

Monetary Policy Over Fifty Years

Experiences and lessons

Edited by
The Deutsche Bundesbank

Introduction	1
1. Successes and failures of monetary policy since 1950	15
DAVID LAIDLIN	
Discussion	25
Charles Goodhart	25
Christoph Drehmann	35
Donald Kohn	45
2. What have economists learned about monetary policy in the last fifty years?	65
LARS E. O. SVENSSON	
Discussion	75
Richard H. Anderson	75
Edward T. McCallum	85
Christiano Lippi	95
3. Will monetary policy become more of a science?	105
FRANÇOIS A. MISSION	
Discussion	115
Richard H. Anderson	115
Michael J. McQuinn	125

 **Routledge**
Taylor & Francis Group
LONDON AND NEW YORK

First published 2009
by Routledge
2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN

Simultaneously published in the USA and Canada
by Routledge
270 Madison Avenue, New York, NY 10016

Routledge is an imprint of the Taylor & Francis Group, an informa business

© 2009 The Deutsche Bundesbank

Typeset in Times New Roman by
Keystroke, 28 High Street, Tettenhall, Wolverhampton
Printed and bound in Great Britain by
the MPG Books Group, Bodmin and King's Lynn

All rights reserved. No part of this book may be reprinted or reproduced or utilised in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from the publishers.

British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

Library of Congress Cataloging in Publication Data

Monetary policy over fifty years : experiences and lessons : the Deutsche Bundesbank.

p. cm.

This book is based on a conference celebrating the 50th anniversary of the Deutsche Bundesbank.

Includes bibliographical references and index.

1. Monetary policy—Congresses. 2. Banks and banking, Central—Congresses.

I. Deutsche Bundesbank.

HG925.M6599 2009

339.5'3—dc22


2008046106

ISBN10: 0-415-47847-2 (hbk)

ISBN10: 0-203-87852-3 (ebk)

ISBN13: 978-0-415-47847-2 (hbk)

ISBN13: 978-0-203-87852-1 (ebk)


Taylor & Francis Group

Discussion

by Hans-Werner Sinn

published in:

The Deutsche Bundesbank (Ed.):

“Monetary Policy Over Fifty years-

Experiences and lessons”,

Routledge: Oxon and New York, 2009, pp. 142-148.

Discussion

Hans-Werner Sinn

The divine coincidence

Olivier Blanchard makes the point that stabilizing inflation is not, in general, the same as stabilizing real output through monetary policy.¹ The divine coincidence between these two goals that Goodfriend and King (1997) derived under the condition of temporary nominal price rigidity as described in the staggered contracts model devised by Calvo (1983) breaks down if there is a downward rigidity of real wages. There is thus a trade-off between inflation and output stabilization that involves more difficult monetary policy decisions.

At first glance, the result may be interpreted as supporting Nicolas Sarkozy's view of the world, i.e. that price stability is too narrow a goal for the ECB and that it should attempt to actively stabilize the business cycle of the real economy at the expense of price stability. It would therefore appear as though Olivier Blanchard had provided the French president with a theoretical base for his new policy approach which would dwarf the concerns of Claude Trichet.

However, closer scrutiny reveals that this is not the case. One reason is simply that price stability is not the same as inflation stability. The Maastricht Treaty does not stipulate that the ECB should aim at stabilizing the inflation rate, but rather at stabilizing the price level, and this, of course, is something different. The central bank might, for example, take the view that it is better to have an unstable inflation rate hovering slightly around 1 per cent than persistent hyperinflation at a constant rate of 50 per cent per annum. True, in practice, both issues are often related insofar as a high variance of the inflation rate tends to come together with a high average inflation rate. But this is not necessarily and not always the case.

Thus, I fear that the 'divine coincidence' between inflation and output stability is much less divine than the term suggests.

I also take a somewhat different view of the economic distortions resulting from non-stable prices. In Blanchard (2009) and in Blanchard and Galí (2007), the repercussions on the real economy all operate via the real wage level, staggered wage formation and corresponding labour demand decisions from firms. That is certainly one channel through which monetary policy is transmitted to the real economy. However, there are many more such channels, possibly of even greater importance, and from a policy perspective these must all be taken into account.

This is not a criticism of the Blanchard-Gali paper, which is indeed brilliant. It is clear that a formal paper needs to restrict its focus in order to remain tractable. However, for the remarks at the Bundesbank's fiftieth Anniversary Conference, it may be useful to broaden the view somewhat.

I would therefore like to define the divine coincidence somewhat differently to Olivier Blanchard. He speaks of a coincidence between output and inflation stabilization. Let me instead speak here more generally of the potential coincidence between price-level stability on the one hand and a maximum of economic welfare on the other, where economic welfare may be understood in a broader sense, including allocative efficiency and distributional neutrality. With this definition in mind, I would like to return to the question of whether the ECB should aim at stabilizing the price level or whether there are other considerations that should induce it to allow for a small amount of inflation. The topics I want to address include classical monetarist arguments, public finance arguments and adjustment arguments applicable to the starting phase of a monetary union.

Credit contracts

Let me begin with the role of price stability for long-term credit contracts. If the buyers and sellers of loans know what the future price level is, they are able to write meaningful long-term credit contracts that satisfy their mutual needs. If they do not, things are more difficult. With an unknown future price level and nominal contracts, neither party knows how large the real debt service will be. Price instability therefore imposes a risk premium on both sides of the market and operates like a transactions cost, which tends to destroy the market for long-term loans. This has devastating implications for the economy's ability to invest in long-term real capital and is hence a serious impediment to economic growth.

The importance of this effect may clearly be seen in the case of Spain and other previously inflationary countries that entered the euro zone. The euro has brought Spain more price stability than ever before and enabled the country to establish markets for long-term fixed interest loans that did not previously exist. This is one of the major reasons why Spain has experienced a construction boom and why it has recovered so well in recent years from its historical stagnation period.

Friedman's argument

I would now like to turn to the argument in favour of a low or even negative inflation rate that was made by Milton Friedman (1969) many years ago. As the only cost involved in producing money is the printing expenditure, which is close to zero, the central bank should induce people to hold enough money so that the marginal liquidity service of money holding is zero. In reality, however, people choose the amount of money so as to equate the marginal liquidity service with the nominal rate of interest, which implies that the actual quantity falls short of the optimal quantity of money.²

The central bank can solve this problem by pursuing an appropriate deflationary policy. If the rate of price deflation equals the real rate of interest, the nominal rate of interest would be zero, and money holding would indeed be at its optimal level. The stock of real balances would be much higher than today, although the central bank would have to gradually shrink the nominal stock year by year.

I do not know of anyone who would endorse Friedman's recommendation for practical policy-making, as a deflationary policy seems dangerous for a number of reasons. However, the argument as such is valid and implies that a low inflation rate is better than a high one. Even if we do not want to go as far as Friedmanian deflation, we should at least try to avoid inflation.

Seignorage

However, Phelps (1973) presents a counter-argument asserting that the seignorage collected by the central bank should be part of an optimal tax system. Since seignorage revenue is the product of the nominal rate of interest and the monetary base, the Phelps argument implies a deviation from the Friedman rule in the direction of a less deflationary policy with a positive nominal rate of interest.

While this is also a valid economic argument, I fail to see its quantitative importance. Seignorage revenue is typically a tiny fraction of GDP, generally only a fraction of a percentage point. In my opinion there is therefore no need to over-emphasize this point.

It is, moreover, unclear whether the argument implies a need for inflation or simply less deflation than Friedman recommended.

Cold progression

Much more important from a quantitative perspective is the 'cold progression' of the tax system. At a certain point in history, the government designs a progressive tax system in line with its redistributive preferences. Now suppose there is inflation. The price level rises, and with it comes a proportional increase in all wages, so that gross income distribution remains unchanged in real terms. Because inflation pushes taxpayers into higher tax brackets with higher marginal and average tax rates, the real net-of-tax income distribution changes nevertheless. The real tax revenue rises, as does the government share in GDP.

In Germany, this mechanism has greatly contributed to the rise of the government sector in the 1970s and 1980s. True, from time to time the government adjusted for this effect with a tax reform lowering the rates, but over long periods of time it enjoyed the extra tax revenue and spent it for dubious purposes. Germany's excessive expansion of the welfare state in the 1970s and 1980s was facilitated by the cold progression of the tax system.

Lags in the pension formula

A countervailing effect was exerted by the lags in the German pension formula. In the German pension system, nominal pensions follow nominal wages, but only with a delay. The delay used to be three years, and has now been shortened to one. The lag implies that the higher the inflation rate, the lower the replacement rate. With an inflation rate of 2 per cent, for example, the pension level used to be 6 per cent lower in real terms than it would have been with a constant price level. This resulted in an unintended, presumably suboptimal, pension level.

Interest income taxation

Another non-neutrality of inflation concerns the taxation of the inflation component in the interest rate; in Germany, we call this an ostensible tax on interest (*Scheinzinsbesteuerung*). Part of the nominal interest income is not a real return but merely a compensation for the inflation-induced loss of capital. As the government does not exempt this part of the nominal interest income from the tax base, it imposes a burden on the real interest income that increases proportionately with the inflation rate. There have been periods in which this has involved a tax burden of more than 100 per cent of the real rate of interest for savers in high income tax brackets.

If the effect is foreseen by savers and investors and debt interest is tax deductible, the nominal interest rate will adjust accordingly, keeping the real net-of-tax interest rate constant (Tanzi effect³). The real allocation of resources would not be affected in this case. If, however, there are borrowers who cannot deduct the interest from their tax base, there are serious economic distortions, because inflation increases the wedge between the effective real interest paid and received, exacerbating the distortions from capital income taxation.

Historical cost accounting

There are, moreover, severe economic distortions resulting from historical cost accounting. This is not the same as the taxation of the inflation component of interest rates but is rather an additional and probably much more severe effect. Historical cost accounting means that firms are allowed to reduce the full historical purchasing value of their assets for income tax purposes. The goal is to keep the replacement investment, which is necessary in order to keep the stock of capital intact, tax exempt. In the event of inflation, this goal is obviously violated. As the assets needed for replacement become more expensive from year to year, the depreciation allowances are smaller than the funds needed for replacement investment. Thus, effectively, the corporate income tax imposes a burden not only on profits but also on the real stock of capital invested in the firm.

This effect implies that the greater the inflation rate, the larger the intertemporal distortion resulting from capital income taxation becomes. Thus, inflation slows down economic growth to a pace far below the socially optimal growth path.⁴

Moreover, this implies a serious intersectoral distortion as its strength depends on the longevity of assets. Assets that are long-lived are affected very little, because their depreciation rate is low. However, short-lived assets such as vehicles, computer equipment and inventory stocks are heavily burdened with additional taxes. In the end, inflation reallocates the economy's stock of capital from short-lived to long-lived assets, creating Harberger-type economic distortions and windfall gains for owners of long-lived assets.⁵

Balassa-Samuelson, the welfare state and the labour market

While all of these arguments legitimate the goal of aiming at price stability, I would now like to turn to an important counter-argument, the Balassa-Samuelson effect, which has been discussed frequently in recent years.⁶

According to the Balassa-Samuelson effect, real economic convergence implies a convergence of price levels. Countries that are still lagging behind others in terms of labour productivity have lower wages and hence lower prices for non-traded, labour-intensive goods, which implies a lower price level in general. When their labour productivity catches up, their wage and price level will do the same. During the transitional phase towards factor price equalization, they will necessarily have a higher inflation rate than the more advanced countries.

The European Central Bank has frequently been asked to take this effect into account and be more tolerant with regard to the inflation rates of those countries in EMU that are still in the midst of their convergence process. I personally think that this is a justified demand, because an overly tight euro-wide inflation goal could, in principle, force the more advanced countries with relatively high wages into a deflationary scenario or, if deflation is prevented by price and wage rigidities, into a recessive adjustment period.

Germany has been through such a painful adjustment period in recent years, although this now fortunately seems to have come to an end. From 1999 to 2006, the country experienced a trade-weighted real devaluation relative to the other euro-area countries of 5.3 per cent. This did not mean that prices on average had to deflate, but it was nevertheless a difficult period in which many goods prices fell and, in particular, many people had to accept lower wages, especially those who found employment in the rapidly increasing labour-leasing industry. Rising and falling prices always coincide in a dynamic economy. The lower the inflation rate is on average, the larger the proportion of the economy forced to make painful downward adjustments in prices and wages.

The process is efficient if prices and wages are fully flexible, but in reality there are important reasons for downward rigidities. The literature has emphasized psychological reasons and menu costs (as costs of rewriting price lists).⁷ The staggered price adjustment process *à la* Calvo modelled by Blanchard and Galí (2007) may be explained in this way.⁸ However, arguably, the most important reason for Germany and other Western European countries is the existence of a welfare state which pays wage replacement incomes that are defined in nominal terms. The income that the welfare state provides to unemployed persons defines

a reservation wage or minimum wage demand that the private economy has to offer if it wants to attract workers. Germany's current problem is that this minimum wage demand is quite high and drives a large fraction of the unskilled labour force into unemployment. Although the country is currently booming, its unemployment rate of unskilled workers is still among the highest in the euro area.⁹

The problem has been exacerbated by the intense low wage competition that came with the fall of the Iron Curtain and the EU's Eastern enlargement. It will be further aggravated when more Eastern European EU countries are admitted to the euro area. In a longer transitional phase, it may therefore be necessary for the ECB to exempt the 'catching-up countries' from its inflation targets.

Conclusion

In conclusion, I find strong arguments for the divine coincidence between price stability and economic efficiency as I define it. Together, long-term credit contracts, Friedman's argument, and a tax system with a nominally defined progression in interest rates as well as nominal interest taxation and historical cost accounting make a truly strong case for aiming at price stability. The only major qualification I would make refers to the Balassa-Samuelson effect in the context of the European welfare states with all the nominal wage rigidities they cause. The adjustment of wage structures necessitated by including the former Eastern Bloc countries in the world market economy would without doubt be facilitated by a looser monetary policy.

Fortunately, we have the Bundesbank! With its long experience of successful monetary policy it may be able to give the ECB valuable advice as to what the compromise between these different arguments should mean for practical policy-making.

Notes

- 1 See also Blanchard and Galí (2007) and Blanchard (2009).
- 2 See Lucas (2000) and Sinn (2001) for a discussion of the quantitative importance of this effect.
- 3 See Olivera (1967); Wielens (1971); Tanzi (1978).
- 4 See Sinn (1987).
- 5 See Sinn (1983).
- 6 See Balassa (1964); Samuelson (1964); Sinn and Reutter (2000a), (2000b); ECB (2003); Katsimi (2004).
- 7 See Bewley 1999; Keynes (1935, p. 14).
- 8 See Calvo (1983).
- 9 See Sinn (2007, p. 116).

References

- Balassa, B. (1964) 'The Purchasing Power Parity Doctrine: A Reappraisal', *The Journal of Political Economy*, 72: 584–596.

- Bewley, T. F. (1999) *Why Wages Don't Fall During a Recession*, Cambridge, MA: Harvard University Press.
- Blanchard, O. (2009) 'Monetary Policy, Labour Markets and Fiscal Policy', this volume.
- Blanchard, O. and Galí, J. (2007) 'Real Wage Rigidities and the new Keynesian Model', *Journal of Money, Credit and Banking*, 39: 35–65.
- Blanchard, O. and Katz, L. F. (1999) 'Wage Dynamics: Reconciling Theory and Evidence', *American Economic Review*, 89: 69–74.
- Calvo, G. A. (1983) 'Staggered Prices in a Utility-maximizing Framework', *Journal of Monetary Economics*, 12: 383–398.
- European Central Bank (2003) *Inflation Differentials in the Euro Area: Potential Causes and Policy Implications*, Frankfurt.
- Friedman, M. (1969) 'The Optimum Quantity of Money', in M. Friedman *The Optimum Quantity of Money, and Other Essays*, Chicago, IL: Aldine Publishing Company, 1–50.
- Goofriend, M. and King, R. G. (1997) 'The New Neoclassical Synthesis and the Role of Monetary Policy', *NBER Macroeconomics Annual*, 1997, 231–283s.
- Katsimi, M. (2004) 'Inflation Divergence in the Euro Area: the Balassa-Samuelson Effect', *Applied Economics Letters*, 11: 329–332.
- Keynes, J. M. (1935) *The General Theory of Employment, Interest and Money*, New York: Harcourt, Brace & Co.
- Lucas, R. (2000) 'Inflation and Welfare', *Econometrica*, 68: 247–274.
- Olivera, J. H. G. (1967) 'Money, Prices and Fiscal Lags: A Note on the Dynamics of Inflation', *Banca Nazionale del Lavoro Quarterly Review*, 82: 258–268.
- Phelps, E. S. (1973) 'Inflation in the Theory of Public Finance', *Swedish Journal of Economics*, 75: 67–82.
- Samuelson, P. (1964) 'Theoretical Notes on Trade Problems', *Review of Economics and Statistics*, 46: 145–154.
- Sinn, H-W. (1983) 'Die Inflationsgewinne des Staates', in E. Wille (ed.) *Beiträge zur gesamtwirtschaftlichen Allokation. Allokationsprobleme im intermediären Bereich zwischen öffentlichem und privatem Wirtschaftssektor*, Frankfurt and Bern: Lang, 111–166.
- Sinn, H-W. (1987) 'Inflation, Scheingewinnbesteuerung und Kapitalallokation', in D. Schneider (ed.) *Kapitalmarkt und Finanzierung* (Schriften des Vereins für Socialpolitik), Berlin: Duncker & Humblot, 187–210.
- Sinn, H-W. (2001) 'Inflation and Welfare. Comment on Robert Lucas', in A. Leijonhufvud (ed.) *Monetary Theory as a Basis for Monetary Policy*, IEA, New York: Palgrave, 132–142.
- Sinn, H-W. (2007) *Can Germany be Saved? The Malaise of the World's First Welfare State*, Cambridge, MA: MIT Press.
- Sinn, H-W. and Reutter, M. (2000a) 'The Minimum Inflation Rate for Euroland', *CESifo Working Paper*, 377.
- Sinn, H-W. and Reutter, M. (2000b) 'Die Mindestinflationsrate für die Euro-Länder', *ifo Schnelldienst*, 53: 35–36.
- Tanzi, V. (1978) 'Inflation, Real Tax Revenue, and the Case for Inflationary Finance: Theory with an Application to Argentina', *IMF Staff Papers*, 3: 417–451.
- Wielens, H. (1971) *Inflation kein Alptraum*, Herford: Nicolai.