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Monetary Policy In An Integrated

World Economy

Address by Manuel H. Johnson

Vice Chairman

Board of Governors of the

Federal Reserve System

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MONETARY POLICY IN AN INTEGRATED WORLD ECONOMY

It is a pleasure to give the opening address at this Cato Conference focusing on the Global Monetary Order. Given the revolutionary changes in Europe and elsewhere, the theme of this conference is quite timely and appropriately broad-based: monetary policy, the regulation of international financial markets, as well as world monetary reform are all on the agenda.

As the conference program states, "the globalization process raises a number of questions, one of the most important being how to achieve monetary stability in an integrated world economy." This morning, I would like to specifically address this issue. In particular, I want to talk about the formulation and implementation of monetary policy by central banks in a more deregulated, more globally integrated financial system.

Perhaps I should begin by describing the nature of the current monetary regime and some of the key factors shaping today's more dynamic economic and financial systems.

The major trading regions of the world generally operate under a fiat money/flexible exchange rate regime. Admittedly, currency arrangements appear to be evolving into a system of multi-polar, currency blocs. Thus, the term "flexible" is used advisedly; perhaps "dirty" or "managed" float would be more appropriate. There is little doubt that a good deal of (largely sterilized) intervention has occurred in recent years. Nonetheless, there also can be little doubt that exchange rates between major trading regions do move all too frequently and often by substantial magnitudes. Exchange rate movements certainly play a large role in the transmission of changes in monetary policy as well as in the balance of payments adjustment mechanism. Nonetheless, reserve holdings have actually increased, despite the belief by some that reserve holdings would

decline when exchange rates were allowed to float. In particular, the dollar continues to serve as a key reserve currency under current international monetary arrangements.

As the theme of this conference indicates, we live in an increasingly integrated and deregulated financial system. Revolutions in telecommunications and information processing have dramatically lowered the costs of acquiring, disseminating, and processing information and undoubtedly have quickened the pace of the integration process. These revolutions fostered a host of financial innovations which in turn enabled price, geographic, and product regulations of financial services to be readily circumvented. In so doing, these advances promoted the deregulation of these financial services which in turn allowed both financial markets and more generally the entire market system to function more efficiently.

These developments have literally changed the world; no part of the world, not even the centrally planned economies, has escaped the effects of these changes. Indeed, the vast improvements in the workings of market-based systems underscored the increasing problems of centrally planned economies. The growing production of both information and knowledge has contributed to an increasingly complex world and made it ever more obvious that such information and knowledge is by its very nature, decentralized and dispersed. And, as the socialist-calculation debate of the 1930s demonstrated, market-based systems are necessarily more efficient at processing and transmitting information about relative supply and demand conditions and providing incentives to produce and distribute desired goods and services.

Characteristics of this Environment

One important characteristic of our current environment is the increasingly large and rapid flows of money and financial capital. Capital flows, for example, have increased dramatically in recent years. Not only has the size of these capital flows increased, but such capital transfers occur more quickly; many financial adjustments or provisional payments settlements can now occur virtually instantaneously. Furthermore, such movements occur continuously. Foreign exchange and some futures markets, for example, operate 24 hours a day around the globe. While currency substitution has not been empirically important in the industrialized world to date, this could change. Nevertheless, it has already been recognized that these substantial capital flows may well be so potent that they now drive trade flows rather than the other way around.

Portfolio adjustments within national borders and between various domestic financial markets have also become large and rapid. Individuals and corporations can easily and quickly move huge sums of money and financial capital between various financial instruments and between financial markets. As illustrations, we need only mention the advent of various money market mutual funds or stock index futures and program trading.

Another important characteristic of an increasingly integrated financial environment is that financial markets have become more interdependent and less separate and segmented. National economies are now more influenced by international factors as opposed to their more isolated character of the past. All economies are increasingly open economies and the only truly closed economy is the world economy. In this environment, prices of financial assets, traded goods, and interest rates have

become increasingly interrelated and can even move in unison depending on the exchange rate regime.

For example, on October 19, 1987 we witnessed the virtual simultaneous and nearly instantaneous "adjustment" of world equity prices. Recently, inflation rates of many large industrial economies have tended to converge as the desire for exchange rate stability has led to more coordinated monetary policies.

An implication of this characteristic is that the U.S. economy increasingly is a portion, albeit a major portion, of the global economy rather than the overwhelmingly dominant player it was immediately after World War II. Accordingly, the actions or policies of other significant players now has greater spillover effects on U.S. markets either through movements in the exchange rate or in other financial asset prices. Research has shown, for example, that the variability of exchange rates, commodity prices, bond prices, and equity prices has been

significantly greater during the last several years relative to the earlier postwar period. More than likely this increased volatility was the result of more efficient information processing and greater international financial integration combined with variances in domestic monetary policy goals among industrial countries.

Implications for Monetary Policy

I believe there are several major monetary policy implications that arise from the greater degree of integration we see today and in the future. These implications relate to (1) the appropriate data for use as monetary policy indicators or guides, (2) the appropriate anchor for the system, and (3) the coordination of monetary policy.

Appropriate Data for Use as Monetary Policy

Indicators or Guides

The information requirements of a monetary authority operating in the world today are monumental. In

order to conduct appropriate policies in such a rapidly changing environment, central banks must have information that is relevant, reliable, as well as quickly and continuously available. Since monetary policy necessarily relates to the future, forward looking information is critical.

Yet it is evident that we live in a complex world of vast information needs where knowledge is decentralized and highly disaggregated. Accordingly, mechanisms are needed that work to summarize or aggregate defused data in order to make it useful for policymakers.

Since financial integration and deregulation have fostered large and rapid flows of financial capital, the timely and accurate compilation and measurement of such financial quantity variables have proven difficult and elusive. Current measures of money, particularly narrow transactions balances, have proven to be much less reliable than was earlier the case.

In a rapidly changing world, the time consuming and cumbersome process of collecting and compiling large amounts of quantity data is not likely to be the most effective way of summarizing and aggregating information or of obtaining timely and accurate data upon which to base policy decisions.

Measures of the quantity of money and financial capital are, after all, necessarily based on samples. Accordingly, such quantity data are subject to revisions and rebenchmarks that can often be substantial. Also, sampling techniques take time so that there is an inherent lag in the reporting of such data. Because financial flows move rapidly today, quantity measures are often outdated and sometimes fully obsolete by the time they are compiled and published. Measures of international financial capital movements, for example, are both notoriously inaccurate and sometimes published only months after they occur.

But international money and capital flows are not the only forms of financial flows which are now more difficult to measure. The proliferation of transactions instruments associated with deregulation, together with the ease of portfolio adjustments, has rendered the measurement of various domestic financial variables difficult as well. It is well known, for example, that the accurate measurement of narrow transactions balances has proven illusory. In part because of such measurement difficulties, narrowly defined monetary aggregates (such as M1) have become much less useful as guides to monetary policy than was earlier the case.

But there are still other problems with quantity data. To be useful, for example, quantity data must be seasonally adjusted. And should redefinitions of variables occur, due, for example, to deregulation, technological, or institutional developments, the altered measurements and changed behavior of particular variables can be substantial.

In sum, there are significant measurement, timing, and sometimes definitional problems associated with the use of sample-based quantity data, particularly in our current rapidly changing and increasingly integrated financial system.

Price data, however, specifically price data from centralized auction markets such as bond, foreign exchange, and commodity markets, have a number of advantages for use as policy guides, especially in the fast paced world of today. To understand why this is the case, it is useful to remember that financial market prices are summaries of or aggregators of information embodying the knowledge and expectations of large numbers of buyers and sellers who have incentives to make informed decisions in an uncertain world. Active competitive markets are a mechanism that efficiently absorbs and processes dispersed information.

As a consequence of this property, financial market prices (such as exchange rates, commodity prices, and

bond prices) provide useful information. Furthermore, they are timely and readily available literally by the minute. They are accurate, less subject to sampling error, and are not subject to revisions, rebenchmarks, seasonal adjustments or "shift-adjustments" that often plague quantity data.

Since market prices embody expectations of the future, they are inherently forward looking, offering a distinct advantage over any form of quantity data. This is a particularly important quality for monetary policymakers who necessarily must be forward looking in their decisions.

Because financial market prices are forward looking, they contain information about inflation expectations. For example, if the markets consider monetary policy to be too easy, based on the observations of thousands of traders, commodity prices and bond rates will be bid up to command an inflation premium and the exchange rate will depreciate to account for the reduced purchasing power of the currency.

In addition to being useful in the normal conduct of monetary policy, market price indicators are also quite useful for monetary authorities in financial crises when lender of last resort responsibilities become relevant. It is in these circumstances that many forms of monetary or reserve aggregates often prove particularly misleading for two important reasons. First, demands for liquidity can change quickly and dramatically in such circumstances. Demands for currency, excess reserves, and other quality assets, for example, often increase sharply. In this case, the quantity of reserves or narrow transactions aggregates can often prove misleading guides to policy. Second, changes in demand for these instruments often occur literally by the hour. In such situations, quantity data are obsolete by the time they are compiled or published.

Market price data, however, are readily available literally by the minute. Lender-of-last resort policy decisions during a financial crisis necessarily must be made

very quickly. The data essential to support such decisions, therefore, must be readily available and timely. Quantity data (such as the monetary or reserve aggregates) are ill-suited for these circumstances whereas market price data are eminently appropriate.

Sharp decreases in Treasury bill and bond yields, for example, could signal a flight to quality as well as work to flatten or invert the fed funds/Treasury bond yield spread. And dollar depreciation or appreciation could occur depending on the national or international nature of the financial crisis. In short, key market prices may immediately signal the need for an increased supply of Central Bank liquidity; these prices may provide correct and timely signals to the Central Bank in such circumstances. Other market price data such as "quality spreads," bank stocks, and even gold prices may also yield useful information on a timely basis in such circumstances.

In an analogous manner, market price data may prove useful by yielding timely and accurate information in the transition to a monetary union as is currently being contemplated by the German authorities. Movements in West German long-term interest rates as well as both Deutsche mark exchange rates and commodity prices, for example, may suggest whether the supply of money and reserves is accommodating rapidly changing demands for DM in a noninflationary manner.

An Appropriate Monetary Anchor

Another important implication of current institutional arrangements relates to a monetary anchor. Under any fiat money flexible exchange rate regime, a nominal anchor is essential. Accordingly, the market price guides just discussed should be linked to a price stabilization objective. For example, any sustained rise in nominal bond yields and commodity prices combined with a general weakening in the exchange rate would very likely

signal rising inflation expectations. This would suggest to the central bank a need for higher call money rates to avoid a future increase in the general price level. Such policy adjustments would be continually monitored against evidence of general price stabilization which would provide the ultimate anchor to the system. Of course, it is essential that this objective should be both an announced and credible goal. Since inflation is positively correlated with increased volatility in financial markets, policies aimed at producing a stable price environment will likely contribute to ensuring that such volatility is lower than would otherwise be the case. Also, it is important that price stabilizing monetary policies become the common objective of the major industrialized countries; coordination efforts toward the goal of price stability can contribute significantly to reduced volatility of exchange rates and other relative financial market prices.

Coordinated Monetary Policy Action

It is also becoming obvious that in our increasingly integrated global financial system, the goal of price stabilization cannot be effectively achieved in isolation without significant changes in exchange rates and possibly the balance of payments. Whether we like it or not, cooperation among the major economies becomes more and more important in order to avoid extreme financial volatility and potentially disruptive shifts in international capital flows.

As a consequence, central bank policies designed to coordinate price stabilization across countries deserve strong support. Nonetheless, flexibility is still appropriate. In particular, countries should have the flexibility to insulate themselves from irresponsible policies pursued elsewhere as well as from external shocks. Otherwise, such shocks or policy mistakes could be transmitted across bond markets and stock markets of all major countries. However, since movements in exchange rates

now play such an important role in the transmission of monetary policy, they cannot be ignored. And coordinating monetary policies with a price stability anchor should go a long way toward reducing excessive exchange rate volatility.

Conclusion

Monetary policymakers operate under a fiat money roughly flexible exchange rate regime. The current environment can be characterized as an integrated, deregulated global financial system where information is dispersed and decentralized.

This environment produces large, rapid, and continuous adjustments of money and financial capital. Increased economic integration means that domestic financial markets have become much more sensitive to international forces.

There are several important policy implications of these developments. The many advantages of financial market price information suggest that these prices are more

appropriate for use as policy guides than quantity variables. A price stability anchor is essential under a fiat money, flexible exchange rate regime. And, finally, because the world is becoming increasingly integrated, coordinated monetary policy action is desirable.