-than-safe assets are mostly held as collateral and haircuts were imposed, so losses are less likely, but the haircuts may turn out to have been deep enough. Importantly, public bonds are treated as safe assets and are not subject to (significant) haircuts. If, as is plausible, some public debts need to be restructured, the ECB stands to suffer significant losses since its holdings of bonds issued by the crisis country governments exceeds € 200 bn.

The exit strategy will also be constrained by its impact on public debt sustainability. The prevailing very low interest rates on core country public borrowing imply that the debt to GDP ratio spontaneously declines at moderate growth rates. When the growth rate picks up, the ECB will want to start applying the brakes. If it raises the interest rate faster than the growth rate, then the debt GDP ratio will become unstable as it will spontaneously increase or, equivalently, require a larger primary surplus to stabilize.

3.3. Exit 1: Reducing the size of the balance sheet

Balance sheets of both the ECB and the Fed have about tripled since the onslaught of the crisis. On the liability side, this has partly been the result of lending to banks, partly to governments and, in the US, partly to indebted households and corporations. The central banks must decide how they wind these loans down.

The key question is whether the objective is to bring the size of the balance sheet back to its pre-crisis level. The liability side is the money base, so the question is whether after the crisis the base will play the same role as it did before. There is no reason to presume that this is the case, although it is much more difficult to detect in which direction the change could go.

The money base supports bank credit creation. It may well be that banks will be less eager to exploit all the space available for credit creation. Stricter regulation, fear of liquidity losses, uncompleted deleveraging and higher non-performing loans all point toward a lower credit to base ratio (the money multiplier). This suggests that the base could remain larger than before the crisis. On the other hand, it is likely that financial markets will play a more important role in providing loans relative to banks, especially in the Eurozone where banks have traditionally been dominant. In that case, a particular volume of total credit would be available with a lower base now than before. It is not known whether this transformation of credit distribution will occur on a significant scale and, if so, how large it would be. Central banks will have to monitor the situation and manage the money base accordingly.

All of this suggests that the new normal size of the balance sheet of the ECB will not be achieved quickly. Not only will the ECB have to gradually discover what size is appropriate, but also it will have to be mindful of the slow improvement in economic and financial conditions. In particular, it is likely that the AQR and the stress tests will lead to some bank restructuring. The ECB will also have to be alert to the possibility that the crisis will not be definitely over for quite some time and that some periods of intense stress may occur again. Normalization, in other words, is likely to be spread over years, not months.

3.4. Exit 2: Changing the composition of the balance sheet

The other big question concerns the withdrawal of central bank support to governments and segments of the private sector. Even in the optimistic case where the sovereign debt crisis does not lead to restructuring, many governments will continue to face expensive risk premia for quite some time after they recover market access. The ECB will not want to increase these country's interest rates by quickly disposing of the debt instruments that it holds.

Will the interbank market integration be completely eliminated? Under the de facto rule that private interest rates are above the sovereign borrowing rate, Spanish banks, say, will borrow at higher rates than German banks. The ECB may wish to restore a unified interbank market, without which the Eurozone cannot operate as a real monetary union. It has already taken a step in that direction by announcing the OMT program, but large differences remain. Any determined action in this respect will require the ECB to hold significant amounts of public debts issued by the (former) crisis countries.

Another important question concerns the maturity of assets held by the central banks. The Fed has learned how to shape the yield curve. The need has arisen from the fact that, at the zero lower bound, the central bank loses its ability to further lower longer-term interest rates. Once the policy rate is lifted above the zero lower bound, the central banks may be satisfied with a return to the pre-crisis practice of using announcements about future levels of the policy rate to impact the whole yield curve. However, forward guidance is more art than science, at least for the time being. It will be improved over time as central banks and markets learn, yet the experience with the use of longer-term assets may encourage central banks to keep significant amounts of these assets. This may be done for potential use in the future if the zero lower bound is hit again. It may also be that central banks will want to routinely combine forward guidance with trading of longer-dated assets. The most plausible conclusion is that, as far as asset maturity holdings are concerned, the new normal will differ from the old normal, at least for an extensive period of time.

4. MONETARY POLICY IN THE NEW NORMAL

One thing is sure: monetary policy has changed. Central banks no longer claim that their sole objective is price stability. They now accept that they bear some responsibility for financial stability. This has been formalized in the Eurozone by the creation of a single bank supervisor within the ECB. The ECB has also been vested with macro-prudential supervision; the European Systemic Risk Board is not part of the ECB, but it is chaired by its President. More broadly, whether they like or not, central banks are now explicitly understood to be lender in last resorts to banks and possibly to financial institutions.

The implications for monetary policy are vast and remain to be fully understood. Does it imply that flexible inflation targeting is a strategy of the past? Before the crisis, an increasing number of central banks have adopted this strategy, often explicitly, sometimes implicitly as in the case of the Fed and of the ECB. It has been argued that inflation targeting is responsible of the Great Financial Crisis, but this case is weak.[2] True, it has led to low interest rates over an extended period of time, which has encouraged the formation of bubbles as a consequence of excessive credit distribution. But the proper way of dealing with a bubble is not to raise the interest rate. The required increase is likely to such that it would create a recession, inflicting losses to the whole economy because one sector is imbalanced. The concept of macro-prudential supervision is rooted in the observation that bubbles are best deal with through regulatory action directed at the unbalanced sector. Reducing low to value ratios, imposing variable capital buffers and reducing leverage ratios are apt at curbing unsustainable credit growth and its consequence, the emergence of bubbles. Proper macro-prudential supervision allows the flexible inflation targeting strategy to remain the order of the day. This conclusion comes with provisos, however.

The fact that financial stability is now part of the mission of central banks means that there will be periods when the flexible inflation targeting strategy must be suspended, or at least

[2] See the debate in Blinder and Kohn, "Exit Strategy", *Geneva Reports on the World Economy* 15, ICMB and CEPR, 2013.

qualified. This has been the case indeed in the aftermath of the Great Financial Crisis. The rapid reduction of policy rates was not fully justified by the flexible inflation targeting strategy, at least not ex ante when the depth of the 2009 contraction was not yet foreseen. Indeed, the unfortunate increase of its policy rate by the ECB in June 2008 was in line with the strategy. Criticism of this action was based on the severely of the on-going financial crisis, not on a misreading of inflation forecasts at a time when commodity prices were rising.

Suspending the flexible inflation targeting strategy will not be easy to implement. The main advantage of this strategy is its clarity, predictability and on the transparency that it requires.[3] It was based on the adoption of the Taylor rule, which links the policy rate to expected inflation and growth. But a rule that can be suspended is not a rule. The challenge now will be to specify conditions under which the rule will be suspended.

The crisis has exposed a key weakness of the flexible inflation targeting strategy. When the interest rate reaches the zero lower bound, the Taylor becomes inoperative. The Bank of Japan tried to implement the flexible inflation targeting strategy with a zero interest rate and failed. These observations imply that there is an incompatibility between the otherwise successful flexible inflation targeting strategy and the zero lower bound. The solution is not to dismiss the otherwise successful flexible inflation targeting strategy but to make the zero lower bound a very low probability event. The uneasy implication is that "normal" inflation should be somewhat higher than the pre-crisis norm of 2%. Indeed, the interest rate is the sum of expected inflation and the real interest rate, the one that matters for borrowing and lending decisions. The "normal" real interest rate is understood to be in the 2-3% range. This means that the normal policy rate should be in the 4-5% range. This reduces the room for a deep cut in case of need. With inflation expectations anchored as 2% - as has been the case for many years - the real interest rate is at -2% when the policy rate is at zero, which may still be too high. Setting the inflation target at, say, 3 or 4% would allow for a "normal" policy rate of 6 or 7%. This would both reduce the occurrence of the zero lower bound and allow for a deeper reduction of the real interest rate when needed. Of course, the benefit of more room for manoeuvre will come with the cost of a higher average inflation rate. These benefits and costs deserve a debate, at the very least.

5. THE MANDATE: A THREAT TO INDEPENDENCE

There used to be a time when central banks had convinced themselves and the broader public that they were only responsible for inflation, sometimes with some concern for growth or employment. The Financial Crisis has shown that there can be circumstances where central banks also have to be concerned with financial stability to avoid crises and, when crises arise, they are lender in last resort to banks, governments and even the private sector when the banking system is not functioning properly. This evolution should be welcome as the "minimum service" to which central banks had committed themselves was never realistic. However, it raises formidable issues, which is why central banks resisted the broader mandate.

First, one reason why central banks are taking on bank supervision responsibilities is that governments have failed. It is hoped that central banks will use their independence to escape capture by private interests and, more broadly, politicization. Yet, once they are in

[3] The ECB's refusal of accepting the flexible inflation strategy can be seen as motivated by a rejection of the associated transparency.

charge, central banks would be subject to pressure. The fact that their officials are not facing elections will help resist pressure, but politicization will be unavoidable. This is a threat to independence.

Second, some new responsibilities lie in the grey area between monetary and fiscal policy. The key characteristic of fiscal policy is that it is redistributive, which requires voters' consent and therefore regular elections of those in charge. Traditional monetary policy also redistributes income between borrowers and lenders as it changes the interest rate, but these are cyclical actions; on average, over the cycle, there is no permanent redistribution. Bank supervision and eventual resolution, macro-supervision, lending in last resorts can result in very sizeable income and wealth transfers.

Third, some of the old and new functions of the ECB compensate for government inaction. For instance, monetary policy is expansionary because fiscal policies are inappropriately focused on austerity. Lending in last resort to Ireland and Spain was required because these countries could not borrow safely to shore up their banks. More examples exist. In all cases, the central bank and member governments are engaged into a game of non-cooperation. This is case in any country, but the fact that there are 18 governments and 1 central bank makes it easier for every individual government to free ride on the central bank and the other governments.

At the end of the day, the power of a central bank is its ability to produce instantaneously and amount of money. The temptation of over-use this facility is hard to resist. This is why central banks have been made independent and their mission was narrowly circumscribed to price stability. Now that the mandate has been broadened, upholding independence will be challenging.

6. CONCLUSION

Exiting from the non-standard monetary policies – zero interest rates and massively increased balance sheets – is going to be another original experiment. There are many open questions and few firm answers, which leaves room for errors. Yet, there is no choice. If we want to maintain price stability, interest rates will have to return to normal levels and balance sheets eventually must shrink to avoid runaway credit creation. The composition of the balance sheet, on the other hand, is likely to be different from what it used to be before the crisis.

Exit will have to be enacted when it becomes highly likely that the period of slow growth has ended and credit growth is about to start accelerating. Detecting the right time to move is going to be very difficult, unusually so because the current cycle is atypical, leaving few solid clues to interpret its evolution.

The ECB will face an especially challenging task. It is likely that some growth will return eventually, but the recovery could remain weak and unsecured for a while, for two reasons. Many European banks remain too fragile to develop credit and some governments are saddled with very large debts. Exiting stands to hurts fragile banks and debt markets. The silver lining is that the US Fed will embark on the exit path long before the ECB, which will therefore benefit from the new experience.