I am very honored to have been invited to deliver the annual Homer Jones memorial lecture. In deference to his memory, I believe it is appropriate that this lecture be concerned with some of the enduring themes that pervade thinking about money.

Many distinguished economists have pondered the role of money and prices and the question of whether it is more appropriate to organize our monetary affairs along national lines or to adhere to an international monetary standard. In arriving at an answer, they have addressed important aspects of freedom, liberty and sovereignty.

That the debate is still not settled definitively attests to the complexity of the topic. As a matter of fact, the current debate about the desirability of a common European monetary standard and about the formation of a European central bank has revived many of the old arguments.

My central theme today will be the role of money and monetary stability and the choice between a national monetary standard and an international one.

I have a personal reason for choosing this topic. For many years it has troubled me that some of my friends and colleagues view themselves as monetarists and analyze domestic policy from that perspective, while another group of my friends maintains that fixed exchange rates are the glue that holds the world economy together. From the perspective of that group, the world would be a better place if we would only adopt a gold standard.

This division reminds me of the time when I set out on my first trip to Latin America. As I was leaving, an expert on the region told me: “Young man, as you travel from country to country in Latin America, you cannot fail to notice that half of the central bankers you encounter will advocate fixed exchange rates, while the other half see flexible exchange rates as the only solution to their country’s problems. Pretty soon you will also learn that virtually all of them attended the University of Chicago. As far as I can tell, the only reason for their different convictions is that the first group studied in Chicago in a year when Harry Johnson and Robert Mundell taught the Monetary Workshop, while the second group took the course in a year when Milton Friedman was teaching it.”

Eventually, I learned that the views of the two groups could be reconciled on the global level because there the conceptual and behavioral assumptions underlying the two approaches converge. If there were only one world economic and financial system, the debate about fixed versus flexible exchange rates would not have been joined in the first place. Unfortunately, that is not the world we live in.
But even for the world we live in, there is a surprisingly close association among the global level of international reserves (or the global monetary base), the world money supply and the world price level. That finding, however, does not answer the question of whether financial stability is best achieved by having individual nations manage their own monetary affairs in an independent, decentralized manner; by relying on a global monetary constraint to impose monetary discipline; or by seeking a workable compromise that we can all live with.

Clearly, I will not be able to do justice to all the complexities and nuances of the topic in such a limited span of time. Brevity may, however, allow me to bring some of the issues sharply into focus and to crystallize some of the arguments.

I will first consider the roles of money in the economy and then discuss some of the problems of defining monetary stability. I will then turn to the role of freedom in determining the ideal monetary system and finally present the rudiments of a workable monetary system that represents a viable compromise for our imperfect world.

THE ROLES OF MONEY

Money enhances economic freedom. In the absence of money, we would still be free to make choices, but these choices would be costly, cumbersome and constrained.

To see how money enhances economic freedom, it is useful to remind ourselves that money fulfills several distinct roles: it serves as a unit of account, a medium of exchange and a store of value.

As a unit of account, money enhances freedom of choice by permitting price comparisons to be made more readily. It lowers information costs and thereby improves the choices available.

As a medium of exchange, money allows individuals to better exercise their freedom to acquire goods and services by lowering transaction costs. Without money, people could barter but this process would certainly be troublesome and expensive.

As a store of value, money permits people to exercise intertemporal choices by allowing them to accumulate funds and to spend them later.

One may even argue that money increases political freedom. Not only does money offer greater independence and freedom of decision making, but as a generally acceptable means of payment and store of value, it enables the individual to reject one political system and use his life savings to live somewhere else, under a different political regime.

Thus, it is not surprising that politically repressive regimes tend to provide their citizens with a money that has little or no international acceptability. Furthermore, they tend to punish those who try to enhance their freedom of choice and scope for independence by accumulating foreign currencies. Nor is it surprising that often, in times of extreme political suppression, gold has become an increasingly valuable treasure.

MONEY AND THE PRICE LEVEL

Money can fill these various roles in an optimal fashion only if it is a stable unit of account, a stable means of exchange, and a stable store of value. In other words, money should provide a consistent yardstick, and that can be true only in a non-inflationary environment.

Unfortunately, the measurement of inflation itself poses not only conceptual, but also practical problems. If money itself is the yardstick, how can its value be defined in terms of something else? If the monetary unit, say the dollar, were to be defined in terms of gold, isn't gold then the yardstick? In that case, gold will at least perform as the unit of account while the dollar may serve as the means of exchange and the store of value.

The value of a national currency may also be defined or measured in terms of other national currencies. But obviously this definition cannot be used for all currencies: The "last" currency must be defined in terms of something else. There must be an ultimate yardstick. The Bretton Woods system solved this problem by defining the value of all currencies in terms of the dollar, and defining the dollar in terms of gold.

Within a country, the price level is typically the measuring rod for the value of its currency. However, the definition of the price level is not as unambiguous as it may seem at first sight. Most customary measures of the price level have the disadvantage of relying on weighted averages of transaction prices of current goods
and services. These are the familiar GNP deflators and the indices of producer prices and consumer prices. For instance, as a measure of the value of the stock of money, the GNP deflator is flawed. It is a concept that has meaning only for the prices of goods that are produced during a certain period — that is, a flow concept.

But how about the prices of assets such as commodities and real estate? Aren't they relevant when it comes to judging whether we are in an inflationary or a deflationary situation? It is arguably more appropriate to measure the value of money in terms of other assets because money itself is an asset. While a good case can be made for considering prices of tangible assets in assessing the value of money, matters become increasingly complex as we broaden the spectrum to include financial assets. One may also make a good case that stock prices are a convenient proxy for real asset values. But other influences, such as a change in management or changes in tax-law, may also influence the value of a stock.

Matters become even more complicated in the case of bonds. While they are an asset on one individual's balance sheet, they are a liability on someone else's balance sheet. Their value is also directly influenced by monetary policy, and it is easy to get into circular reasoning in that connection. Although bond prices do give useful information, it is probably better to consider that information separately from information conveyed by changes in real asset prices.

I conclude from this discussion that if we are interested in the stability of money as a unit of account, store of value and means of transaction, the appropriate indices for changes in the value of money should incorporate prices that reflect these functions. That is, asset prices, commodity prices and intermediate as well as final goods prices might appropriately be given attention in defining and measuring price stability and the value of money.

GOLD AS A MONETARY STANDARD

Given the complexities of measuring the price level itself and of defining the value of money, it is not surprising that over the centuries people, in seeking simplicity and expediency, have focused on gold as a universal constant that served as a practical unit of account, a medium of exchange and a store of value.

Gold has served as money over centuries of human history. Moreover, many distinguished economists have advocated a gold standard at some point in their professional lives. But many of them have subsequently abandoned their beliefs that gold can serve as a national, let alone a global, money and have come to advocate alternative systems.

I argued earlier that money plays an important role in maintaining and enhancing economic and political freedom. To my mind, gold fails to meet this crucial test for a monetary standard. The two largest gold-producing countries in the world are the Soviet Union and South Africa; as key suppliers, they wield considerable influence over the market price of gold.

I view neither one as an economically or politically reliable and stable supplier. Thus, I would not entrust them with the power over our economic, financial and, indeed, political affairs that a move to a gold standard would entail. This objection seems to me so fundamental as to make further debate of the pros and cons of a gold standard unproductive and pointless. There is simply no reason why free, democratic nations should cede such an important part of their sovereignty into uncertain hands. Of course, everyone should be free to choose to hold gold, and to use it as a store of value or as a medium of exchange between willing individuals. Governments should neither fix the price of gold nor impede its private use.

FREEDOM AND THE MONETARY SYSTEM

Choosing an international monetary system involves profound constitutional questions that affect a nation's sovereignty.

The deep desire to protect and foster human freedom unites the advocates of a national monetary rule and the proponents of an overarching international monetary standard. For simplicity's sake, I will refer to them as the...
monetarists and the internationalists. The two groups also distinguish themselves in their advocacy of flexible and fixed exchange rates respectively.

Both the monetarists and the internationalists hold the view that government should serve the people and that the role of government should be strictly limited. In the economic realm, both groups believe in price stability as the key objective of monetary policy. They also want to limit the role of government, and therefore advocate the adoption of “monetary constitutions” or predetermined rules for carrying out policy. In that, they are united against the interventionist view, which holds that active governmental decision making is a positive force that is needed to bring about economic stability, efficiency and welfare maximization.

But the monetarists and the internationalists adhere to different philosophical concepts about which monetary arrangements best protect human freedom. The monetarists believe that human freedom is protected best when governmental authority is exercised at the most decentralized level of government; the internationalists believe that a global monetary rule would minimize the chance of inappropriate interference by national governments by taking monetary decision making out of their hands. Thus, monetarists and internationalists tend to differ in their prescriptions for organizing the monetary system. In addition, different empirical judgments about the way the world works underlie the two approaches.

Monetarists argue that to preserve individual freedom, the power of the state should be limited. They claim that the only consistent way to accomplish this objective is to disperse governmental power through decentralization to the lowest level possible. National government should exercise only those powers that cannot be delegated to regional or local governmental units.

While monetarists believe that the power to create money and regulate its value should be exercised at the national level, they also believe that the authorities should be constrained by a domestic monetary growth rule.

From this belief it follows that the government should not be externally constrained. For the monetarists, preserving that independence is a key requirement of any international monetary system. Consequently, the international monetary system should be constructed so that monetary decisions are taken at the lowest level of decentralization possible, namely, the nation. Flexible exchange rates are therefore advocated by the monetarists as a means of preserving the political and economic independence of the country. Under such a system, international policy coordination is not only unnecessary, it is even undesirable because it will inevitably infringe upon the freedom of the nation-state. Instead, flexible exchange rates are advocated as a buffer between countries.

In contrast, internationalists argue that individual economic freedom can be attained best in a system in which one common international currency is used throughout the world. In such a system, individuals are free from national economic and financial constraints and can maximize their welfare unhampered by national boundaries and political intrusions. They are at liberty to engage in transactions with anybody anywhere in the world. In the view of many internationalists, an international gold standard provides such a system, in which gold serves as the actual medium of exchange. Such a system eliminates the uncertainties imposed by fluctuations in exchange rates, and maximization of global welfare therefore becomes a genuine possibility.

The true internationalist sees the nation-state largely as a political construct that has only limited economic importance. A common global monetary standard will allow individuals to maximize their economic as well as their political welfare.

The two sides are united in their view that the preservation and enhancement of individual freedom are the ultimate and overarching goals of any social order. That is the ideal. They both wish to attain that ideal by minimizing the political and economic power of the state. Furthermore, they assume that competitive forces will bring about economic adjustment in a speedy and efficient manner.

The question is whether reality can approach this ideal view of the world, or whether the imperfections that still beset the world call for a compromise that may fall short of the ideal systems represented by pure monetarism or pure internationalism.
A PRAGMATIC APPROACH

While at present important interpreting forces are shaping the global economy, I believe that the world is still an imperfect place. Economic conditions and the degree of economic integration vary around the globe. Relatively few true global markets exist, and the various national and regional markets are linked with differing degrees of perfection.

In other words, despite greater globalization the economic and financial world remains a patchwork. Some would argue that patchwork makes the world even more interesting and beautiful — and in a world with positive information costs, the one may be just as efficient as the other.

The problem confronting us is therefore one of constrained optimization and of the development of rules that will permit maximum freedom in the economic and political realm while taking into account the need for collective decision making in certain areas.

Nowhere is the need for such an accommodation more apparent than in the monetary sphere. Just as separate monies issued by individual persons would lose their usefulness, so would a global monetary standard not necessarily serve everyone best. The debate about the advantages and disadvantages associated with a common monetary standard and a central bank for Europe reveals the problems and the issues involved.

Let me set out what I consider to be some relevant considerations that should guide us in deciding what monetary system will serve us best.

First of all, the goal of monetary policy should be to provide a stable financial environment so that private decision makers can maximize their welfare. A stable monetary standard will help to minimize transaction costs and aid in rational economic decision making. Stability in this sense can be defined as the absence of any bias in decision making that would be induced by a tendency for the price level to vary systematically. This state of affairs will be reached when the change in the general price level is close enough to zero that economic agents can ignore it in their decision making.

Second, price stability is meaningful only in an economically and financially integrated area. The world we live in does not yet represent such a market area. National borders, artificial or informal barriers to economic and financial flows, information barriers and the like, all contribute to a compartmentalization of the world economy.

Third, a common indicator, such as a global commodity basket, can provide a useful reference point for national and international policy makers. Not only is such a reference point helpful in introducing sensitive asset prices into the decision making process, but also it gives important information about the development of global inflationary or deflationary pressures. Indeed, the use of such an indicator of commodity prices was agreed upon at the Toronto summit meeting of the industrialized nations.

Fourth, more or less homogeneous economic and financial zones constitute the optimal domains for various monies or monetary standards. As economic and financial integration progresses and as the barriers between economic regions fall, the natural monetary domain also grows. At present, such progress is particularly pronounced in Europe, which is rapidly moving toward becoming an integrated economic and financial entity. As a consequence, talk about European monetary integration nowadays is more than theoretical speculation, and it may well move into the realm of reality in the not too distant future.

Fifth, it should be recognized that monetary integration has not only economic, but also political significance. The road to this common monetary standard can be the formation of a joint political decision-making body, the delegation of the monetary decisions to a common central bank, adoption of a commodity or gold standard or the formal or informal acceptance of a standard represented by another monetary authority. In the last case, the political underpinnings of that decision-making body must be sufficiently similar to the political beliefs and priorities of all participants to avert substantive conflicts.

As the global integration of economic and financial markets proceeds and as political interdependence increases, it stands to reason that monetary integration will increase as well.

In that connection it is important that progress in one area be accompanied by progress in the other areas. Just as it would be unrealis-
tic to expect rapid political integration, it is unrealistic to push monetary integration too far out in front. Time for adjustment and consensus formation must be permitted.

But as confidence in economic and financial integration grows and as political cooperation becomes an enduring reality, progress toward greater monetary integration will be made as well. That is, the monetary domains will tend to expand, and over time we will move closer to a global monetary standard.

What does all that imply for the real world that we live in?

In exploring that question, we must remember the lessons of history. Soon after the establishment of a government for the United States, the First Bank of the United States was founded, in 1789. Its charter was not renewed, and it was succeeded by the Second Bank of the United States, which ceased to exist in 1836. Why? Simply because the economic and political consensus in the young nation was too weak to support a uniform monetary policy. The interests of the merchants and traders of the East could not yet be reconciled with the priorities of the farmers and settlers of the South and West. Thus, the United States had to do without a central bank until the formation of the Federal Reserve System, only 75 years ago. Even then, the design of the System recognized the need to assure representation of the views of the various regions of the country, as well as those of the banking, commercial, industrial, agricultural and public interests.

On our own continent, we see an ever-increasing integration of the economic and financial affairs of the United States and Canada. The U.S. dollar is used widely in Canadian capital markets. It is also used as a medium of exchange and a store of value in much of Latin America. But clearly no political base is in place for monetary integration among the various countries of the American continent.

Matters have proceeded further in Europe, where the movement toward economic integration has been accompanied by the establishment of common administrative and political institutions. This development sets the stage for the debate about the desirability of establishing a central bank for Europe, which could issue a common currency and administer a common monetary policy.

It is instructive to trace the development of the European Community because it illustrates the interdependence of economic, monetary and political integration. An economic beginning was made by the original six signatories to the Treaty of Rome, which established the European Economic Community. Gradually, other nations entered the economic union.

In the monetary sphere, Belgium and Luxembourg have long had a common currency. The common monetary arrangements of the European “snake” constituted essentially an experiment, but taught important lessons that were incorporated into the more formal European Monetary System. While the original members of the European Economic Community are now all participants in the European Monetary System, some of the countries that joined the Community later have not yet taken this step. Overall, progress has been gradual and sometimes marked by disappointments and setbacks.

All this has been accompanied by the establishment of common European political institutions and by the development of an administrative apparatus that has progressed from exercising coordinating functions to playing an important decision-making role. Thus, a growing economic and political consensus has been forged that may in due course serve as a foundation for a common European currency and a common monetary policy.

I have previously advocated the establishment of unitary exchange rates as an intermediate step that the Europeans might take. Under such an arrangement, all exchange rates would be aligned so that one German mark would equal one French franc, one British Pound, and so on. The institutional arrangements of the current European Monetary System (EMS) would be maintained. Under such a scheme, the various currencies would soon be accepted across the continent, and in effect a uniform means of exchange for the continent would be created. If the arrangement were successful, a full monetary union and European central bank might follow in due course.

The formation of a European currency area would undoubtedly have implications that
would transcend European borders. Already quite a few African countries peg their currencies to those of European countries, and it can be expected that these and possibly others would want to peg to a common European currency as well.

What may we conclude from this discussion?

One, the choice of a monetary standard and a monetary system involves important political choices and is rooted in basic ideas about how best to protect and preserve freedom. Those choices, then, must be made with great care.

A certain congruence among political, economic, financial and monetary arrangements is needed if such arrangements are to find public acceptance and if they are to be viable.

Two, as the world becomes more integrated, progress toward the establishment of broader monetary domains can also be made.

I believe that we are privileged to live in a time in which we are witness to considerable progress on all these fronts and in which we can participate in building a more integrated world, where economic and political decisions can be made with increasing freedom for all people.