Independence and the scope of the central bank's mandate

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Thank you for the opportunity to participate in the Riksbank conference on rethinking the central bank's mandate. As requested by the organizers of the conference, in these remarks I discuss issues relating to the independence of central banks and to the scope of the mandate given to central banks. In addressing these issues I draw on my own research and on several recent conferences that take a rules-based approach to monetary policy.[1]

1 Central bank independence for limited purposes with strong accountability

Economic research and experience has clearly demonstrated the value of central bank independence for achieving good economic performance. But in granting independence to a government agency in a democracy, great attention should be paid to making sure that the agency has a well-defined *limited purpose* with *strong accountability*.

Macroeconomic research – including the work on time-inconsistency[2] – has concentrated on the importance of central bank independence in the sphere of monetary policy as a means of achieving price stability and preventing high inflation. This research suggests that a key purpose of a central bank should be to achieve and maintain price stability – with an inflation target of some kind – and that the central bank should be held accountable for achieving this goal. Indeed, the international spread of inflation targeting and central bank independence that took place in many countries in the 1990s was motivated by these considerations. Because of a tradeoff between price stability and output stability,[3] most central banks interpreted that purpose with a *flexible* inflation target – whether or not that is part of the mandate.

If the purpose of the central bank is broadened, then the rationale for independence becomes weaker. Of course there is a close connection between financial stability and monetary policy, and that argues for financial stability being a purpose of a central bank, especially in its lender of last resort role.[4] But many financial regulatory activities could be handled by less independent agencies of government, and one needs to establish a clear connection between monetary policy actions and regulatory actions to rationalize placing these activities in an independent central bank.

When central banks drift too far from being limited-purpose institutions and become independent multi-purpose institutions, they escape the checks and balances needed in a democratic system. This can lead to inappropriate interventions which may not have been approved by a legislative process or a vote of the people. It can also lead to poor economic

performance. Currently there is a danger that central banks are being transformed into multipurpose institutions, involved in interventions in particular sectors or in credit allocation without a rationale for independence. In the United States, for example, questions have been raised about why the Consumer Financial Protection Bureau – with oversight of such activities as payday loans – is located in the Federal Reserve without a specific appropriation role for the congress.

One reform would require congressional appropriation of funds for all regulatory activity within the central bank – as is currently the practice with regulatory activity outside the central bank – leaving only the monetary policy function to be independent of the appropriations process. If central banks do not have a limited purpose with accountability, they will likely become less independent in the future. Thus expanding the mission of central banks creates the risk of losing independence for the key monetary policy function.

1.1 De jure independence is not enough

While legislation establishing central bank independence is necessary for good monetary policy and macroeconomic performance, it is not sufficient. Considerable evidence for this principle can be found in the large shifts in the past several decades between more rules-based and less rules-based monetary policy, which in my assessment, have significantly affected economic performance, just as macroeconomic research would predict. The absence of a rules-based framework in the United States in the 1970s was accompanied by high inflation and high unemployment. The move to rules-based policy with a clear focus on price stability during the two decades starting in the early 1980s was accompanied by improvements in both price stability and output stability. And the move away from rules-based policy starting around 2003-2005, was followed by poor economic performance including the Great Recession and the Not-So-Great Recovery. For historical evidence of these well-known shifts and their effects see Meltzer (2009, 2011) and Taylor (2012a, 2013). For formal econometric evidence, see Nikolsko-Rzhevskyy, Papell and Prodan (2014).

These swings towards and away from rules-based policy occurred without any concomitant changes in the underlying legal basis for central bank independence.[5] While there have been changes in the Federal Reserve Act during this period,[6] standard numerical indices of *de jure* central bank independence have not changed as shown by Crowe and Meade (2007). The record thus indicates that *de jure* central bank independence is insufficient for generating good monetary policy. It certainly has not prevented the central bank from swinging away from rules-based policies.

It is important to note also that there have been swings in *de facto* independence. Meltzer (2009) showed how the Fed sacrificed its independence in the late 1960s and 1970s and regained it in the 1980s and 1990s. Meltzer (2009) along with Goodfriend (2012) and Issing (2012) have found a decline in *de facto* independence in recent years. There is thus a close correlation between the ups and downs in *de facto* independence and higher and lower adherence to rules-based policy during this period. These changes in *de facto* independence have been driven by both the executive branch and the central bank itself. Meltzer (2009) argues that the loss of *de facto* independence in the late 1960s and 1970s was originally driven by the U.S. Administration, while the loss of *de facto* independence more recently was due to actions taken by the Fed itself. Thus central bank independence is sometimes taken away, and sometimes given away.

In sum, within a given legal framework, policy makers have been able to engage in varying degrees of adherence to rules-based policy and *de facto* independence. We have seen major shifts in the effectiveness of monetary policy within a single framework of central

5 See Taylor (2013) for further discussion of trends in *de jure* and *de facto* central bank independence.
6 For example, the dual mandate was added to the Federal Reserve Act in 1977.

bank independence and stated inflation goals. The policy implication is that monetary reform needs to focus on ways to encourage more rules-based policy and discourage the bouts of discretion and loss of *de facto* independence.

2 Deepening the scope of the objective given to central banks

The fact that *de jure* central bank independence with stated inflation goals has not prevented harmful departures from rules-based policy indicates the need to review the scope of the objectives given to the central bank. Rather than *widening* the scope to include more goals, consideration should be given to *deepening* the scope to include the strategy to achieve the existing goals, giving details about the strategy for the policy instruments.

To be sure, this is not an easy reform to implement. For one thing, strategy is difficult to define. Moreover, some central banks would say that they already have stated a strategy to achieve their goals. In the United States, for example, the Federal Reserve recently issued a statement entitled "Longer-Run Goals and Monetary Policy Strategy". But if you read this statement you will find nice clear statements about goals, but little in the way of an accountable strategy for the policy instruments to achieve the goals. The European Central Bank has issued a statement about monetary policy, which it simply calls "Strategy". It has a good explanation about goals including a "quantitative definition of price stability", but it too says little about a strategy for the instruments of policy other than reference to its "two-pillar approach" which provides for some cross-checking with the monetary aggregates.[7]

2.1 Policy rules legislation

One way to proceed would be to enact legislation requiring the central bank to report its strategy or rule for the policy instruments. In other words, in addition to a "goals" mandate, which currently exists in a number of countries, there would be a "rules" mandate. For example, several years ago I suggested such legislation,[8] and a proposal along these lines has now been written into a bill which passed the U.S. House of Representatives last year.[9] This bill would require that the Fed "describe the strategy or rule of the Federal Open Market Committee for the systematic quantitative adjustment" of its policy instruments.

According to this approach, a specific strategy would not be prescribed in the legislation; it would be the central bank's job to choose the strategy and how to describe it. The central bank could change its strategy or deviate from it if circumstances called for a change, but the central bank would have to explain why. For concreteness, the legislation requires the Fed to compare its strategy with a "reference rule" that is often discussed inside and outside central banks.

Policy rules legislation in the United States with similar provisions was voted out of the Senate Committee on Banking, thus, working out a compromise with the House is feasible. If such a bill passed Congress and was signed into law, it would constitute the needed reform of the Federal Reserve Act.

There is precedent in the United States for giving such a detailed objective to the central bank. For example, language appeared in the Federal Reserve Act from 1977 to 2000 requiring the Federal Reserve to report the ranges of the monetary aggregates. The legislation did not

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7   The Fed's statement (adopted effective January 24, 2012 and amended effective January 26, 2016) can be found at www.federalreserve.gov/monetarypolicy/files/FOMC_LongerRunGoals_20160126.pdf. The ECB's statement can be found at www.ecb.europa.eu/mopo/strategy/html/index.en.html

8   See Taylor (2011).

9   Section 2 of the Fed Oversight Reform and Modernization Act. A statement supporting this legislation was signed by Lars Peter Hansen, Robert Lucas, Edward Prescott, George Shultz, Robert Heller, Jerry Jordan, Athanasios Orphanides, William Poole, Michael Bordo, Michael Boskin, Charles Calomiris, Varadarajan Chari, John Cochrane, John Cogan, Steven Davis, Marvin Goodfriend, Gregory Hess, Peter Ireland, Mickey Levy, Bennett McCallum, Allan Meltzer, Gerald O'Driscoll, Lee Ohanian, Scott Sumner, and John Taylor.

specify exactly what the numerical settings of these ranges should be, but the greater focus on the money and credit ranges was helpful in the disinflation efforts of the 1980s. When the requirement for reporting ranges for the monetary aggregates was removed from the law in 2000, nothing was put in its place. A legislative void was thus created concerning reporting requirements and accountability, and proposed reform would fill that void.

Recently economic research has emerged endeavoring to evaluate legislation with a rules mandate. Nikolsko-Rzhevskyy, Papell and Prodan (2016) carried out a counterfactual exercise in which they assume that such legislation was in force for several decades in the United States. They found that the Federal Reserve would have had to explain its deviations in several cases, suggesting, but not proving, that this would have reduced the tendency to deviate from rules-based strategy.

Walsh (2016) applied a "contract theory" approach to analyze the rules-based proposal. This method had previously been used effectively by Persson and Tabillini (1993) and Walsh (1995) to evaluate mandates based on goals for the central bank. Walsh (2016) notes that the key difference between the "goal-based" and the "rules-based" approaches is in how the alternative performance measures affect incentives. He assumes a central bank objective function with squared deviations of output and inflation from targets, but he adds terms representing temporary political pressures to deviate. Using an empirical model, he finds that if the central bank's chosen policy rule has a measure of real economic activity based on the gap between real output and its efficient level, then it is "generally optimal to place weight on both the goal-based and the rule-based measures of performance".

Some have expressed reservations about this type of legislation, arguing that central banks should not be chained to any mechanical rule. But the central bank would choose and describe its own strategy, thereby it need not be mechanical. The strategy could change if there was a crisis as long as an explanation was provided. The central bank would still serve as lender of last resort or take appropriate actions in the event of a crisis. The strategy does not mean that the instruments of policy be fixed, but rather that they flexibly and systematically respond to economic developments in a way that can be explained.

Another concern raised about policy rules legislation is that the central bank would lose its independence. Based on my own research and experience in government, the opposite is more likely. A clear public strategy helps prevent policy makers from bending to pressure. Another difficulty is that there are many types of policy rules. Some rules are better than others, and it makes sense for researchers and policy makers to do research on rules. I do not think adding housing prices or the stock market to a rule is a good idea, but with this legislative approach it would be up to the central bank to decide.

Of course there are perennial policy problems to deal with, such as uncertainty about the output gap, the effective lower bound on the interest rate, or movements in the equilibrium real interest rate. However, these are even more difficult issues for discretionary policy when one does not have a strategy. There is plenty of research on how policy rules can incorporate such uncertainties.

2.2 Forecast targeting legislation

It is worth considering other approaches to deepening the mandate given to the central bank. Such alternatives might be more appropriate in countries with different political systems and central banking traditions. One alternative to stating a monetary policy strategy in terms of a rule for the instruments is to use "inflation forecast targeting" or simply "forecast targeting" as developed in other contexts by Svensson (1997) and Woodford (2012). Indeed, Woodford entitled his paper "Forecast Targeting as a Monetary Policy Strategy," emphasizing that this alternative approach is a strategy.

There is a close connection between the two approaches to rules-based policy. In Taylor (2012b), I argued that they were the dual solution to the same problem, much like first-

order conditions and decision rules provide dual and complementary answers to the same optimization problem. One can learn from both approaches.

According to this approach the central bank would choose its policy interest rate so that a linear combination of its forecast of different variables would fall along a given path. For example, Woodford (2012) suggested a linear combination of the *h*-period ahead forecast of the inflation rate $\pi_{t+h,t}$ relative to the target inflation rate π^* and the *h*-period ahead forecast of the output gap $x_{t+h,t}$ follow the following path

$$(\pi_{t+h,t} - \pi^*) + \phi x_{t+h,t} = 0$$

over a range of *h* where interest rate policy can affect these variables.

While an interest rate path can be calculated using this approach, it need not yield a simply policy rule. As with the policy rules legislation, the central bank would have the job of deciding on the strategy, and as with the policy rules legislation, this need not be mechanical. Qvigstad (2005) showed how charts and other diagnostic tests could be used to describe the intended path for the interest. In addition, with examples from Norges Bank policy decisions, he showed how policy rules could be used as a cross-check, emphasizing the connection between proposals for policy rules legislation and forecast targeting legislation.

To make this approach workable in practice, one would have to write the appropriate language into legislation without impinging on central bank independence in the sphere of monetary policy and also have a means of establishing accountability. Here the monetary policy evaluation method proposed by Svensson (2012) would be useful. It evaluates central bank's decisions for the policy instruments in terms of their consistency with stated goals for output and price stability in real world situations where there are lags in policy and other forces affecting outcomes. In this way, departures from the stated forecast targeting commitment could be detected resulting in a degree of accountability.

Note that this proposed approach is much deeper than what is sometimes called "constrained discretion." Under constrained discretion, all one needs are the goals and the policymaker does whatever he or she thinks needs to be done with the instruments. There is no description of a strategy or a contingency plan for the instruments; there is no commitment to a forecast target. Constrained discretion is an appealing term, and it may be constraining discretion in some sense, but it is not inducing or encouraging rules-based policy. Simply having a specific numerical goal or objective function is not a monetary strategy. The evidence shows that relying solely on constrained discretion has not worked for monetary policy.

2.3 International monetary considerations

Because deviations from rules-based monetary policy seems to spread from country to country, there is an important international monetary aspect of reform proposals to maintain rules-based policy. These deviations cause movements in exchange rates and capital flows, which in turn cause governments to impose capital controls, intervene in exchange markets, and use regulations to affect international exchange transactions. Staffs at the international financial institutions have recently endorsed such controls, in contrast to the 1990s when they suggested that they be removed. Thus the international monetary system has drifted away in recent years from a rules-based system long advocated by monetary economists.

These international problems trace to deviations from rules-based monetary policies at the national level, because central banks tend to follow each other. Extra low interest rates in the larger countries are followed by extra low interest rates in many other countries, in an effort to fight off currency appreciations.

Many are calling for a new international monetary strategy to deal with these problems, including Volcker (2014) who argues that "the absence of an official, rules-based, cooperatively

managed monetary system has not been a great success" and Rajan (2016) who says that "what we need are monetary rules that prevent a central bank's domestic mandate from trumping a country's international responsibility." I have argued that economic research indicates that a rules-based international monetary system should be built up from rules-based monetary policy in each country,[10] and thus, that a natural reform proposal would be for countries to forge an agreement where each country commits to a rules-based monetary strategy. Essentially this is a multi-country version of the reforms I proposed earlier in these remarks. Each central bank would describe and commit to a monetary policy strategy for setting the policy instruments. The strategy could include a specific inflation target, a list of key variables to react to in certain ways, and some notion of the long-run equilibrium interest rate.[11] Each central bank would formulate and describe its strategy. As in the above proposals, the strategies could be changed if the world changed or if there was an emergency. A procedure for describing the change and the reasons for it would be in the international agreement.

There are important lessons from previous international monetary agreements. For example, under the Plaza Accord of the 1980s between the United States, the United Kingdom, Japan, Germany and France, the Bank of Japan agreed to shift its monetary policy in a way that adversely affected its economy – too tight at first and too easy later – causing a boom and bust. In contrast, other central banks' monetary policies were not affected: the Fed clarified what it was already doing. The lesson is that the international agreement should not impose specific strategies on central banks. As with the legislative proposals suggested earlier in these remarks, such a process poses no threat to the national or international independence of central banks.

3 Conclusion

Given the many calls for reform, now may be a good time to move ahead. However, because some countries are still in the midst of unconventional monetary policies, and others are only starting to normalize, there will be a need for a transition to more rules-based policy. Moreover, there is still much disagreement about the nature of the problem and about the remedy as I have tried do make clear in these remarks. For these reasons, it is important to get views from a wide spectrum of people both inside and outside of government and in particular both inside and outside of central banks. Good governance, especially of independent agencies of government, requires it.

The opportunity for economists to go in and out of government service can be beneficial in terms of bringing new ideas into practice and also in developing new research ideas in academia. For this reason, where it is practical, having economists and other experts from the outside participate for a term in policy decisions makes sense. In the United States, this is frequently achieved in practice because actual terms of Federal Reserve governors can be quite short even though the legislated maximum terms are long. The Federal Reserve district banks have also been an important source of diversity of views.

Good governance also requires a strong independent civil society and a press that can speak out when appropriate. I think it is important to have conferences on monetary policy with people from both inside and outside central banking. Central bank conferences such as this one with candid out-of-the-box thinking from a range of views are very important. I am grateful to have had the opportunity to participate in this conference.

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10 See Taylor (2016).

11 Clarida (2016) describes how this might be done while taking account of the fact that the equilibrium real interest rate is globally determined.

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