International Finance 11:2, 2008: pp. 153–165
DOI: 10.1111/j.1468-2362.2008.01220.x

COMMENTARY

Why a Dual Mandate is Right for Monetary Policy*

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I. Introduction

The overflow crowd packed into the Senate's largest hearing room – not the usual home of the Financial Services Committee – fell into a hush as the Chairman of the Federal Reserve Board made his entrance and took the centre seat at the witness table, accompanied by all six of his fellow Board Members. The crowd had a sullen look. The Senators seated around the dais's three tiers appeared angry.

The US economy had been spiralling downward for ten months in the wake of the mortgage market collapse and the steep decline in home prices. Two sizeable commercial banks and seven investment banks had failed, and many of the rest had had to raise capital on highly unfavourable terms. Investors in many uninsured financial instruments still could not get their money back. Not just home mortgage defaults

* This paper draws in part on Friedman (2008a, b). I am grateful to numerous colleagues for helpful discussions and for comments on an earlier draft.

> and foreclosures but corporate bankruptcies too were running at record rates since the 1930s. Industrial production had declined 23% from the previous peak. With 26 million Americans now out of work, unemployment had reached 17% of the labour force.
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> The committee's chairman called the hearing to order, welcomed the witnesses, and sombrely invited the Federal Reserve chairman to present his opening remarks.
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> 'Thank you, Mr. Chairman,' he began. 'I am pleased to report that during the past year US monetary policy has been outstandingly successful. Overall inflation has again been exactly 1.5%. Prices other than for food and energy have risen by just 1.3%. My colleagues and I are here to accept this committee's congratulations and those of the American people'.

Such a situation is, of course, unthinkable. The important question, in light of today's monetary policy debates, is what makes it so.

Any central bank is a part of its nation's government. In the United States our Constitution assigns the power 'to coin money [and] regulate the value thereof' – in modern parlance, the authority to make monetary policy – to the Congress. For nearly a century now, Congress has delegated that power, subject to instruction and to ongoing oversight, to the Federal Reserve System. What is important for this purpose is the substantive content of that instruction.

Under prevailing legislation, Congress has charged the Federal Reserve to conduct monetary policy so as to promote *both* maximum sustainable employment *and* stable prices. This 'dual mandate', as it is often called, stands in contrast to the instruction given to many other countries' central banks to focus primarily, or even exclusively, on maintaining stable prices. Not surprisingly, US monetary policy therefore sometimes differs from the policies pursued in other countries. The current departure of the Federal Reserve's policy course from that pursued by the European Central Bank is an especially visible example. But because of the contrasting instructions from higher authority, such differences will inevitably occur from time to time.

America is well served by the dual mandate governing the nation's monetary policy. Congress should resist the urging of many central bankers, and some academic economists too, to abandon it in favour of an inflation-only or even an inflation-primarily instruction. Indeed, there is ground to think that other countries would do well to consider adopting a central bank instruction of this kind also; but that is, of course, their choice.

Further, as long as Congress does charge this country's central bank to seek both maximum employment and price stability, the Federal Reserve should likewise resist calls to formulate its monetary policy strategy according to an 'inflation targeting' regime. In principle, inflation targeting is consistent with pursuing policy objectives both for prices and for real economic outcomes like employment and output. But in practice that is unlikely to be the case. Moreover, when monetary policy pursues objectives for both prices and real output, an inflation targeting regime is unlikely to deliver the gains in policy transparency and accountability of policy that advocates often claim as its advantages; the more likely result is instead a loss of transparency and a parallel sacrifice of accountability.

Implementing a monetary policy with both nominal and real objectives is not simple. There is more to making monetary policy than simply 'managing' (one is tempted to read: manipulating) the public's expectations. But as in so many other arenas of public policy, the attempt to replace substance with simplicity is often a recipe for unwanted consequences.

II. The Objectives of Monetary Policy

The purpose of any nation's economic policy is to advance its economic well-being, meaning the prosperity of its citizens and the vitality of the institutions through which they participate in economic activity, both in the present and for the future. Whether working men and women are able to make a living, whether they can invest safely for their retirement, whether the businesses that they own and at which they work can earn a profit and invest adequately for future growth, and whether the banks and other financial institutions on which both individuals and businesses rely can survive in the face of the risk-taking that is central to their reason for existing, are all fundamental aspects of that well-being.

Individual citizens are, and have a right to be, concerned with many facets of the economic environment in which they live: their incomes, their employment prospects, the value and safety of the assets they own, their ability to start a business or borrow to purchase a new home, just to name a few. From an aggregate perspective, yet further aspects of an economy's actual and prospective situation are plausibly of concern to public policy makers as well: the levels of production and employment in relation to 'full employment' benchmarks, the economy's international balances, its investment rate, among others.

As the events of the past year have sharply reminded us, monetary policy makers in particular also have both practical and historical reasons for seeking to maintain the vitality of financial institutions and the functioning of financial markets. The Federal Reserve System was created as a direct response to a series of banking crises (in 1901, 1907 and 1913, and before that in the 19th century also) that not only shut down much of the nation's financial system but spilled over to impair the non-financial economy as well. The visible sign of that motivation was the new central bank's charge, in the original Federal Reserve Act, to 'provide an elastic currency'. The collapse of the nation's savings and loan industry in the late 1980s once again showed how the impairment of a country's banking system can interrupt the credit-creation process, destroy asset values, and otherwise impede the ability of households and firms to carry out their ordinary economic affairs. Following the collapse of the sub-prime mortgage market, and the decline in the housing sector more generally, something of the kind is happening again today.

Experience shows that rising (or falling) prices can and sometimes do undermine the efficient functioning of economic activity, not to mention the values of specific financial assets, so that price stability is a key desideratum in all of these regards. But price stability is instrumental, valued not for itself but for how it enhances an economy's capacity to achieve those goals that, even if they are not genuinely primary from the perspective of basic human concerns, are at least instrumental at a higher level. The idea that economic policy should pursue price stability as a means of promoting more fundamental economic well-being, either currently or in the future, is not ground for pursuing price stability at the expense, much less to the exclusion, of that more fundamental economic well-being.

There are two circumstances under which instructing a central bank to look out only for price stability would make sense. One would be that some other instrument of public policy were also capable of serving the same purpose with respect to output and employment, and the differential economic effects of the two policy tools at the government's disposal were such as to warrant assigning responsibility for price stability to one (in this case monetary policy) and for maintaining maximum sustainable employment to the other. Early in the post-World War II period many economists and other participants in the economic policy-making process held out just this hope for the flexible use of fiscal policy. But since then both experience and developments in economic thinking – witness the limited impact of this summer's $150 billion economic stimulus package – have belied that hope. Today no such other policy tool is visible. Hence the importance attached to monetary policy, in practically every quarter, with respect to both the economy's inflation rate and its level of output and employment.

Alternatively, if monetary policy were *unable* to exert influence over output and employment in any more direct way than via the evolution of prices, then (from the perspective of how to conduct monetary policy, though not more generally) promoting fundamental economic well-being and pursuing price stability would amount to the same objective. It is presumably true that over long horizons an economy's average inflation rate depends on monetary policy in a way that its average productivity growth and its 'full employment' rate of unemployment do not.[1] But today few economists, and certainly few business people, market investors, or even ordinary citizens who concern themselves with economic affairs, believe that actions taken by the central bank have no impact on output or employment, or real economic outcomes more generally, over time spans that are very much of public concern. The fact that monetary policy cannot increase an economy's 'natural' rate of employment or its full employment output level–and, importantly, should not be called upon to do so–is no reason not to look to monetary policy to keep employment and output as close as possible to those levels in the face of business–cycle disturbances.

Nor is it the case that over short- to medium-run horizons the monetary policy actions that are best for achieving price stability are always best for achieving maximum sustainable output and employment. (Olivier Blanchard and Jordi Gali call this possibility a 'divine coincidence'; Blanchard and Gali 2007.) That correspondence too may or may not hold in the long run, but not over the time frame with which citizens, investors and policy makers are also rightly concerned.

It is not legitimate, therefore, to duck the question of whether and how monetary policy *should* seek to affect real economic outcomes by subsuming that question within the prior one of whether monetary policy *can* do so. Both theory and evidence indicate that in an economy like that of the United States monetary policy can affect not just prices but also output, employment and other important aspects of non-financial economic activity, and can affect them over at least some significant period of time. The relevant question is in what way it should seek to do so. That, in turn, is what the instructions given to the central bank are all about.

III. Explicit Dual Mandates versus Implicit Instructions

The US Federal Reserve System may be unusual in operating under an explicit dual mandate, but it is hardly the only central bank where policy makers are concerned about output and employment, or the preservation of financial markets and institutions, or any of the other familiar considerations that are often at the heart of monetary policy. Even those central banks

[1]Whether these features of long-run real economic activity are *entirely* independent of monetary policy is more questionable; the economy's investment rate affects its productivity growth, and sustained periods of actual unemployment can affect the corresponding 'natural' rate by influencing either labour market institutions or social attitudes. For evidence on the effect of monetary policy on the economy's long-run investment ratio, see Ahmed and Rogers (2000). For evidence on effects in the labour market, see Blanchard and Summers (1986) and Ball (1997).

that conduct monetary policy according to an inflation targeting regime, or whose public charge places clear primacy on maintaining price stability, normally seek to achieve that objective at the least possible cost in terms of foregone output, employment, incomes and profits. In Mervyn King's famous phrase, there are few 'inflation nutters' (King 1997).

What, then, are the relative merits of an explicit dual mandate versus such a more implicit approach? Pure inflation targeting regimes, in which the central bank specifies a numerical target for the increase of some chosen price index and then articulates its monetary policy strategy entirely in terms of the intended path of inflation relative to the target rate, leave any real objectives completely unspecified. A few inflation-targeting central banks (in Norway and Sweden, for example) have made public their underlying analytical apparatus in a way that does make explicit how they take into account the real consequences of their policies.[2] But none of the larger inflation targeters have done so, and it is unclear to what extent anyone outside these banks pays attention to such analytical formalisms.

Hierarchical, or 'lexicographic', policy instructions – which some economists now favour for the United States – at least acknowledge the existence of real objectives for monetary policy. But they do so in a way that, if taken literally, absurdly implies that an outcome like the one portrayed in the fictional Senate hearing described above would be acceptable. In the United Kingdom, for example, the Chancellor of the Exchequer has charged the Bank of England to achieve an inflation rate of 2%, ± 1%, and only then, 'subject to that', to pursue further objectives like full employment and a satisfactory pace of real economic activity. In principle, therefore, in the face of a large enough inflationary disturbance, the Bank would be obligated to forgo efforts to forestall even a potentially devastating real economic decline. (Further, because the target specified by the Chancellor refers to 'headline' inflation, not 'core' inflation as the Federal Reserve chooses to interpret the price stability element of its dual mandate, in principle the Bank is obligated to seek to depress economic activity by enough to make the prices of other goods *decline* whenever food and energy prices experience large increases.)

Surely no one takes these implications at face value. Indeed, for just this reason, it is not surprising that the relevant empirical literature has mostly failed to find much difference in macroeconomic performance between countries whose central banks do and do not use inflation targeting. Hence a hierarchical instruction to the central bank is, really, a kind of dual mandate as well. The difference is that it is an unspoken one. Everyone presumably understands that there are some things worse than an extra 0.1% increase in

[2]See Svensson (2007) for an exposition of how this can be done, and the websites of the Sveriges Riksbank and the Norges Bank for descriptions of current practice.

prices, and that under some circumstances the central bank will act so as to prevent them. But the nature of those circumstances – even their potential existence – remains unspecified. So do the aspects of economic activity to which they refer and the dimensions of the movement, either actual or threatened, that would warrant departing from the supposed hierarchy of policy objectives.

A generation ago this difference between preferences for explicit versus implicit instructions given to the central bank would perhaps have been an unremarkable matter of bureaucratic organization, or even merely of personal taste and style. In recent decades, however, much of the work on monetary policy done both by academic economists and within the leading central banks has emphasized the advantages supposedly conveyed by making policy makers' intentions as clearly known to the public as possible. And, at least as far as first appearances go, in this area of central banking practice has closely followed theory. A few decades ago most central bankers apparently thought it unwise to explain their policy objectives to the public except in the most general and abstract terms. Addressing specific policy actions was even rarer. Today central bankers in most countries communicate regularly with the public about both their objectives and their actions, using a variety of mechanisms including official governmental reports, regularly released economic analyses, post-decision announcements, testimony before higher government authorities, press conferences and public speeches by individual policy makers.[3]

One now-standard argument favouring such transparency is that the resulting greater predictability of monetary policy – to be precise, greater *conditional* predictability – leads to more efficient decision making by private investors, firms and workers involved in determining prices and wages, and by many others too. Private economic decision makers face many uncertainties that the makers of public policy cannot help to resolve. One that central bankers can at least reduce is the uncertainty associated with their own intentions and what decisions *they* will make under given plausible sets of circumstances.

A second argument for greater transparency of monetary policy, closely related to the aim of enhancing the efficiency of private decision making but nonetheless independent of it, is to enable both higher political authority and the body politic at large to hold monetary policy makers accountable for their success or failure in achieving the ends to which they are charged. More explicit articulation of those ends clearly facilitates greater accountability. Explicitly articulating one objective, while leaving others implicit, fosters accountability of that one but not the others.

[3]For a comprehensive survey of current practice, see Blinder et al. (2008).

For just these reasons, the recent infatuation with the idea of a hierarchical mandate to replace the Federal Reserve's existing dual mandate – publicly giving policy makers an instruction that they are implicitly not to take literally – is puzzling if taken at face value. As in the debate that was current a few years ago over whether the Federal Reserve should adopt inflation targeting (see, for example, Friedman 2004; Mishkin 2004), there is probably more to it than that.

IV. The 'Management' of Expectations

Given the fact that most central banks do have objectives for real economic outcomes, at least implicitly if not following an outright dual mandate, it is clear why monetary policy makers should care what people think. Modern representations of price and wage determination – the various models underlying the New Keynesian Phillips curve, for example, but by no means those formulations alone – relate pricing decisions to two distinct influences: (1) Price setters will set higher prices, all else equal, if their marginal costs of production are higher, and on average across all producers, marginal costs will be higher if the economy's level of aggregate demand is greater compared with the relevant 'natural' or 'full employment' output. (2) For given marginal cost, price setters will likewise set higher prices as they expect either prices or inflation to be higher in the future; hence expectations also matter. Both of these influences on price determination are operative, and in exactly this way, in models based on random price flexibility *à la* Calvo, staggered contracts *à la* Taylor, convex costs of adjustment *à la* Rotemberg, 'Ss' pricing *à la* Gertler and Leahy, and, in all probability, others as well.[4]

In light of this independent role for expectations, central bankers' concern for the public credibility of their commitment to a low-inflation trajectory, along the lines of the familiar time-inconsistency literature, is readily understandable.[5] The lower is expected inflation, the smaller is the real economic cost in terms of foregone output and employment required to contain the inflationary consequences of an adverse shock like an increase in oil or food prices. Similarly, the lower is expected inflation, the smaller is the real economic cost of returning to a low-inflation trajectory after some past sequence of events – a series of oil price increases, or perhaps the need to

[4]The standard references are Calvo (1983), Taylor (1979), Rotemberg (1982, 1987), and Gertler and Leahy (2005). See Roberts (1995) for a useful review of how each of the first three of these models leads to approximately the same new 'New Keynesian' Phillips curve. The Gertler–Leahy model, as the authors explain, has the same property.

[5]The standard reference is Rogoff (1985).

keep interest rates low for some time in the wake of an eruption of credit defaults and financial market fragility – has placed the economy on a path along which inflation is already too rapid. Depending on the relative magnitudes assigned to the two key terms in the aggregate price-setting mechanism, it is easy to understand the view, increasingly found in research on monetary policy, that the essence of monetary policy consists of managing expectations.[6]

Anything that helps to 'manage' the relevant expectations, therefore, serves as a substitute for monetary policy in the standard sense of higher or lower interest rates and greater or lesser liquidity of credit markets. For a given adverse shock to the economy's productive capacity, or a given starting point with unacceptably rapid inflation, there is a continuum of combinations of interest rate increases and inflation expectations that will result in either maintaining the desired inflation rate or returning to it. More success at persuading the public that future inflation will be low means less need for higher interest rates and depressed aggregate demand. More success by the central bank's press office means less need for reliance on the open market desk. So too does more influence on expectations achieved by the nature of the instruction given to the central bank by higher authority.

Importantly, however, along this continuum of interest rate and inflation expectation combinations that will maintain the desired inflation rate in the face of a given adverse shock, or restore the desired degree of price stability starting from initial conditions with inflation already unacceptably rapid, each such combination corresponds to a different real economic cost. Those combinations with lower inflation expectations, and therefore a smaller required increase in interest rates, involve less reduction of output and employment compared with the prevailing full employment levels. In short, disinflation achieved by the open market desk involves real economic cost; disinflation achieved by the central bank's press office – or by the nature of its fundamental charge – does not.

This incentive for monetary policy makers to shape the public's expectations is hardly unique in economic policy making, or even within the scope of central banking. To cite the example provided by recent events in the United States, in most economies the central bank not only makes monetary policy but also acts as the lender-of-last-resort. Before a liquidity crisis occurs, any lender-of-last-resort will naturally want the operators of private financial institutions to believe that official assistance will rarely be forthcoming, and even then only on onerous terms. Otherwise the resulting

[6]See, for example, Eggertsson and Woodford (2003) for a sharp articulation of this view in the context of the threat of *deflation* that US monetary policy makers, along with those in several other countries, perceived earlier in this decade.

'moral hazard' would create incentives for private parties to game the protective system by taking risks that they would not otherwise assume. But once a crisis is in full swing – in this specific instance, if one of the economy's five largest investment banks is threatened with bankruptcy and its numerous counterparties with chaos – a responsible lender-of-last-resort will presumably act promptly and aggressively to effect a rescue, if necessary even on terms advantageous (under the straitened circumstances) to the private parties involved.

It is not surprising, therefore, that in the monetary policy sphere as well central banks often seek to 'manage' expectations without undertaking real monetary policy actions. The rhetorical devices used for this purpose include easing interest rates, or at least not tightening them, while simultaneously issuing a contrasting 'bias' or 'balance of risk' statement to signal that policy makers' aims nonetheless remain firmly fixed on low inflation (the Federal Reserve); issuing a detailed quarterly report on the central bank's monetary policy deliberations and actions but calling it the 'Inflation Report', as if inflation were policy makers' sole concern (the Bank of England); publishing a description and rationale of the central bank's monetary policy strategy that simply asserts the presumed long-run efficiency advantages of aggregate price stability for aggregate output, while giving no hint of any tension between inflation and output at nearer horizons (the Bank of Canada); and the list goes on. To the extent that the instruction given to the central bank likewise constitutes public information about its monetary policy intentions and strategy, it too is potentially such a rhetorical device.

Just a year or two ago, an even-handed assessment might well have expressed cautious optimism that, with the passage of time, the world of monetary policy making would eventually outgrow the legacy of the inflation of the 1970s, including the fixation on credibility of the central bank's commitment to low inflation, and the other well-known implications of the logic of time inconsistency. Today, under the burden of a lengthening list of new adverse shocks – food, energy, the end of the information technology investment boom, proliferating security measures that likewise impinge on productivity gains – it seems more likely that the 1970s in this regard will be with us somewhat longer. It is no surprise, therefore, that even the question of what instruction a country should give to its central bank has now become a recommended aspect of the 'management' of the public's expectations for this purpose.

V. Understanding the Cost

One would hope, however – one *should* hope – that fundamentally important matters like what a country's government instructs its central bank to do would not fall victim to the same understandable desire to place rhetoric before substance. The likely damage would result in the first instance from undermining precisely those objectives that transparency about monetary policy is supposed to achieve, namely enhanced efficiency and accountability. If the relevant higher authority obfuscates what the central bank is supposed to do – more specifically, if it explicitly identifies one among a set of objectives but leaves the others implicit, or even conceals them altogether – the purported efficiency gains to private sector decision making from greater predictability of future policy actions are obviously nullified. The result is the same as when the central bank itself obfuscates its objectives, as under most forms of inflation targeting. Similarly, if the central bank's public instruction obscures its policy actions, the purported gains to the democratic accountability of its decision making are precluded as well.

Even more important than the likelihood of problems due to obfuscation and opacity, however, is the prospect that the central bank will end up acting on the basis of its instruction and will thereby achieve an incomplete or distorted set of policy objectives. After all, in most circumstances the central bank's ability to manage expectations independently of what actual monetary policy does is presumably highly limited.[7] To be sure, the communication policies of many central banks today suggest that policy makers believe that it is possible at least to persuade many people (perhaps even including themselves), for at least some period of time, of things that may or may not be true, and presumably this is so. The practically relevant issues in this regard occupy a portion of the horizon spectrum that plays out well before it becomes necessary to conceive of the central bank governor as the Wizard of Oz.[8] But presumably a government does not frequently change the set of policy instructions it publicly gives to its central bank. And, just as presumably, over time – at least in well-ordered polities – most central banks' tendency will be to comply, in so far as is possible, with the instructions given.

In the end, therefore, the questions that matter for such purposes are the fundamental ones: Given that monetary policy *can* influence real economic outcomes, and that no alternative policy instrument is available to undertake this task over the time horizons that we customarily look to monetary policy to address, what should citizens look to their central bank to do? And in what way should their government, to which the central bank is immediately

[7]For just this reason, much of the research literature on 'managing expectations' proceeds from the assumption that the central bank will indeed make good on its expected policy strategy if the relevant contingency is realized (see again Eggertsson and Woodford 2003).

[8]Economists' usual procedure when confronted with questions of this generic form is to fall back on the familiar mantra that one cannot fool all the people all the time; but this line of reasoning is actually not very helpful for many practical purposes.

responsible, instruct the central bank to do that to the best of its ability? Citizens are entitled to want their central bank to concern itself – because *they* are rightly concerned – not just with price stability but real outcomes too. A dual mandate, explicitly addressing *both* inflation *and* output and employment, is the best way we know to achieve those ends.

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