Optimal Monetary Policy: A New Keynesian View

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The New Keynesian View

As Paul Samuelson once put it: Adam Smith is dead and Keynes is dead; well—and Mises is dead, too. But Keynesianism is alive and well and back with a vengeance. Built on solid neoclassical foundations, this "new" Keynesianism, which features the effects of nominal rigidities in the presence of economic shocks and the existence of involuntary unemployment, represents the theoretical core of modern monetary policy. This article gives a short overview of the new Keynesian theory of optimal monetary policy. The concept of inflation targeting represents the core of this theory. It will be illustrated with the help of Walsh's simple model of inflation targeting (Walsh 2001b). On the basis of this model, the implications of the theory of optimal monetary policy for practical monetary policy will be demonstrated.

What is New Keynesianism?

Basic Principles

Modern macroeconomics is divided into two camps. The neo- or new-classical research program of the real business cycles school (e.g., Plosser 1989) is convinced that the cause of business cycles is to be found in the stochastic character of economic growth itself: cycles and trends are explained with the help of the same models. The new Keynesian research program is harder to summarize (DeLong 2000, p. 83). Perhaps it is easier to describe what new Keynesianism (NUKE) is not than what it is: (1) Following Mankiw (1992), NUKE is not about an exegesis of Keynes (1936). (2) NUKE does not put in doubt that the insights of classical theory are helpful for economic analysis. (3) NUKE does not believe that capitalism is threatened by oversaving, and that this must be hindered by deficit spending programs. (4) Monetary policy is more powerful in fighting recessions than fiscal policy. (5) But policy undertaken should not be discretionary but rule-based. (6) Monetary policy has to consider that inflation has its costs.

As you can see, NUKE does not have very much in common with "old" Keynesianism à la Tobin (1993). Mankiw put it this way:

> New Keynesian economics is far different from old Keynesian economics—so different, in fact, that today the label "Keynesian" may generate more confusion than understanding. With new Keynesians looking so much like

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> old classicals, perhaps we should conclude that the term "Keynesian" has out-lived its usefulness. Perhaps we need a new label to describe the school of macroeconomics that accepts the existence of involuntary unemployment, monetary non-neutrality, and sticky wages and prices. Until a new label is found, however, we can safely say that Keynesian economics is alive and well. (Mankiw 1992, p. 565)

Therefore, a new Keynesian is someone who believes in involuntary unemployment, the short-run nonneutrality of monetary policy and the short-run inflexibility of wages and prices.[1,2]

The New Keynesian Core of Modern Macroeconomics

In light of the empirical failure of new classical economics to give a plausible explanation for the occuring changes in output, employment, and unemployment, it is hardly astonishing that the basic principles of NUKE (see DeLong 2000) are virtually identical with the core principles of modern macroeconomics.[3] What constitutes these core principles (Solow 1997; Taylor 1997; Eichenbaum 1997; Blinder 1997; Blanchard 1997)? First, in industrial countries real output oscillates along an increasing growth path. In the long run, this growth path is determined by the supply-side. Second, in the long run there is no trade-off between inflation and unemployment: an increase in the growth rate of the money supply manifests itself in the long run merely as a proportional increase in the inflation rate. The "natural" equilibrium unemployment rate as understood by Friedman (1968) and Phelps (1967), which is determined exclusively by real factors, remains unaffected by monetary policy. Hence, in the long run central banks should have an inflation target only. Third, short-run fluctuations are generated by changes in aggregate demand. In the short run, there is a trade-off between inflation and unemployment, as is described empirically by the Phillips curve. This trade-off is only possible, because in the short run wages and prices are not flexible enough to clear markets continously. For practical monetary policy this implies that it should strive to stabilize the growth of aggregate demand in order to minimize fluctuations of real output and inflation. Fourth, expectations of households and firms react to policy measures. Hence, monetary policy has to consider these expectations and act accordingly: building up credibility and transparency is the name of the game.[4] Fifth, the evaluation of monetary policy should not be based on isolated one-time changes in policy instruments but on a series of changes which are connected by a policy rule. Sixth, the IS-LM model still belongs to the "hard" core

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[1]Gordon (1990, pp. 1116 and 1135):

> The essential feature of Keynesian macroeconomics is the absence of continuous market clearing. Thus a Keynesian model is by definition a non-market-clearing model, one in which prices fail to adust rapidly enough to clear markets within some relatively short period of time. . . . The task of new-Keynesian economics is to explain why changes in the aggregate price level are sticky.

[2]For a survey of NUKE see Gordon (1990).

[3]Differences between the new Classicals and the new Keynesians exist more in terms of modeling the supply-side and less in modeling the demand-side and the effects of monetary policy (Gordon 1990, p. 1117). How erroneous today's labels in modern macroeconomics are can be seen, if you consider that NUKE has fully adopted the essential monetarist axioms (DeLong 2000). Kimball (1995) denotes modern macroeconomics as "neomonetarist."

[4]Equilibrium exists if expectations are fulfilled. Equilibrium does not imply cleared markets.

of modern macroeconomics. In this model, prices and wages are largely predetermined in the short run and change in the logic of a Phillips curve equation. In the short run output is determined by demand. Aggregate demand, represented by an IS-curve, responds directly to fiscal policy measures. Due to the interest sensitivity of the IS-curve, and given that it determines interest rates, monetary policy can steer aggregate demand. Okun's law postulating a simple linear relationship between the percentage change in output and the absolute change in the unemployment rate connects changes in output growth with changes in the unemployment rate.[5]

Why Does Money Affect Output?

Why does money affect output in the short run? What is the cause of nominal rigidities and what role do they play in this process (Blanchard 1999, p. 19)? These are the two key questions of modern macroeconomics. There is a consensus about what happens after an exogenous increase in nominal money supply: Given nominal prices, the increase of the nominal money supply leads to a decrease of the nominal interest rate and, due to nominal price rigidities, to a decrease of the real interest rate. This decrease in real interest rates induces a rise in aggregate demand and in the demand of every single good, given nominal (and therefore relative) prices. Higher capacity utilization leads to higher marginal costs. Hence, the increase in demand for each good gives price-setters an incentive to increase their relative prices. If prices were set continuously, the attempt of each price-setter to increase his relative price would fail. All prices, and therefore the aggregate price level too, would rise until the aggregate price level is adjusted proportionally to the increase in nominal money supply. Aggregate demand and output would adopt their initial values. Hence, money would be neutral even in the short run.

In the real world, individual prices do not adjust continously but are set discretionarily via staggering which is due to the fact that cost changes entail a change in prices. This price-setting behavior, which—carried out at intervals—is perfectly rational at the microeconomic level, leads to considerable fluctuations in output at the aggregate level and therefore to macroeconomic inefficiencies. This is to be explained by the fact that the staggered price adjustment of individual prices leads to a delayed adjustment of the aggregate price level in reaction to nominal shocks.[6,7] During the adjustment process, real money supply is higher than its initial value as is the case with aggregate demand whereas real interest rates are lower than their initial value. In the long run, the aggregate price level adjusts proportionally to the increase of nominal money supply. Aggregate demand, output, and relative prices adopt their initial values. Money is neutral, but only in the long run.

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[5]The "new" micro-foundational IS-LM model à la King (2000) and Clarida et al. (1999) is now the standard framework of the new Keynesian theory of optimal monetary policy.

[6]Metaphorically, a chain gang moves slowly, because it can coordinate its movements only very imprecisely. The shorter the length between two members of the chain gang, and the greater the number of members, the slower will be the movement of the whole chain gang (Blanchard 1999, p. 20).

[7]The speed of the adjustment of the nominal price level depends on the elasticity of the desired relative prices in reaction to changes in aggregate demand. The higher this elasticity is, the higher individual price-setters will set their prices. In this case, the price level will rise faster. Hence, effects of money on output tend to be short-lived. To explain nominal rigidities, i.e., a slow adjustment of the price level in reaction to changes in money supply, one needs real rigidities, i.e., a low elasticitiy of individually desired relative prices in reaction to changes in demand (Blanchard 1999, p. 22).

Higher aggregate demand can only lead to higher output if the market structure on goods markets provides price-setters with incentives to supply more ouput, even if the price stays set. For this reason, monopolistic competition is assumed for goods markets. In a monopolistically competitive market structure, higher demand for goods translates into higher output, because in a monopolistically competitive setting, there is virtually always a lack of demand.

Monetary policy can produce real effects only because in the short run, prices are relatively inflexible. As nominal rigidities are considered to play the decisive role in cyclical fluctuations in employment and output, NUKE embarks upon the explanation of nominal rigidities and their effects.[8] In this context, an explicit and utility-based welfare analysis of the consequences of alternative monetary policies can be undertaken with the help of a dynamic general equilibrium model, in which behavioral equations are based on an explicit optimizing process. Hence, the new Keynesian framework may serve as the foundation of the design of an optimal or at least desired monetary policy (Gali 2001, p. 1).

The New Keynesian Theory of Optimal Monetary Policy

The Design of Optimal Monetary Policy

Policy Goals

The central question of the theory of optimal monetary policy is: how should monetary policy react to shocks (Clarida et al. 1999, p. 1665)? What is monetary policy—science or art (Walsh 2001a)? The theory of optimal monetary policy suggests that monetary policy is a science. This implies that economists know what they need to know in order to design and implement a "good" monetary policy. The theory of monetary policy relies on the assumption that policy makers are well-meaning central bankers who aim to maximize the utility of a representative household. This dynamic optimization problem is solved under the restriction of given resources, institutions, and information (Gali 2001, p. 19). The target function of the central bank translates the behavior of the target variables into a measure of welfare which is used by policy makers in their decision process. It is usually assumed that the arguments of the central banks' optimal target function include a specified inflation rate and potential output. Since the target function is specified as a loss function, the central bank tries to minimize the expected future welfare losses, which result from the deviations of output and inflation of their respective target values. When considering that a decrease in inflation is followed by temporary output losses, this policy is optimal in the sense that marginal utility and marginal cost of monetary policy actions are equalized (Walsh 2001b, p. 5).

Inflation Targeting as the Core of Optimal Monetary Policy

The concept of inflation targeting is at the core of the theory of optimal monetary policy. What are its most important features? First of all, the announcement of an official numerical inflation goal for a specified period of time. Second, the explicit acknowledgement that a low and stable inflation rate should be the foremost goal of a central bank. The advantage of this concept is that transparency and coherency of monetary policy is strengthened, entailing the elimination of uncertainites concerning

[8]The term "Keynesian" aims at the feature of nominal rigidities. The term "new" aims at the methodological progress in macroeconomic model-building in the form of dynamic general equilibrium models in the tradition of the real business cycles literature (Clarida et al. 1999, p. 1661).

future inflation rates. This increases the credibility of the central bank in fighting inflation, which, in turn, leads to a decrease of inflation expectations of households and firms (Svensson 1999, p. 217). Another advantage of inflation targeting is that this policy framework includes a flexible and cautiously "discretionary" monetary policy. This is facilitated by an increased accountability of the central bank with respect to the degree of goal fulfillment (Bernanke and Mishkin 1997).

The fact that there is no long-run trade-off between output and inflation suggests aiming at a zero inflation rate (e.g., Goodfriend and King 1997, pp. 262). There is a consensus, however, that an inflation target between zero and two percent is optimal, allowing for measurement errors. A higher inflation target would cost too much (Cecchetti 2000, p. 48).

The concept of inflation targeting is built on three principles: To reach the inflation target, the central bank is to (1) focus on the output gap, (2) follow the Taylor principle, (3) and act in a forward-looking way (Walsh 2001a).[9]

- FOCUS ON THE OUTPUT GAP: The output gap is the deviation of output from its equilibrium level. A major cause for changes in the inflation rate, the output gap is of primary interest to monetary policy. The central bank tries to close the gap between actual ouput and potential output. Excessive inflation sets in if the central bank pursues a too ambitious output goal, because increasing output raises real marginal cost. In response, firms raise their prices.

- FOLLOW THE TAYLOR PRINCIPLE: The Taylor principle says that monetary policy should react to an increase in the inflation rate with an over-proportional increase of the nominal interest rate. This guarantees that the real interest rate, which is relevant for aggregate demand, is changed. For under-proportional interest rate increases would entail a decrease in real interest rates which, in turn, would lead to aggregate demand rising even further and risk triggering an inflation spiral. One way to implement the Taylor principle is to apply the famous Taylor rule (Taylor 1993).[10] This rule specifies exactly to what extent the interest rate has to be changed in reaction to changes in the inflation rate and the output gap.[11] The appeal of the Taylor principle is that monetary policy does not need to know if a higher expected inflation rate results from a temporary aggregate demand shock or from a shock provoked by financial markets (Daniel 2001).

- FORWARD-LOOKING BEHAVIOR OF THE CENTRAL BANK: Monetary policy influences the real side of the economy with a certain lag. A change in the interest rate has its maximum impact only 12 to 18 months later. The effects of the inflation rate take even longer before they set in. Hence,

[9]If the central bank aims at not only a certain inflation target but also to stabilize, we speak of "flexible" inflation targeting. In the case of "strict" inflation targeting, the central bank does not aim for a stabilization of output. Flexible inflation targeting implies that monetary policy does not strive to achieve the inflation target too rapidly, because of the high cost of temporary output losses.

[10]The term "rule" implies a reaction function, which describes the behavior of the interest rate under control of monetary policy. This interest rate is a predictable function of a few economic variables (Allsopp and Vines 2000, p. 17).

[11]Therefore, the theory of optimal monetary policy is also described as new normative macroeconomics (Cecchetti 2000, p. 44).

> central banks cannot wait until actual inflation starts to rise but they have to act in a forward-looking manner.

One monetary policy framework that meets these three principles is the concept of inflation forecast targeting. The latter helps implement the concept of inflation targeting in applied monetary policy. According to inflation forecast targeting, the central bank should stabilize inflation at a low level and close the output gap at the same time. For this purpose, central banks use all available knowledge and information about the future course of inflation, the actual and future economic conditions of the real side of the economy, and of the monetary transmission mechanism. Due to the lagged effects of monetary policy measures, central banks need to react to inflation forecasts. If the inflation forecast predicts that inflation will rise, the central bank should raise interest rates, before actual inflation rates start to rise and vice versa. The central bank changes the interest rate until the inflation forecast corresponds to the inflation target. The extent of the monetary policy reaction depends on the sensitivity of the inflation forecast to interest rate changes.[12,13]

A Simple Model of Inflation Targeting

The simple inflation targeting model by Walsh (2001b), which will be presented below, will give a flavor of the spirit and the method of the theory of optimal policy. The model has two components: First, an expectations-modified Phillips curve which describes the supply-side of the economy. Second, a description of monetary policy reflecting the preferences of the central bank regarding the trade-off between inflation and unemployment. This second relationship describes the demand-side.

Aggregate Supply: The Phillips Curve

The Phillips curve depicts a relationship between the inflation rate π, the expected inflation rate π^e, the situation of the business cycle defined as the gap between actual output y and the "natural" output level y^n, and an inflation shock variable e. x is the percent output gap $\left[x = \frac{y - y^n}{y^n}\right]$. The Phillips curve can be written as

$$\pi = \pi^e + ax + e \tag{1}$$

This equation describes a linear relationship between the output gap and the inflation rate.[14]

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[12]See Walsh (2001a) for practical implementation problems of optimal monetary policy principles.

[13]Mishkin and Schmidt-Hebbel (2000) find in a cross-country analysis that inflation targeting is a quite successful monetary policy framework compared with alternative monetary regimes.

[14]In this respect, the new Keynesian version of the Phillips curve differs from the Phillips curve specification here: First, because the expectations variables in the new Keynesian version are forward-looking. If firms set their prices, which will then be fixed for several periods in the future, they will take into account the path of future inflation. Second, here the Phillips curve is not derived from microeconomic first principles. The coefficent on the expected future inflation is in this case not equal to 1, but should equal the subjective discount rate. Due to empirical research, a value of 1 is normally assumed. A different value of the coefficient would not change the qualitative implications of the model (Walsh 2001b, p. 4). Inflation dynamics implied by the ouput gap and the Phillips curve is the decisive characteristic of NUKE (Gali 2001, p. 10). The micro-foundational "new" Phillips curve is from a theoretical point of view a central innovation in monetary theory. But empirically, it is not consistent with the stylized facts of the dynamic effects of monetary policy (Mankiw 2001, p. C59).

Aggregate Demand: The Monetary Policy Rule

To analyze inflation targeting it is assumed that monetary policy tries systematically to minimize deviations of output from the natural output level and deviations of the inflation rate from the inflation target π^T. "Systematically" signifies in this context that in its doings, the central bank takes into account the utility and the cost of its activities, i.e., the central bank behaves optimally, given its goals. It is further assumed that for the central bank marginal costs resulting from changes of the inflation rate and the output gap are proportional to the deviations from their respective targets π^T and zero. This is, e.g., the case, if the goal of the central banks is to minimize the squared deviations of π and x around their respective target values. The marginal cost of fluctuations in output is λx and the marginal cost of fluctuations in inflation is $k(\pi - \pi^T)$. λ (k) is a measure of the cost of fluctuations in output (inflation) for the central bank. It is assumed that the central bank tries to push x towards the target value zero. At the beginning, $x < 0$ is assumed. Hence, the economy operates below the natural level of output. A slight increase in x, Δx, leads to a gain of $-\lambda x \Delta x$. Corresponding to the increase in x, costs rise in the shape of an increase in the inflation rate. The effect of inflation is, by equation (1) $a\Delta x$, and the resulting cost is $ak(\pi - \pi^T)\Delta x$. Equalizing marginal cost and marginal utility of monetary policy actions gives

$$x = -\left[\frac{ak}{\lambda}\right](\pi - \pi^T).$$

This equation describes the relationship between the output gap and deviations of the inflation rate from its target value, which is consistent with monetary policy minimizing the cost of output variability and inflation variability. If it were possible for the central bank to control the output gap perfectly, the result would be exactly $x = -\left[\frac{ak}{\lambda}\right](\pi - \pi^T)$. When taking into account that next to monetary policy, disturbances u influence output and aggregate demand besides monetary policy, the result is

$$x = -\left[\frac{ak}{\lambda}\right](\pi - \pi^T) + u \tag{2}$$

or

$$\pi = \pi^T - \alpha(x - u), \tag{3}$$

where $\alpha = \frac{\lambda}{ak}$. Equation (3) describes the monetary policy rule followed by the central bank. $\frac{\lambda}{a}$ describes the trade-off between inflation variability and the volatility of the output gap. If the relative weight, λ, of the output goal in the loss function of the central bank increases, the variance of the output gap decreases, whereas the variance of the inflation rate increases. A central bank, which puts a higher weight on the output goal, accepts a higher variability of inflation and a lower variability of output than a central bank with a higher weight on the inflation goal. The price for attempting to generate a higher stability of inflation is a higher variability in the real economic activity and vice versa.

The Monetary Transmission Mechanism

In the day-to-day handling of monetary policy, the control variable of the central bank is a short-run interest rate. The central bank is to set the interest rate in such a way that the intertemporal loss function is minimized. In order to achieve this goal, the central bank has to have an idea of the monetary transmission mechanism

(Svensson 1998, p. 205). Unfortunately, the functioning of this transmission mechanism is only little known.[15]

The relationship between the nominal interest rate, output, and inflation is drawn on the basis of their impact on aggregate demand. The IS curve defines real aggregate demand as a negative function of the real interest rate. A simple IS curve (scaled by the natural output level) can be written as

$$\frac{y}{y^n} = \frac{y_0}{y^n} - b\left[i - \pi^e\right] + u. \tag{4}$$

i is the nominal interest rate. The negative coefficient on the real interest rate reflects, in new Keynesian models, intertemporal substitution effects in consumption as well as, in old Keynesian models, effects on investment through the credit cost and credit availability channel. The aggregate demand shock u is not anticipated by the central bank. Hence, u is not correlated serially with a statistical mean of zero. All anticipated or persistent changes in demand are represented by changes of y. The long-run equilibrium real interest rate is therefore given as

$$r^* = \frac{\left(y_0 - y^n\right)}{by^n}. \tag{5}$$

When subtracting one from both sides of the IS equation (4), we obtain

$$x = x_0 - b\left[i - \pi^e\right] + u,$$

where $x_0 = \frac{\left(y_0 - y^n\right)}{y^n}$. Given the definition of r^* in equation (5), the output gap results in

$$x = -b\left[i - \pi^e - r^*\right] + u. \tag{6}$$

In the case of absent demand shocks, output is lower than the natural level of output (x is negative), if the current real interest rate is higher than the long-run time-variant equilibrium real interest rate r^*.

Policy Rules

Monetary policy rules (e.g., Taylor 1993) specify the policy instrument, the nominal interest rate i, as a function of the inflation rate and the output gap. As the inflation rate and the output gap are endogenous variables, the monetary policy reaction function can be represented in different ways. For example, when solving the Phillips curve equation (1) and the monetary policy rule (3) for the output gap x, when substituting the result for the output gap (6), and when solving for the nominal interest rate, which is consistent with a short-run equilibrium, we obtain

$$i = r^* + \pi^e - \frac{\pi^T - \pi^e - e}{b(a + \alpha)} = i^T + \left[1 + \frac{1}{b(a + \alpha)}\right]\left(\pi^e - \pi^T\right) + \frac{e}{b(a + \alpha)}. \tag{7}$$

[15]Mishkin (1992) identifies eight different transmission channels.

$i^T = r^* + \pi^T$ is the long-run equilibrium nominal interest rate. The demand shock u does not appear in the policy rule anymore, because the central bank sets the nominal interest rate, by assumption, before it can observe the demand shock.

The coefficient of the expected inflation rate in (7) is greater than one. Hence, this policy rule stipulates that the nominal interest rate should be raised over-proportionally, if the expected inflation rate is higher than the inflation target of the central bank. This ensures that an increase of the expected inflation rate induces the central bank to raise the nominal interest rate to such an extent that the real interest rate is increased. The increase in the real interest rate leads to the necessary reduction of output to contain inflation. According to the policy rule, the nominal interest rate should be changed proportionally if the estimated equilibrium interest rate changes. The nominal interest rate is to be raised in reaction to positive inflation shocks. This is the reason why a positive inflation shock reduces the output gap.

Implications for Monetary Policy

What does the new Keynesian theory of optimal monetary policy imply for the constitution of central banks and practical monetary policy (Fisher 1994, p. 301; Svensson 1998; 2001, p. 4)?[16]

- The central bank should be given the authority to change the interest rate and other variables relevant for monetary policy so that it can achieve its policy goals.
- The central bank should have a clearly defined mandate including price stability.
- The central bank should publicly announce and target an explicit symmetrical positive inflation goal for a specified period of three years. The announcement should describe exactly the circumstances, which give allowances for deviations from the inflation target due to changes in the terms of trade, the interest rates, and indirect taxes.
- The central bank should target a consumer price index which does not take into account interest-related cost. The reason for this is that an increase of the interest rate aimed at decreasing the inflation rate would have the contrary effect of raising the inflation rate.[17]
- The central bank should pursue the concept of flexible inflation forecast targeting. This implies that the central bank should stabilize output and inflation. In this context, central bank rules should take into account the

[16]New Keynesians do not believe that a monopolized money economy is necessary. As Chris Waller once stressed, in the new Keynesian framework money has no role as a medium for exchange, but serves only as a numéraire. The equilibrium allocation can be achieved with any unit of account. Therefore, central banks do not have a role to play. As Woodford (2001, p. 57) shows, it is quite possible that the information revolution strengthens the privatization of money supply. But even in such a system, central banks would play a central role due to historical network externalities. Therefore, a privatization of the money supply does not change the new Keynesian basic concept of optimal monetary policy.

[17]The question of whether a central bank of a small open economy should use monetary policy rules which take account of the nominal exchange rate has remained open so far (Dennis 2001).

short-run Phillips curve trade-off: price stability is always more important than output stability.

- In order to make sure that the central bank does not act in an excessively discretionary way and to ensure that inflation forecasts are not biased, it is imperative to maintain the greatest possible transparency with respect to the numeric inflation goal and the weight of the output stabilization goal in the loss function of the central bank. For transparency in monetary policy translates into a committment of the central bank to do everything, absolutely everything, to minimize its loss function. The required transparency is given credence by the publication of inflation reports.

- The central bank should be held accountable and responsible in two ways: On the one hand, it should be held responsible for the achievement of its goals. This means that twice a year, the president of the central bank should account for the central central bank's doings in connection with the achievement of its goals in front of the legislature and thus in front of the public. On the other hand, the central bank is required to explain and justify its monetary policy decisions in front of the legislature and the broad public. If the central bank does not succeed in achieving its goals, punishment in the shape of inexorable public questioning and the corresponding loss of reputation should suffice.

- Due to the nondemocratic character of an independent central bank, the government should have the right to overrule the monetary policy decisions of the central bank. However, this should go along with costs for the government.

- The central bank should not be forced to finance public budget deficits and to administer public debt.

- Responsibilities for exchange rate policy and interest rate policy should not be divided as long as the exchange rate is flexible. For, with flexible exchange rates, the exchange rate and the interest rate are interdependent.

- The board of central bank governors should consist of experts on monetary policy. Each member should have one vote. Tenure should be five years and staggered because this means that only one member is (re-) elected at a time. After each monetary policy meeting, votes by names and anonymous minutes should be made public very fast. The monetary policy committee should be held responsible for monetary policy issues.

SUMMARY

This article gives a short overview of the new Keynesian theory of optimal monetary policy. The concept of inflation targeting represents the core of this theory. It is illustrated with the help of Walsh's simple model of inflation targeting (Walsh 2001b). On the basis of this model, the implications of the theory of optimal monetary policy for practical monetary policy is demonstrated.

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