

The SNB's New Monetary Policy Framework Ten Years On: Panel Discussion

Contribution by EDWARD NELSON^a

Much of the conference discussion, and two of the conference papers – JORDAN, PEYTRIGNET, and ROSSI (2009) and GENBERG and GERLACH (2009) – covered the issue of whether Swiss National Bank (SNB's) policy since 1999 can be characterized as inflation targeting. My impression from the discussion in JORDAN, PEYTRIGNET, and ROSSI (2009), and from the SNB's (2009) official description of its monetary policy framework, is that the Swiss National Bank has great reservations about being classified as an inflation targeting country. There is a historical irony in the apparent reluctance on the SNB's part to be regarded as targeting inflation. Swiss monetary policy arrangements from the mid-1970s onward are regarded as showing the way, along many dimensions, for those countries that did become official inflation targeters (BERNANKE, MISHKIN, LAUBACH, and POSEN, 1999; RICH, 2003).

What is not in dispute, however, is that there are major areas of common ground between SNB policymaking and an inflation targeting framework. In setting its policy rate (the three-month Libor rate), the SNB vigorously responds to inflation, as GENBERG and GERLACH (2009) document. And on a closely related point, the underlying *doctrine* that is the basis for SNB policymaking is shared with inflation targeting countries. It is a doctrine that views inflation control not as a responsibility which should be dispersed across agencies, but instead specifically a *monetary policy* responsibility. The SNB's attachment to this doctrine is a legacy of its 1970s policy reforms. Those reforms, in turn, reflected the influence of monetarism on SNB policymaking. In its 1999 overhaul of monetary policy arrangements, Switzerland abandoned money growth targeting; in that limited respect, the SNB distanced itself from the monetarist framework adopted during

- a Email: Edward.nelson@frb.gov. These remarks are a revised version of those presented at the Swiss National Bank conference, "The SNB's New Monetary Policy Framework Ten Years On," October 29–30, 2009, at the Swiss Re Centre for Global Dialogue. The views expressed here are solely the responsibility of the author, and should not be interpreted as reflecting the views of the Board of Governors of the Federal Reserve System or of any other person associated with the Federal Reserve System.

the 1970s. But it would be a mistake to regard the fate of monetary targeting in Switzerland as the basis for evaluating whether monetarism has had a durable influence on SNB policymaking. The present arrangements of the SNB are undeniably connected to the 1970s policy framework via the monetary focus on inflation. The influence of monetarism has therefore proved enduring. It was the monetarist literature that was responsible for centering the analysis and control of inflation squarely on monetary policy. As discussed in NELSON (2007), Switzerland was ahead of its time in the early 1970s when it resolved the debate over whether inflation was a monetary or nonmonetary phenomenon in favor of the monetary perspective. Inflation control consequently became a specific responsibility of Swiss monetary policy. There is no escaping the conclusion that, both doctrinally and in carrying out actual policy, the SNB's post-1999 monetary policy framework exhibits considerable continuity with the monetarist framework of the 1970s.

An additional element of continuity with the monetarist aspects of older SNB policy may be gleaned from the details of GENBERG and GERLACH'S (2009) estimates of SNB reaction functions for 2000–2009. I was struck by the authors' finding that a consumer sentiment variable does better than output gap estimates as the real variable in accounting for policy-rate choices. What is the best interpretation of the fact that consumer sentiment seems to be policymakers' preferred proxy for real economic activity? From the authors' results, it appears that consumer sentiment is stationary and not particularly well correlated with output gap estimates. I conjecture that consumer sentiment might be standing in for the *growth rate* of real economic activity or for the growth rate of the output gap. If this is the case, one might interpret the SNB's response to the sentiment variable as revealing a further influence of principles from the monetarist literature on Swiss policymaking. GERBERDING, SEITZ, and WORMS (2005) and BEYER, GERBERDING, GASPAR, and ISSING (2009) argue that one of the manifestations of the influence of monetarism on 1970s German monetary policy was the fact that the Bundesbank responded to the growth rate of the estimated output gap, rather than to the absolute level of the gap.¹ The way I would characterize this finding is that German monetary policy was in line with Milton Friedman's position that he was opposed in principle to *full employment policy* – which is to say, monetary policies based on precarious estimates of the level of the output gap – but not opposed to a *policy of stable employment* – which is to say, monetary policies that responded to the *growth rates* of employment or output. As Georg Rich

1 ORPHANIDES and WILLIAMS (2009) articulate a similar interpretation of monetarist rules.

noted at the conference, the constant money growth rule that Friedman advocated can be interpreted as an interest-rate rule that responds to the growth rate of output, *inter alia*. If my conjecture that consumer sentiment is standing in for the change in real economic activity is correct, the presence of consumer sentiment in Genberg and Gerlach's estimated SNB reaction function would further confirm the SNB's long-time association with monetarist ideas.

References

- BERNANKE, BEN S., FREDERIC S. MISHKIN, THOMAS LAUBACH, and ADAM S. POSEN (1999), *Inflation Targeting: Lessons from the International Experience*, Princeton, N.J.: Princeton University Press.
- BEYER, ANDREAS, VITOR GASPAR, CHRISTINA GERBERDING, and OTMAR ISSING (2009), "Opting Out of the Great Inflation: German Monetary Policy After the Breakdown of Bretton Woods", in: M.D. Bordo and A. Orphanides (eds), *The Great Inflation*. Chicago: University of Chicago Press for NBER, forthcoming.
- GENBERG, HANS, and STEFAN GERLACH (2009), "Swiss Monetary Policy, 2000–2009", paper presented at the Swiss National Bank conference, "The SNB's New Monetary Policy Framework Ten Years On," October 29–30.
- GERBERDING, CHRISTINA, FRANK SEITZ, and ANDREAS WORMS (2005), "How the Bundesbank Really Conducted Monetary Policy", *North American Journal of Economics and Finance* 16, pp. 277–292.
- JORDAN, THOMAS J., MICHEL PEYTRIGNET, and ENZO ROSSI (2009), "Ten Years' Experience with the Swiss National Bank's Monetary Policy Strategy", paper presented at the Swiss National Bank conference, *The SNB's New Monetary Policy Framework Ten Years On*, October 29–30.
- NELSON, EDWARD (2007), "Ireland and Switzerland: The Jagged Edges of the Great Inflation", *European Economic Review* 52, 700–732.
- ORPHANIDES, ATHANASIOS, and JOHN C. WILLIAMS (2009), "Monetary Policy Mistakes and the Evolution of Inflation Expectations", in: M.D. Bordo and A. Orphanides (eds), *The Great Inflation*, Chicago: University of Chicago Press for NBER, forthcoming.
- RICH, GEORG (2003), "Swiss Monetary Targeting 1974–1996: The Role of Internal Policy Analysis", European Central Bank Working Paper No.236.
- SWISS NATIONAL BANK (2009), "Monetary Policy Strategy", www.snb.ch.

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Contribution by ALEXANDER SWOBODA

There is little doubt, as the papers at this conference document, that the new monetary policy framework of the Swiss National Bank has served the Swiss economy well. Rather than bask in the congratulatory mood befitting the tenth anniversary of a successful venture, I will raise some questions first about past successes, second about some issues in need of further research, and third about the future.

1. The Past 10 Years

The new monetary policy framework (NMPF) seems to have served the Swiss economy very well indeed, but a number of questions of interpretation remain. The first is whether an alternative framework could have performed as well or better. Of course the question is an unfair one since it is always possible with the benefit of hindsight to think of some, even if only marginal, improvement in the conduct of monetary policy. However and for the sake of argument, consider the following issue: could the previous MPF, with its emphasis on the targeting of monetary aggregates, have done as well? After all, the performance of the Swiss economy under the previous regime, except for part of the nineties, was not particularly bad in international comparison even if targets were missed more often than met and the targeted aggregates were changed several times. This suggests that Swiss success in terms of inflation control from the mid-eighties to the inception of the NMPF (and perhaps during the latter period) probably rests in good part with a long history of price stability, however achieved. That said, we all suspect that the new regime is better adapted to the conditions of the last ten years if only because the performance of the Swiss economy in terms of price stability and, more recently in terms of growth and resiliency to the crisis, seems to have been among the best of its peers.

That, however, does not provide an answer to a second and related question: Was that favorable outcome due to luck, to changes in economic structure, or to a wise monetary policy framework and decisions? That issue has been raised a

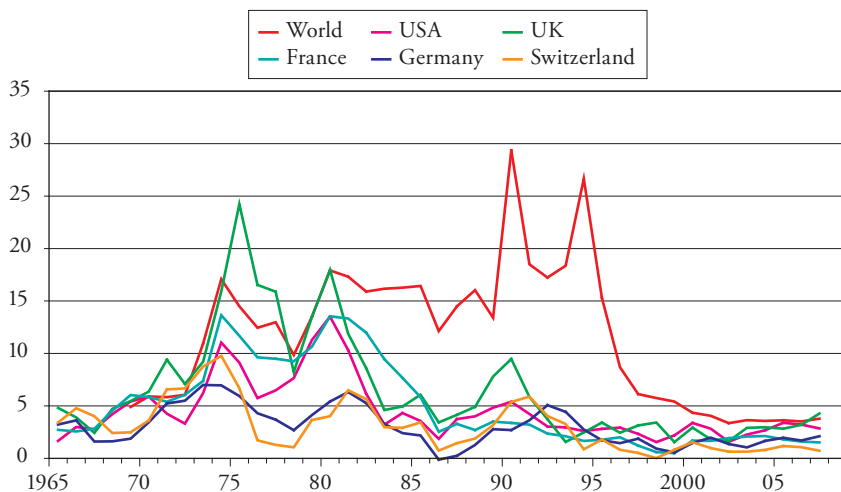
number of times in relation to “the great moderation” mostly, but not only, with respect to the United States. Federal Reserve officials would probably answer 70% skill, 15% structural change and 15% luck. A skeptic would take a more agnostic stance and assign 1/3 probability to each of these “causes” (on the assumption that they are exhaustive). After this conference and for the case of Switzerland, I would opt for something like 50% skill, 10% change in economic structure, and 40% luck.

By luck I mean a benign environment for monetary policy in the sense, first, that there were no violent shocks until the end of the period that followed the NMFP’s introduction, though not all the papers presented at this conference would concur: while Genberg and Gerlach, for instance, would, Jordan, Peytrignet and Rossi speak of several supply shocks hitting the Swiss economy and of the success of the new framework “in spite of an economic climate characterized by dramatic international turbulence and major monetary policy challenges” –though they do recognize that the overall improvement in the Swiss economy during the period may have been facilitated by “worldwide improvements in growth and inflation (The Great Moderation)”. Second, the period was benign in that there was (or seemed to be) no severe conflict between pursuing the objectives of price stability and low output variability with a single instrument, namely, interest rate policy. This is of course partly a by-product of the Great Moderation with its fall in the variability of output growth and inflation as well as a marked decline in inflation, starting in the mid-eighties for the United States and the low-inflation countries of Europe including Switzerland and Germany, a little later for other countries in Europe and at the beginning of this century for many developing and emerging market economies. Figure 1 illustrates for inflation. In many ways, the great moderation was a golden age for monetary policy of the inflation targeting variety.

It is only with the (foreseeable) end of the great moderation around late 2007 that monetary policy would be truly challenged in the simultaneous pursuit of the three objectives of price stability, the maintenance of low unemployment and financial stability. Those three objectives become incompatible in the face of a conjunction of severe supply shocks, asset bubbles and a systemically fragile financial system.

These considerations leave us with two questions about the past ten years. First, is there really a “Sonderfall Schweiz?” The answer could be yes, insofar as the inflation performance of Switzerland was better than that of its peers over the period, and no, insofar as the improvement in performance was general during the period of the great moderation (which, incidentally, was a great moderation mainly in comparison with what might be termed the great “immoderation” of

Figure 1: CPI Inflation in Percent



Source: IFS

the period extending from the late sixties to the mid-eighties). Second, one may well ask whether the NMPF is but a fair weather policy framework. True, Switzerland has performed rather well during the last two or three stormy years in international comparison. A robust economic and financial structure, a rapid injection of liquidity into the economy, and of capital into UBS, as well as a favorable starting situation, especially with respect to the fiscal position and to government debt, may, however, provide most of the explanation. That said, the flexibility of the policy framework did allow for an appropriate and rapid response to the crisis and the framework itself appears to have been a stabilizing rather than destabilizing factor. Whether it will be adequate in the future is a question to be taken up further below. But first, two factual issues for further research are taken up below.

2. Two Issues for Research

One justification for choosing a three-year horizon for the SNB's inflation forecast and for showing the forecast path of inflation over the period rests with the notion that Swiss monetary policy measures impact on the price level and

inflation with long (up to three years) and variable lags. Such long and variable lags are conventional wisdom in Switzerland and seem to derive from estimates that date back to the 1980s, in particular to the belief that the burst of inflation around 1981 found its origin in the floor put under the Deutsche Mark in 1978 and in the subsequent expansion of the monetary base and money supply; and the belief that the inflationary acceleration of the late eighties and early nineties occurred as a consequence of the monetary expansion that followed the stock market crash of 1987. Whatever the merits of this view, one would expect that these lags should be sensitive to the change in monetary policy framework and the switch from monetary aggregates to the rate of interest as the instruments of choice of that policy. An in-depth investigation of these lags and their determinants would seem worthwhile if only to build better confidence estimates around inflation forecasts and to assess the impact of alternative policy instruments such as various measure of “quantitative easing.”

A second issue which would deserve further research is how the NMPF has changed the weight of foreign vs. Swiss factors (including monetary policy) in the evolution of the Swiss economy. In a study dating back to 1985, Hans Genberg and I found that foreign influences were the dominant factor in the Swiss business cycles under either fixed or flexible exchange rates. The main difference between the two regimes, as theory would lead us to expect, was in the scope that flexible rates afford to monetary policy for the control of inflation.¹ Revisiting these findings would help assess the contribution of monetary policy to the stabilization of Swiss output over the past decade.

3. The Next Ten Years

The SNB will have to meet several challenges to serve the country as well in the next ten years as it has in the past ten. In the first place, it will need to maintain its independence and to concentrate on its main mandate, the preservation of price stability. To that end it must avoid central banker schizophrenia, that is, avoid being torn between achieving multiple goals with only one main instrument, its interest rate policy under the NMPF. In turn, this means that the policy framework should be adjusted to insure that there are as many instruments of economic policy available as there are targets of policy, in line with the Meade-

1 See HANS GENBERG and ALEXANDER SWOBODA (1985), *External Influences on the Swiss Economy under Fixed and Flexible Exchange Rates: 1964–1981*, Grösch: Verlag Rüegger, 182 p.

Tinbergen principle. Concretely, that means that fiscal policy should play its role in employment stabilization; the latter is also a legitimate concern of monetary policy but only to the extent that it does not jeopardize price stability in the medium run. It also implies that financial stability should be pursued mainly with the help of specific macro-prudential instruments rather than through interest-rate policy (that does not mean that interest rates should not be used to lean against asset bubbles). Such instruments include capital and leverage ratios and the lead that the SNB together with the FINMA is taking in this respect is to be welcomed. There is one caveat, however: such ratios have to be made countercyclical lest they be destabilizing rather than stabilizing: there must be incentives for buffers to be built up in good times and reduced in bad, at the financial system as well as individual firm level.

More immediately, the NMPF has been abandoned in the past year and a half as the policy rate essentially hit the zero bound. In a sense, so-called quantitative easing constitutes a reversion to monetary aggregate targeting. As is the case for other central banks, the challenge for the SNB over the next months will be to exit from Q.E. and other “unconventional” measures such as the purchase of bonds issued by Swiss private borrowers. The most important exit, however, will be from the moral hazard –in particular the too big to fail syndrome that has been injected into the financial and economic system over the years. This is the overarching structural challenge for economic policy for the global as well as Swiss financial system.

If these challenges are met, the monetary policy framework that was introduced ten years ago should, used with flexibility and adjusted sensibly to changing circumstances, also serve the country well over the next ten years.

Perspectives on Monetary Policy in Switzerland^a

CHARLES WYPLOSZ

Along with a number of central banks, the SNB has adopted an up-to-date policy framework which has delivered price stability and moderate growth for nearly a decade. This auspicious period, however, has come to an abrupt end when the Great Crisis has spread around the developed world, hitting the Swiss banking system especially hard. Even though, Switzerland has withered the shock reasonably well. Part of the merit undoubtedly goes to monetary policy.

In my remarks, I focus on three issues that have figured out prominently during the conference: 1) Is the SNB really an inflation targeter? 2) What does the Swiss experience tell us about how to deal with asset prices? 3) Is the Swiss way of targeting the three-month LIBOR superior to what most other central banks do?

Inflation Targeting or Not?

Many contributors to this conference have argued that, although it would not recognize it, the SNB actually operates as an inflation targeter. While some of us get pretty excited about this debate, it is fair to recognize that it is a fairly unimportant issue, maybe simply a question of doctrine or even just of vocabulary. Central banks that admit pursuing the inflation targeting strategy insist that they have adopted the flexible version of that strategy.¹ They target inflation in the medium run, but they choose how close they want to be to the target and, if they have deviated, how soon to get back to it, taking into account the output gap and possibly other factors. The SNB essentially follows the same strategy with one main difference: it does not announce an inflation target. Yet, it declares price stability as its main objective and it provides a definition of price stability (less than 2%).

Inflation targeting central banks usually specify a particular inflation rate that they want to achieve and a tolerance level. The SNB announces a range but no

a Remarks at the roundtable at the Conference on “The SNB’s New Monetary Policy Framework Ten Years On”, Zurich, 29–30 October 2009.

1 The reference is KING (1997).

particular position within the range. Thus an inflation targeting central bank implicitly commits to raise the interest rate if its inflation forecast exceeds the target, and conversely, while the SNB makes a seemingly less tight commitment. A flexible inflation targeter, however, makes no specific commitment and, in practice, mostly endeavors to keep the inflation rate within the tolerance range. In the end, therefore the only practical difference is in terms of communication and transparency.

As stated e.g. in WOODFORD (2007), the most widely accepted view is that transparency is highly desirable because it allows central banks to shape expectations of those variables (long-term interest rates, exchange rates, asset prices) that lie at the heart of the transmission mechanism. SVENSSON (1997), among many others, argue that inflation targeting provides more transparency than less precise strategies.

Why, then, does the SNB resist being labeled an inflation-targeter? A clue is given by the fact the new framework was adopted shortly after the creation of the ECB and that the strategy formulation is very similar, but not identical, to that of the ECB. A rationale for being similar is that the euro area is by far Switzerland's main trading partner, so that the euro-franc exchange rate is a very important variable for the SNB. Of course, fixing the exchange rate is not doable unless monetary policy independence is relinquished, but exchange rate stability is highly desirable. A nice situation, therefore, is one where the SNB and the ECB independently follow very similar policies because they face very similar conditions and react with very similar policies. Occasionally, the situation will differ and exchange rate movements will be the price to pay for monetary independence but, the rest of the time, the exchange will be stable. This is a very sensible approach. The main drawback is that the SNB will not accept being called an inflation targeter because the ECB strenuously refuses to be called an inflation targeter.

Another argument is that the SNB wants to maintain some flexibility. Inflation targeting, it is argued, imposes a straightjacket on the monetary policy strategy. A straightjacket may be welcome for central banks with limited credibility and experience but the highly reputed SNB can do without. The argument is powerful, of course, but not compelling. Inflation targeting advocates note that the strategy imposes a tight logical discipline on to policy makers. Not only can it help reduce mistakes but it is an excellent framework to organize discussions within policy-setting committees. The last point may not apply to the SNB given the small size of its Governing Board but the first one stands.

More importantly, maybe, inflation targeting is also a useful tool for central bank communication. It provides a natural framework to explain policy decisions.

It encourages transparency as it requires that policymakers reveal their forecasts of (at least) inflation and output at the relevant horizon. Transparency, in turn, is important as it helps shaping market expectation. It also matters for accountability. Yet, a curious aspect of the situation in Switzerland is that there is virtually no public debate of monetary policy. It seems as if both markets and the broader public – including the political authorities – completely trust the central bank for making the right decision.

Dealing with Asset Prices

Switzerland already had an encounter with housing and asset price bubbles in the early 1990s. Deep losses, including in the banking sector, were followed by five years of average zero growth. As in other countries, the lesson was largely learned and asset prices have moved with great moderation during the Great Moderation years. Yet, this time, the asset price problem appeared under a new guise. The overvalued assets appeared in the books of one of the two large banks, not on the books of the non-financial sector.

The Swiss lesson, here, is that central banks cannot just ignore asset prices, but that they have to also be concerned with the quality of bank assets. In a country whose two large banks hold assets that amount to six times the GDP (before the crisis), relatively small losses can be devastating for the whole economy. The lender-of-last-resort function is not an option left to the discretion to policymakers, it is an obligation. From there follow a whole range of implications that the SNB has drawn ahead of most other central banks. The new requirements suggested last December by the Basel Committee on Bank Supervision have been imposed on Swiss banks by end 2009.

Yet, the too-big-to-fail problem remains. Imposing higher capital requirements and capping leverage is bound to reduce the occurrence of failures, but bank crises remain a possibility. Having seen that they are effectively protected from failure, the two large banks have limited incentives to avoid the high returns that come with large risk-taking. The question is whether a small country can host huge world-player banks.

The LIBOR miracle

During the crisis all developed country central banks have been led to gradually lengthen the maturity of their lending to commercial banks. The move was intended to stabilize their funding. Eventually, most central banks went all the way to offer one-year maturities, and so did the SNB. But the SNB enjoyed a favorable starting position since its normal practice is to stabilize the three-month LIBOR.

This fortuitous advantage is often seen as a vindication of the SNB's practice. In many ways it is, but those who believe that there is no free lunch want to understand better how it operates. The table below reports the volatility of interest rates for Switzerland and a few other countries, controlling for changing monetary policy targets. Unsurprisingly, LIBOR volatility is lowest in Switzerland, far below volatility in the Euro Area or the United States. Much the same is found for the volatility of the OIS rate. In all case, however, volatility is similar or even lower in the case of Sweden, whose central bank operates the traditional overnight interest rate target.

This evidence casts doubts on the LIBOR miracle assumption. Lower LIBOR volatility is only to be expected when the central bank shapes its market activity with the explicit aim of stabilizing the LIBOR. The LIBOR may also be stable because the risk premium is stabilized. The ratio of the volatility of OIS rates to the volatility of Libor rates is a measure of perceived risk. On that measure, Switzerland comes last and Sweden first. This observation suggests that, indeed, there is no free lunch. By stabilizing the LIBOR, the SNB compensates for risk fluctuations by moving the risk-free rate. As a result, the quasi risk-free OIS rate is unusually volatile.

Is it good practice to stabilize LIBOR at the cost of destabilizing expectations on future short term rates? It all depends on which is the more important for the economy as a whole. JORDAN, RANALDO and SÖDERLIND (2009) argue that the LIBOR dominates the overnight rate because it is less sensitive to short-term reversible shocks. They also note that it cannot be manipulated by individual market participants. An additional argument is that three-month maturities are more convenient for financial intermediaries that carry out maturity transformation.

These are weighty arguments, but they open up a question. If three-month is better than overnight, would not six-month or one-year be even better? The issue of the optimum maturity for the monetary policy instrument does not seem to have been addressed in the literature. The successful experience of the SNB suggests that this issue deserves systematic analysis, both theoretical and empirical.

Table 1: Interest Rate Volatility (1 August 2007 to 14 September 2008)

	Euro Area	Sweden	Switzer- land	United Kingdom	United States
OIS Swap 3M Vola.	0.08	0.07	0.12	0.09	0.17
Libor 3M Vola.	0.18	0.11	0.06	0.21	0.18
Spread Vola.	0.18	0.08	0.14	0.19	0.23
Vola. OIS Swap / Vola. Libor.	0.47	0.67	1.90	0.42	0.96
future Libor 3M (3M ahead) Vola.	0.23	0.19	0.10	0.20	0.22

Source: DELL'ERBA et al. (2009).

References

- DELL'ERBA, SALVATORE, SIMONE MEIER, PASCAL TOWBIN, and SEBASTIAN WEBER (2009), "Swiss Monetary Policy in the Current Crisis", unpublished paper, Institut de Hautes Etudes Internationales et du Développement, Genève.
- JORDAN, THOMAS, AGNELO RANALDO and PAUL SÖDERLIND (2009), "The Implementation of SNB Monetary Policy", *University of St. Gallen Discussion Paper No. 2009-08*.
- KING, MERVYN, (1997), "Changes in UK Monetary Policy: Rules and Discretion in Practice", *Journal of Monetary Economics* 39, 81-97.
- SVENSSON, LARS E. O. (1997), "Inflation Forecast Targeting: Implementing and Monitoring Inflation Targets", *European Economic Review* 41, pp. 1111-1146.
- WOODFORD, MICHAEL (2007a), "The Case for Forecast Targeting as a Monetary Policy Strategy", *Journal of Economic Perspectives*, Fall 2007.