

## Frederic S Mishkin: Monetary policy and the dual mandate

Remarks by Mr Frederic S Mishkin, Member of the Board of Governors of the US Federal Reserve System, at Bridgewater College, Bridgewater, Virginia, 10 April 2007.

\* \* \*

Thank you for inviting me to talk with you today.<sup>1</sup> I would like to direct my remarks to the macroeconomic mission of the Federal Reserve System. I wish to note that these remarks reflect only my own views and not those of the Federal Reserve Board or of anyone else associated with the Federal Reserve System.

In a democratic society like our own, the ultimate purpose of the central bank is to promote the public good by pursuing a course of monetary policy that fosters economic prosperity and social welfare. In the United States, as in virtually every other country, the central bank has a more specific set of objectives that have been established by the government. This mandate was originally specified by the Federal Reserve Act of 1913 and was most recently clarified by an amendment to the Federal Reserve Act in 1977.

According to this legislation, the Federal Reserve's mandate is "to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates." Because long-term interest rates can remain low only in a stable macroeconomic environment, these goals are often referred to as the *dual mandate*; that is, the Federal Reserve seeks to promote the two coequal objectives of maximum employment and price stability. In the remainder of my remarks today, I will describe how these two objectives are consistent with our ultimate purpose of fostering economic prosperity and social welfare. I will then talk about some important practical challenges in implementing these goals.

(By the way, I wish that I could also discuss the Federal Reserve's role in promoting the stability of the financial system, another key objective of central banks, but unfortunately that would violate my own personal mandate of finishing this speech in the allotted time.)

Now with respect to the first objective, the rationale for maximizing employment is fairly obvious. The alternative situation – high unemployment – is associated with human misery, including lower living standards and increases in poverty as well as social pathologies such as loss of self-esteem, a higher incidence of divorce, increased rates of violent crime, and even suicide. Furthermore, when unemployment is high, the economy has idle workers along with a reduced level of production and household income. And when factories are idle, firms generally choose not to invest in additional plant and equipment, which in turn has adverse consequences for subsequent labor productivity and economic growth. All these symptoms of high unemployment were observed during the economic devastation of the Great Depression during the 1930s, which is now just a fading memory. But even less severe recessions are associated with painful consequences for many individual workers and their families.

With respect to the second objective – that of price stability – there is now a broad consensus among policymakers, academic economists, and the general public in support of the principle that maintaining a low and stable inflation rate provides lasting benefits to the economy. In particular, low and predictable inflation promotes social welfare by simplifying the savings and retirement planning of individual households and by facilitating firms' production and investment decisions. Furthermore, an environment of overall price stability contributes to economic efficiency by reducing the variability of relative prices and by minimizing the distortions that arise because the tax system is not completely indexed to inflation.

Price stability also has important benefits in terms of equity. For example, an elevated inflation rate typically *increases* poverty because the poorest members of society do not have access to the sorts of financial instruments that would help protect them against inflation. By the way, these are not just theoretical arguments: The experience of the United States in the 1970s, and that of many other economies across a wide range of times and circumstances, demonstrates that high and unstable

---

<sup>1</sup> I want to thank [Andrew Levin](#), Brian Madigan, and Spencer Dale for their extremely helpful comments on and assistance with this speech.

inflation generally detracts from the standard of living, hinders the process of capital formation and economic growth, and in some countries has even led to political and social instability. Such episodes also show that a full recovery from the adverse effects of severe inflation can take many years.

Although I could spend all morning extolling the virtues of the dual mandate, let me now turn to describing some of the challenges that the Federal Reserve faces in implementing this mandate.

The first challenge is determining how to interpret the dual mandate. Of course, the Federal Reserve doesn't take a literal approach to the goal of maximum employment. In that case, our policies would need to be directed at getting everyone to work at least one hundred hours a week, and we would have to discourage senior citizens from retiring and young people from attending college instead of entering the labor force. Furthermore, every modern economy has a certain level of "frictional" unemployment, which reflects the transitory periods over which individuals remain voluntarily unemployed while searching for a new job. Partly for these reasons, Federal Reserve officials and other policymakers often refer to this aspect of the dual mandate as the goal of maximum sustainable employment, and they place particular emphasis on the word *sustainable*.

Similarly, in promoting the goal of price stability, policymakers have generally not taken this goal literally – by aiming at complete constancy of the price level – but instead have pursued policies aimed at maintaining a low and predictable inflation rate. In particular, at a congressional hearing in mid-1988, then-Chairman Greenspan defined price stability as an environment in which households and businesses "can safely ignore the possibility of sustained, generalized price increases or decreases" in making their saving and investment decisions.<sup>2</sup>

Now let's turn to the practical challenges in conducting monetary policy to achieve the dual mandate.

A central element in successful monetary policy is a strong commitment to a *nominal anchor*, that is, the use of monetary policy actions and statements to maintain low and stable inflation. During the 1980s and 1990s, the Federal Reserve succeeded in bringing inflation down from double-digit levels to the average rate of about 2 percent that has prevailed over the past decade. Moreover, when some measures of inflation were close to 1 percent in 2003, the Federal Open Market Committee's official statements specifically noted that any further substantial decline in inflation would be unwelcome, mainly because of the risk that a falling price level (which has not occurred since the Great Depression) could cause a significant disruption to economic activity and employment.

In recent years, the Federal Reserve has been quite successful in maintaining a nominal anchor. Not only has the inflation rate remained within a reasonably narrow range, but inflation expectations, as measured by spreads between inflation-indexed and non-inflation-indexed Treasury securities and by surveys of professional forecasters and the general public, have also been well anchored.

Maintaining price stability is also essential for achieving the other element of the dual mandate, namely, maximum sustainable employment. First, as I have already emphasized, a low and predictable inflation rate plays a crucial role in facilitating long-term growth in employment and labor productivity. Second, although the economy will inevitably be buffeted by various shocks, in the majority of circumstances the appropriate monetary policy response to stabilize inflation also helps to stabilize employment and output fluctuations around their maximum sustainable levels. In other words, the two elements of the dual mandate are usually complementary.

To see how a commitment to price stability leads to appropriate policy actions to stabilize employment and output fluctuations, we need to understand that there are two key determinants of inflation: inflation expectations and the amount of slack in the economy.<sup>3</sup> Maintaining a nominal anchor helps stabilize inflation expectations, which in turn means that rises or falls in inflation tend to be highly correlated with economic slack. Thus, stabilizing inflation also helps to stabilize economic activity around sustainable levels.

To see further how this process would work, consider a negative shock to aggregate demand (such as a decline in consumer confidence) that causes households to cut spending. The drop in demand

---

<sup>2</sup> Alan Greenspan (1988), [statement before the Committee on Banking, Finance, and Urban Affairs \(746 KB PDF\)](#), U.S. Senate, July 13.

<sup>3</sup> Two other important factors are import prices, which are determined by world market prices and exchange rates, and relative energy prices, such as the price of oil. However, a central bank has no control over world market or relative oil prices, and so adding these factors into the analysis does not change the basic conclusion here.

leads, in turn, to a decline in actual output relative to its potential, that is, the level of output that the economy can produce at the maximum sustainable level of employment. As a result, future inflation will fall below levels consistent with price stability, and the central bank will pursue an expansionary policy to keep inflation from falling. The expansionary policy will then result in an increase in demand that raises output back up to potential output in order to return inflation to a level consistent with price stability.

For example, during the last recession the Federal Reserve reduced its target for the federal funds rate a total of 5-1/2 percentage points, and this stimulus not only contributed to economic recovery but also helped avoid an unwelcome further decline in inflation. In other cases, a tightening of the stance of monetary policy is needed to prevent an "overheating" of economic activity, thereby avoiding a boom-bust cycle in the level of employment as well as an undesirable upward spurt of inflation.

A strong commitment to price stability helps reduce fluctuations in employment and output in other ways. First, when inflation expectations are well anchored, a central bank will not have to worry that expansionary policy to counter a negative demand shock will lead to a sharp rise in expected inflation – a so-called inflation scare – that will then push up actual inflation in the future. Thus, a strong commitment to a nominal anchor enables a central bank to be more aggressive in the face of negative shocks and therefore to prevent rapid declines in employment or output.

Moreover, with a strong commitment to a nominal anchor, supply shocks to inflation, such as a rise in relative energy prices, are likely to have only a temporary effect on inflation. This result is exactly what we have seen in the United States. Because people are confident that the Fed will not allow inflation to remain high, the recent sharp run-up in oil prices did not lead to a sustained rise in longer-run inflation expectations. As a result, inflation rose temporarily but has now been falling back again. When inflation expectations are well-anchored, the occurrence of an adverse aggregate supply shock does not necessarily mean that the central bank must raise interest rates aggressively in order to keep inflation under control, and hence the commitment to price stability can help avoid imposing unnecessary harm on the economy and on the workers who are most vulnerable to a weakening of economic activity.

Now that we see the benefits of maintaining a commitment to a nominal anchor, one might naturally think that there would also be benefits to establishing a similar sort of anchor for the maximum level of employment. But that thought would be incorrect.

In particular, although the Federal Reserve can determine and achieve the long-run average rate of inflation in keeping with its mandate of price stability, the level of maximum sustainable employment is *not* something that can be chosen by the Federal Reserve because *no* central bank can control the level of real economic activity or employment over the longer run. As I've already emphasized, monetary policy can certainly help improve the maximum sustainable employment of the economy by maintaining low and predictable inflation. But any attempt to use stimulative monetary policy to maintain employment above its long-run sustainable level will inevitably lead to an upward spiral of inflation and therefore will actually undermine the productive capacity of the economy, with severe adverse consequences for household income and employment.

Indeed, the level of maximum sustainable employment is primarily driven by the fundamental structure of the economy, including factors such as demographics, people's preferences, the efficiency of labor markets, the characteristics of the tax code, and so forth. And many policies outside the control of the Fed can have a significant effect on the efficiency of the economy and hence on the maximum sustainable level of employment.

Another crucial challenge in implementing the dual mandate is that the level of maximum sustainable employment *cannot* be directly observed and is subject to considerable uncertainty. Indeed, economists do not even agree on the economic theory or econometric methods that should be used to measure the level of maximum sustainable employment. This challenge would be less formidable if the structure of the U.S. economy remained fairly constant over a sufficiently long period of time. In that case, a reasonably good estimate of the natural unemployment rate – the unemployment rate consistent with maximum sustainable employment – could be obtained from the actual long-term average rate of unemployment, and one could similarly estimate the path of potential output by fitting a trend to actual gross domestic product (GDP) data. In fact, however, such estimates can be highly misleading because the structure of the U.S. economy is highly dynamic and evolves almost continuously over time.

In particular, over the past few decades the natural unemployment rate and the path of potential output have apparently moved around quite substantially. If we do not recognize the potential for such shifts, they can pose serious pitfalls for the conduct of monetary policy. It is difficult to gauge these structural changes even with the benefit of hindsight, and it is even more difficult to recognize such developments when they occur. For example, most economists now agree that the natural unemployment rate shifted upward in the late 1960s and that potential output growth shifted downward after 1970. However, perhaps because these shifts were not generally recognized until much later, monetary policy in the 1970s seems to have been aimed at *unsustainable* levels of output and employment, and hence policymakers may have unwittingly contributed to a series of boom-bust cycles as well as accelerating inflation that reached double digits by the end of the decade. And although subsequent monetary policy tightening was successful in bringing inflation back under control, the toll was a severe recession in 1981-82, which pushed up the unemployment rate to around 10 percent.

The opposite problem occurred in the second half of the 1990s, when the common view among economists was that the natural rate of unemployment was near 6 percent. When the actual unemployment rate dropped close to 4 percent, and the economy was growing at a rate that many economists viewed as unsustainable, there were widespread calls for the Fed to raise interest rates to prevent an acceleration in inflation. Under Chairman Greenspan's leadership, however, the Federal Reserve resisted these views because it did not see inflation pressures developing and questioned whether the common estimate of the natural rate of unemployment was correct. The result was that the Fed did not tighten monetary policy, and the economy reaped the benefits of the new economy: very low levels of unemployment and a modest decline in the inflation rate.

Attempting to anchor a particular rate of growth of output and employment in the longer term could therefore lead to seriously flawed policies. As I have already noted, an attempt by the Fed to achieve growth that is higher than the underlying growth rate of productive capacity would lead to unnecessary fluctuations of employment and inflation. And trying to achieve growth that is lower than the economy's true potential growth rate would create unnecessary unemployment and generate deflationary pressures that would subsequently have to be reversed.

Given the possible pitfalls of trying to anchor the level of output or employment, what is the best way for a central bank to minimize deviations of employment from its maximum sustainable level?

To be sure, central banks need to form some views about the economy's potential to produce on a sustained basis. After all, as I have already noted, the amount of slack in the economy is a key determinant of inflation. But, rather than focusing on fixed estimates of potential output or the natural rate of unemployment, central banks should take an eclectic approach in assessing the overall balance of economic activity relative to productive capacity. In other words, in pursuing the dual mandate, the central bank should recognize that a wide variety of indicators drawn from labor, product, and financial markets provide information about the overall balance of supply and demand in the economy. In addition, central banks should use information from various price indicators to tell them whether the economy is overheating or running well below productive capacity.

In some circumstances, a temporary tradeoff between the two elements of the dual mandate may exist. Unforeseen shocks to the economy – an adverse supply shock, for example – might lead to inflation that is temporarily above levels consistent with price stability at the same time that employment is growing more slowly than its maximum sustainable pace. In such a situation, returning inflation too quickly to levels consistent with price stability might unnecessarily exacerbate the economic weakness. Instead, while restoring price stability remains critical, the central bank should do so at a pace that does not do undue harm to the economy.

Finally, central banks should respond aggressively to output and employment fluctuations on those (hopefully rare) occasions when the economy is very far below any reasonable measure of its potential. In this case, errors in measuring potential output or the natural rate of unemployment are likely to be swamped by the large magnitude of resource gaps, so it is far clearer that expansionary policy is appropriate. Furthermore, taking such actions need not threaten the central bank's credibility in its pursuit of price stability.

It should be clear from my remarks today that although as a Federal Reserve official I am legally obligated to fulfill the dual mandate, I am actually an enthusiastic supporter. The best way to achieve the mandate is for the Federal Reserve to have a strong commitment to a nominal anchor to promote price stability, but with a focus on keeping employment as close as possible to its maximum sustainable level.