

# The Mundell-Laffer Hypothesis— a new view of the world economy

JUDE WANNISKI

**T**HE United States has been passing through an economic nightmare. It seems like just the other day—and it was—that American economists of the first rank spoke confidently of “fine-tuning” the economy to assure a predetermined rate of economic growth within acceptable bounds of inflation and unemployment. And even those in the profession who scoffed at the notion of such fine-tuning, those who argued it could not be done in the fashion prescribed by the New Economics, were prepared to assert that other strategies—usually pertaining to the supply of money—could be called into play to keep the United States on the magic path of non-inflationary growth.

Obviously, the profession has been experiencing an intellectual crisis. Over a six-year period, the pragmatic Republicanism of Richard Nixon shot into the twitching patient every antibody the economic doctors of Cambridge and Chicago prepared. And always the vital signs declined. Money was tightened and money was eased. Mr. Nixon became a Keynesian and a “full-employment budget” was installed. Deficits were run on purpose and deficits were run by accident. The Phillips curve, a wondrous device by which politicians supposedly could balance unemployment and inflation along a finely calibrated line, was enshrined in the textbooks. The dollar

was devalued and the gold window closed. The Japanese and Germans were reviled as being stubborn, and worse, efficient. The dollar was devalued again, then floated. Wages and prices were controlled through varied stages of stringency, and a jawbone was brandished. At the end of all these exertions, many are beginning to wonder whether the patient was sicker than had been thought or whether the medicine has been making him sicker than he was.

To be sure, the academic theoreticians who pushed these various prescriptions will now all argue that their own brand of medicine was not given time to work—and besides, the patient was poisoned by all those other medicines. They all have a point in that there is rarely enough time in the real world to see a diagnosis and a prescription through; politicians and the public will always want a remedy that doesn't require the patient to get much worse, for very long, before he gets better. That is one of the inevitable political constraints on economic policy, as distinct from economic theory.

But before one laments the constraints that the body politic places on our economic physicians, it is worthwhile seeking out another opinion. It is always possible there is an expert around with a superior diagnosis of our economic illness—one that does not require politically impossible prescriptions. And, in fact, there are *two* such experts around today: Robert A. Mundell, 42, a Canadian who is professor of economics at Columbia University, and Arthur B. Laffer, 34, of the University of Chicago's graduate school of business. For the past several years, they have attempted to effect what some would call a "Copernican revolution" in economic policy. And, with every passing year, they are getting a somewhat more respectful hearing from their fellow economists—though, of course, theirs is still very much a minority point of view.<sup>1</sup>

It is the purpose of this article to show how the Mundell-Laffer "model" of the world economy works, and why its implications are not politically unattractive—i.e., would not involve a period of suffering by the world's population in order to achieve improvement. The model is really quite simple and, except for its applications, is not even particularly novel. It is just, as Laffer says, "that nobody's thought much about it this way for about 50 years or so."

One of the reasons the Mundell-Laffer hypothesis is getting a respectful hearing these days is that it easily explains phenomena that other theories can explain only with immense difficulty and

---

<sup>1</sup> There is no joint Mundell-Laffer paper. Mundell, the prime mover, writes the theory. Laffer, more the empiricist, provides the data support, contributing slices of theoretical inspiration along the way.

complication. Though they are not in the business of forecasting, Mundell and Laffer's predictions of what would happen as a result of particular policy changes have held up astonishingly well these past years. Laffer in 1971 said the U.S. dollar devaluation would not mean a turn from deficit to surplus in the U.S. trade balance. There wasn't one. In February 1973, when the dollar was devalued again, he said it would mean "runaway inflation" in the United States. In January 1972—almost two years before the Yom Kippur war—Mundell said the price of oil, and then of other commodities, would rise dramatically if the U.S. economic policy makers proceeded to do what in fact they did. Later in the year, he said that if the Western economies did what they in fact subsequently decided to do, there would be increased world inflation, a general rise in interest rates, and an accelerated use of the Eurodollar. In 1973, he bet an eminent U.S. economist \$1 that U.S. inflation would be far worse in 1974 than 1973, and another \$1 that sometime in 1974 the price of gold would hit \$200.

Maybe Mundell and Laffer were lucky—right for the wrong reasons, as some may say. But it certainly would seem to be worth the effort to understand their reasoning—and, above all, to understand their general view of the economic universe and what it is in this view that fundamentally separates them from the great majority of their peers. Their policy prescriptions—which derive from a kind of synthesis of Keynesian and classical economic thought—make no sense unless one shares their perspective on the economic universe. After all, Columbus would have found it difficult to persuade Queen Isabella that sailing west to the Indies was good policy if he had failed to convince her that the world was round, not flat.

### **The world is a closed economy**

This is where they start: The world economy is truly integrated and has been for a long time. The proposition sounds reasonable enough, perhaps even trite. Yet while most other economists accept the idea to a degree, the prevailing analytical approach to economic problems and policy is based on a quite different notion: that the U.S. economy is in large part independent of the economies of the rest of the world, especially now that monetary policies are not linked through fixed currency exchange rates. From this prevailing notion there follows the idea that, insofar as the U.S. economy experiences fluctuations in rates of inflation as the result of the economic policies of other governments, such disturbances are limited

in scope by the U.S. volume of trade with the rest of the world. These disturbances must be small, the conventional wisdom argues, because U.S. trade is so small in relation to the whole of the U.S. economy. In 1971, when the dollar was devalued by 13 per cent, virtually the entire economics profession in the United States calculated that, because U.S. trade was only five per cent of GNP, the effect of the devaluation on the level of U.S. prices would merely be 13 per cent of five, or a little more than a half-point on the Consumer Price Index. This kind of calculation can be made only by viewing the United States as a closed economy, "with international relationships grafted on," says Laffer. But, they argue, the U.S. economy is not a closed economy; nor is that of any other nation. *The only closed economy it makes sense to talk about is the world economy.* One cannot understand the American economy within an American perspective; it must be viewed from the perspective of the world economy.

In simplest terms, what they are saying is that prices are tied together around the world, not only by the volume of goods shipped back and forth, but by rapid communication of price changes. To verify this, one of Laffer's students, Moon Hoe Lee, went to the trouble of studying nine countries from 1900 to 1972. He found that (1) their general price indexes indeed moved in step during the period, as long as their exchange rates were unchanged; and (2) that when a country devalued or revalued its currency, it experienced roughly equivalent amounts of inflation or deflation. (The only brief exceptions were observed when a country became isolated during wartime, Japan and Italy during World War II being the clearest examples.) What this means is that if a country devalues by 13 per cent against the rest of the world's currencies, you could expect that it would experience higher inflation than the rest of the world *until its prices had risen by 13 per cent more than those of the rest of the world.* So far from such a revision of exchange rates having only a minor effect—via foreign trade—on the Consumer Price Index, it has an exactly proportioned effect relative to the price level in the rest of the world.

This isn't exactly a revolutionary idea but, as Laffer says, it hasn't been thought about for quite a while. Here's J. Lawrence Laughlin writing in 1903:

The action of the international markets, with telegraphic quotations from every part of the world, precludes the supposition that gold prices could in general remain on a higher level in one country than another (cost of carriage apart), even for a brief time, because, in order to gain

the profits merchants would seize the opportunity to send goods to the markets where prices are high.

Laughlin talks about gold, but implicit in his statement is that apples are affected similarly. Say there are a million apples in a country selling at 10¢ each, but that there exists an unqualified demand for 1,000,001 apples. If the extra apple can't be gotten from the rest of the world at less than 11¢, cost of carriage apart, *the price of all apples will rise to 11¢*. In this illustration, the volume of trade involved is only one part in a million—but price still changes by 10 per cent.

Going a step further, Mundell has revived the proposition, and Laffer has documented empirically, that money, like apples and gold, is also subject to these international forces of supply and demand. When, for example, there is an excess demand for money in the United States relative to the rest of the world, we will import money and run a balance of payments surplus—i.e., more money will be coming into this country than is going out. When there is an excess supply of money in the United States, we will export money and run a balance of payments deficit. This idea also has its roots in earlier centuries, but is still a minority view among economists everywhere. Balance of payments deficits are thought to represent not a market phenomenon but a structural problem—i.e., “capital flight” or “undercompetitiveness.” Laffer has further demonstrated that when a country's growth rate accelerates relative to the rest of the world its balance of *trade* worsens; and vice versa. (As a child grows, it consumes more than it produces.) *But such a deficit is not cause for alarm*. What is then happening is something perfectly natural. As long as its government does not speed up its own money creation, the country will export bonds to pay for its deficit in trade. All that is occurring is that the rest of the world has decided the country in question, with its higher growth rate, is a good place in which to invest. (Just as parents invest in their growing children.)

This way of looking at deficits and surpluses in one's balance of payments and balance of trade is strikingly different from the prevailing way, and has large implications for economic policy. But more about that later.

### Myths of devaluation

While the above approximates the Mundell-Laffer long-distance view of the economic universe, it is necessary to move in closer and examine the terrain piece by piece before the direction of policy

becomes apparent. A most important thesis, again one that cuts against the predominant thinking, is this: *When money supplies and currency exchange rates change, the terms of trade remain unchanged.* Somewhere at the root of our economic policies of the past several years lies exactly the opposite assumption.

Put simply, what Mundell and Laffer say is this: If a bushel of U.S. wheat can be traded for a bottle of Italian wine when \$1 equals 100 lire, then, even though the United States devalues the dollar so that it is only equal to 80 lire, the bushel will still trade for the bottle. There may be a temporary confusion, which economists call "money illusion," but it is only temporary. That is, the U.S. farmer may temporarily accept 80 lire in payment for his wheat, because it still equals \$1—and his first interest is in dollars. But when he discovers that \$1 is now worth only four-fifths of the bottle, he will insist on getting \$1.20 worth of lire so he still gets the whole bottle. As a result, *the dollar price of U.S. wheat goes up by the full amount of the devaluation.* Or the lire price of Italian wine goes down.

It is thus the contention of Mundell and Laffer, borne out by considerable empirical evidence, that devaluation has no "real" effects, but results only in price inflation in the devaluing country relative to the country or countries against which the devaluation occurs. By reducing the amount of goods its money can buy, the devaluing country creates an excess demand for its money. If it simply prints more money, there is no balance of payments improvement—which was what devaluation was supposed to achieve. If it doesn't, its citizens will simply import money (by exporting bonds) to satisfy the excess demand, and this will show up as a brief "improvement" in the balance of payments.

But isn't it true, as the textbooks and newspapers have been saying for a generation, that when a country devalues, the goods it imports become more expensive, so it buys fewer of them, while the goods that foreigners buy from it are cheaper, so the foreigners buy more of them? And the net result is a nice improvement in the devaluing country's balance of trade? The answer is: No.

Laffer points out that by looking only at what happens to the *demand for imports* in each country following a devaluation, the textbooks see only half of what happens. What about the *demand for exports*?

When the United States devalues its currency, for example, the goods it exports fall in price in terms of foreign currencies. Under normal supply and demand conditions, the residents of the United States should then buy more of its export goods and have less in-

centive to produce them. Abroad, the goods foreigners export to the United States rise in price relative to U.S. currency. They should then have less incentive to buy their own export goods and want to make more of them, increasing exports to the devaluing country. This would mean the U.S. trade balance would worsen in real terms if it devalued.

Here, Laffer is merely pointing out the logical inconsistencies of the current theory; in fact, he argues, devaluation only invites inflation and will not affect the trade balance. His empirical study of 15 devaluations between 1961 and 1967 shows no relationship between devaluation and improved trade balances. In most cases, trade deficits in fact worsened in the years following a country's devaluation; simply by the law of probability—since there is no causal relationship—trade balances should improve half the time and worsen half the time.

"Most of Great Britain's economic problems over the last 30 years have come about because of London's fetish with the trade account," says Mundell. "It is forever trying to increase exports and decrease imports, and in the process of trying to send more goods out and allow fewer in has systematically reduced the efficiency of its economy." It has also, of course, experienced massive inflation. West Germany, on the other hand, has accepted a series of major currency appreciations that should have doomed its trade balance. Yet its domestic economy remains vigorous and its trade balance in surplus, and inflation has been very moderate.

### **Exchange rates need never change**

According to Mundell-Laffer, the world be much better off with a system designed to keep exchange rates permanently fixed. If 2.5 Deutschemarks will always be equal to \$1, or 300 yen always equal \$1, all currencies would be identical except in name. *The world would in effect have a common currency.* Interest rates, prices, and the rate of inflation would then be the same everywhere, broadly speaking, just as they are within a large country like the United States with its common currency.

In the Mundell-Laffer scheme of things, a common currency is not a utopian fantasy; it has been around before. For decades prior to World War I, the world had a simulated common currency as national currencies were tied to the pound sterling and the pound was fixed to gold. In the years after Bretton Woods (1944) until about 1967, or even 1971, the world had a simulated common cur-

rency bound to the dollar. The system was flawed, but still enormously successful.

There are substantial benefits to be had, by the world and all its component parts, through use of a common currency, simulated by a properly constructed fixed-exchange-rate system. Conversely, the world and its component economies are now paying an enormous penalty for the absence of a common currency—the penalty of rampant inflation. But before the benefits of a common currency are examined, consider the supposed penalties of not having an independent national currency. Even if, as Mundell and Laffer claim, devaluation does not improve the U.S. competitive position in the world and only causes price inflation, isn't monetary policy useful in stimulating production and employment in the United States, making it worthwhile to retain national control over it? Again, say Mundell and Laffer, the answer is no.

Just as trade between a U.S. wheat farmer and an Italian wine-maker is only stimulated momentarily by the confusion of an exchange rate change, so there is no lasting stimulation to commerce internally from pumping money into the system faster than the system is demanding it—i.e., beyond the real growth demands of the economy. There may be a brief confusion in the terms of trade between Kansas farmers, California vintners, and Detroit automakers, or the workers who are paid to produce these goods. But there will be less and less confusion as they learn to read the signals and extract their meaning. As soon as this has been accomplished, the overwhelming effect is price inflation. And, because monetary stimulation increases the rate of inflation, thereby "taxing" cash balances and other financial assets, there is an immediate lowering of real income and offsetting subtraction from output. If the horse will not drink if there is a gallon in the trough, you can't make him drink by adding liquidity.<sup>2</sup>

If monetary stimulation can increase production only by increasing someone's credit at the expense of someone else (a creditor who is paid off in inflated currency, a contractor who has agreed to supply goods and services at a fixed price, or a worker tied to a wage contract), the increased production gained by such deceptive means can be of value to a politician only insofar as the cost of price inflation can be pushed far enough into the future so that some other

---

<sup>2</sup> At one time Mundell believed with the rest of the profession that the government could retard the economy by contracting its money supply, but after so much government manipulation over so many years private commerce has become exceedingly adroit in switching to money imports and substitutes, chiefly trade credit and credit cards, both of which are sources of liquidity.



politician will have to deal with it. If the market becomes conditioned to see immediately through the deception, and discounts the future accordingly, the politician gets no gain whatever.

On the other hand, there are distinct advantages to the politician, and to the economic interests of his constituency, in a common currency or a properly constructed fixed-exchange-rate system.

### The "bonus" of a world currency

The world economy gets a bonus, something extra, by having the economies of scale of a common currency. On narrow grounds, even the opponents of fixed rates agree with this. But Mundell and Laffer go beyond the narrow grounds.

Here is the *usual* financial argument on behalf of fixed rates: Suppose each of the 50 states of the U.S. had its own monetary authority and its own currency. Interest rates and the rate of inflation would vary widely. Business would still be transacted between states, but in each interstate transaction requiring a contract both buyer and seller would have to insure themselves against a change in the exchange rate, say between Kansas and Nebraska. This effort would require a sizable layer of personnel, expertise, and capital, which would otherwise be doing something more useful. As always, consumers would pay higher prices for everything, the cost of "hedging" being added in at the retail level. The dollar cost of providing "hedges" between 50 currencies would run into billions per year.

It may be argued that such an overhead expense is not really a colossal amount of money to pay in order to retain the advantages of independence. In the same way, if it were really deemed important by national governments to have independent monies, the extra tens of billions of dollars worth of resources required to maintain commerce in a world of floating exchange rates could be defended. But Mundell and Laffer identify the costs of floating in a different dimension as well. It is not only that the floating system has financial costs because of added coverage requirements, but also that *there are dramatic and inescapable increases in the amount of error in a system of many, rather than few, monetary authorities*. This point is crucial to an understanding of why the world economy is now in such a mess. It becomes obvious why Mundell can write so casually that, throughout history, "the gains from using a common international medium are so great that some means of creating one have always been found."

Again, consider Kansas and Nebraska. If each had an indepen-

dent monetary authority, each authority would have to be considerably wiser and more efficient than if they arranged a compact to pool their mistakes. Imagine that on a given day in July, there are a thousand economic transactions in Kansas that have to be made with the available supply of money. If the Kansas monetary authority erred on that day by not anticipating the precise number of transactions and the quantity of money required to make them, one of two things would happen. If the amount of money were insufficient, some of those thousand transactions could not be completed at prevailing prices. Prices would have to fall until the amount of money were sufficient. If prices did not fall (which is likely in that prices seem to go up easier than they come down), some of the transactions would not be completed unless money substitutes were available. Which means the supply of goods would have to fall, resulting in lower output and higher unemployment in Kansas.

Alternatively, if the Kansas authority overshot the mark and produced too much money, all the transactions would be completed, but because buyers had more money than sellers had goods, the prices of goods would be bid up until supply equaled demand. So, on that day in July, if too much money is supplied, there is inflation; if too little is supplied, there is some deflation and some reduced output.

On that same day, the Nebraska authority is having a similar problem. With so many transactions to be completed, only by miraculous good luck is it going to produce the precise amount of money required.

But consider what happens if the Kansas and Nebraska monetary authorities agree to buy and sell each other's currencies at a fixed rate, say one Kansas dollar for one Nebraska dollar. If this is so, and Kansas produces \$100 too little money to effect its 1,000 transactions, and Nebraska produces \$100 too much, a party in Kansas will observe there are 100 too many Nebraska dollars and 100 too few in his own state. He then borrows 100 Nebraska dollars and presents them at the Kansas monetary authority. In accord with the Kansas-Nebraska agreement, he gets the 100 Kansas dollars he wants for the 100 Nebraska dollars. With this transaction, each state has precisely the amount of money it needs and there is no unemployment in Kansas and no inflation in Nebraska. On the following day, Kansas can overshoot a little and Nebraska undershoot a little, and over the course of months—and certainly years—they can make sure that the use of each other's money nets out to roughly zero. That is, neither state will have a balance of payments deficit or surplus.

But what if, you will wonder, both Kansas and Nebraska under-shoot at the same time? Say Kansas is short \$100 and Nebraska short \$50. In sharing the error, both come up short \$75, which means Nebraska is worse off than if it didn't have the agreement, but Kansas is better off. But even if one is going to assume that Nebraska will be consistently right and Kansas consistently wrong, it is still to their mutual advantage to compromise their errors—if only because each gains from the other's prosperity and loses from the other's depression.

This is not simply a theoretical example. *It is, in fact, exactly the way the 12 Federal Reserve Districts operate*, with each responsible for issuing currency in its region. The districts have daily, monthly, and yearly balance of payments deficits and surpluses with one another, but they are so attuned to correcting the money supply to fit demand that the deficits and surpluses are not even apparent to the public, which believes there is only one U.S. currency instead of 12. (Check the left center of any bill for the issuing bank.)

### **The Bretton Woods system**

This is almost, but not quite, the way the Bretton Woods system operated. Instead of setting up a system that would approximate the fashion in which the 12 Federal Reserve Districts correct balance of payments differences with each other, by expanding or contracting the money supply, the Bretton Woods agreement tried something else.

Imagine, in the above example, that instead of all 50 states balancing payments with one another by expanding or contracting the money supply, one state had a different role. New York, say, would not have to stay in balance with the other states. Theoretically one state could be excused, because if 49 states have zero balances, the 50th automatically has a balance of zero. New York could then use this extra measure of freedom by making sure that the system *as a whole* had "proper" monetary policy, so that with economic growth in the system *as a whole*, commerce would not be hindered by a paucity or excess of money growth.

What, though, is the *proper* quantity of money? That is the question New York would have constantly to decide. The answer goes something like this: The chief cost of excessive expansion of money is the strain put on the availability of natural resources. If New York raised the quantity of money at too rapid a rate, it would increase the nominal amount of transactions. But, as previously mentioned,

this would come about through the destruction of the real value of someone's financial assets.<sup>3</sup> The increase in nominal transactions generated by this artificial means—inflation—results in a more inefficient use of the nation's resources than would otherwise occur. One way New York could solve its hypothetical problem of determining the proper rate of money growth would be to adopt a metal as money, such as gold, thereby tying money creation directly to a natural resource. This, too, is not a theoretical example. It is the way the world economy worked for decades, even centuries, up to 1914. During this period, Great Britain fixed the price of gold by regulating the quantity of money in the world and by buying and selling gold, doing so with such precision that all the while it maintained only a very small inventory of gold. Nor was there a general international monetary agreement in this period. The rest of the world simply found it so advantageous to fix their currencies to the pound sterling, while sterling was fixed to gold, that it occurred *ad hoc*.

This was also the Bretton Woods system, arrived at formally. The United States played the role for the world economy that, in the hypothetical example, New York played for the 50 states, and that Britain played in earlier centuries. Although the Bretton Woods system was flawed, it did provide the framework that made possible a quarter-century of uninterrupted prosperity and growth in the Western economies. The flaw, however, led to its abandonment.

The flaw in Bretton Woods lay in the fact that the people who were responsible for running the system didn't know how it was supposed to work. Go back to our hypothetical New York example. If 49 states are maintaining external balance by expanding or contracting their money supply, and New York is expanding the quantity of money to accommodate economic growth in the system as a whole, then if New York expands too fast everyone in the system has too much money and there is a general inflation. If the other 49 states do not desire to have inflation, they have to print less of their own currencies. If New York keeps pumping out money, and the other 49 states are contracting their monies accordingly, the result is inevitable. At the extreme, everyone in the United States is transact-

---

<sup>3</sup> Those who lent money at a fixed rate of interest, or contracted to supply goods or services at a fixed price, or who agreed to work for a year or longer at a fixed wage, discover that the addition of these marginal transactions, through excessive monetary expansion, has put prices up, and their wages have lost purchasing power. While those who borrowed or bought enjoy an offsetting benefit, the net effect is a weakening of the relationship between reward and effort. Henceforth, if excessive policies continue, they will demand compensation in the form of higher interest rates, higher fixed-price contracts, and higher wages and/or cost of living adjustments.

ing business with New York dollars. All the states are running huge surpluses in the balance of payments with New York, and New York is running a stupendous balance of payments deficit. But New York doesn't care. It has become the sole supplier of money, and as banker of the game receives in return for its banking service the real goods of all other states.

So it was with Bretton Woods. For a while, everything worked well. After World War II, the United States had most of the gold in the world, far more than it needed. It didn't worry about providing precisely the correct growth of money supplies, but acted in a way that made sure there was more than enough money rather than too little. When the war-torn countries got on their feet, it still did not matter that the United States was overexpanding its money creation, because the others wanted some of the U.S. gold to hold for a rainy day, and they were now prosperous enough to acquire some. By restraining its money growth, West Germany, for example, would import dollars. If the number of dollars were more than needed by West Germans, after being turned in for Deutsche-marks, the West German monetary authority, the Bundesbank, would have some left over to buy U.S. gold. After several years of this, the U.S. gold hoard was down from \$24 billion to \$12 billion, valued at \$35 an ounce.

In this arrangement, all the economic incentives drove the United States to create more money than was really needed, and forced the other countries to produce less of their own currencies if they wanted to avoid inflation. People and enterprises all over the world did more and more of their business in dollars, finding the United States always there to supply money when needed, while their own monetary authorities seemed to be cutting back. In exchange for its real good, the banking service, the United States was receiving other real goods—autos, radios, etc.

But it's one thing for New York to drive everyone else's money out of the other 49 states, and quite another for the United States to push out foreign currencies by running constant balance of payments deficits. For the most part, the U.S. deficits were not the fault of the United States, but the natural result of its having been the most efficient supplier of money in the world. The dollar became, says Mundell, "the major intervention currency, a reserve asset for central banks, the standard of contract, the standard of quotation, the invoice currency, the major settlement currency, the major reserve asset for commercial banks, the major traveller's currency, the major external currency for indexing bonds, and the major clearing

currency." In so many ways, foreigners were demanding dollars rather than their own national currencies.

### Gold and dollars

Such was, and still is, the power of the dollar, deriving from the power of the American economy. Just as Kansas is the most efficient supplier of wheat, and Brazil the most efficient supplier of coffee, so the United States is the most efficient supplier of money. It would be ridiculous to expect Kansas to run a zero balance of trade in wheat, importing as much as it exported, or Brazil a zero balance of trade in coffee. So too, it was imperative that the United States run ever increasing deficits in its export of money. Bretton Woods broke down because U.S. politicians and economists did not understand this, and thus did not do the simple things required to perpetuate international economic stability.

What was overlooked was the efficient use of gold in providing a control mechanism and an error signal, as to when the United States was supplying too much money or too little. If the world economic system's real growth, year after year, would average three per cent, and the increase in the world money supply would average five per cent, there would be a world inflation rate of two per cent. As a purely private commodity, gold in 1944 at \$35 was overpriced. But as world prices moved up year after year, and gold remained at \$35 an ounce, eventually it became underpriced. By 1960, external demands for U.S. gold became so great at this bargain price that the U.S. government would sell gold only to other central banks. What emerged then was a collective agreement among central banks not to reduce further U.S. gold stocks. But the gold pool thus formed broke down in 1968 when gold losses to the private market became serious.

According to Mundell and Laffer, what the United States could have done to avoid the last decade of grief was to have concentrated on keeping the dollar more attractive than \$35-per-ounce gold. Neither individuals nor central banks would come to the U.S. Treasury with dollars and demand their conversion into gold as long as the level of real growth in the world called for X number of dollars and only X number were supplied. If the United States was afraid of "losing" any more of its \$12 billion gold hoard in 1967, it need only have acted in the following fashion: Whenever a foreigner holding, say, \$100 showed up and demanded an equivalent amount of gold out of the Treasury hoard, the Federal Reserve would know

it had mistakenly issued 100 too many dollars. By contracting the money supply in that amount, the Fed would only have to sit back and wait: Somebody else in the world, needing 100 dollars in order to make a transaction and finding the world was short by that amount, would come to the Treasury with the equivalent amount of gold and demand dollars.

Instead, by partially closing the gold window in 1968, the United States only succeeded in making the dollar less attractive relative to gold and began the process that culminated in the current economic nightmare. Immediately, the private market developed an unofficial price of gold higher than \$35 an ounce. This effectively *immobilized* the gold held by central banks as reserve assets. Why? Central banks hold reserves as a cushion against unexpected international demands, arising from an internal crop failure, for example. But if such demands arose while gold was selling unofficially at higher than \$35, the central bank would have to give up its gold at the official price and lose the difference. Every central bank thus locked up its gold and began scraping together new reserves—i.e., dollars. The U.S. central bank, of course, didn't have this concern—acquiring dollar reserves—because it is the central bank that creates dollars.

### The demise of Bretton Woods

At the time, the popular belief in the United States was that the Western European and Japanese economies were amassing these dollar reserves by running trade surpluses with the United States. There was a common vision here of a Japanese manufacturer, using cheap labor, peddling a television set here for dollars, then simply banking the dollars. An American would lose a job, and a substitute job would not be created because the dollars earned by Japan would not be spent. The U.S. economy had become “uncompetitive,” or so the story went, and as the balance of payments deficits mounted, the idea took hold that the reason for all this was that the U.S. dollar had become “overvalued.”

What Mundell and Laffer say actually occurred was that, as foreign central banks immobilized their gold reserves, “money” became scarcer in these countries. In order to transact business, foreigners borrowed dollars and turned them in at their central banks for their own currency, and month after month the foreign central banks would show larger holdings of dollars. To most Americans, this looked pretty frightening, since these dollars were perceived as claims against U.S. goods and services. *What was not apparent*

*in the balance of payments deficits was the original transaction, the foreign "borrowing" of dollars, which meant that the United States had an equal and offsetting claim against foreign assets.*

In a world economy whose growth depended on a proper growth of the common currency (i.e., the dollar), the United States under the Bretton Woods arrangement would have to run ever larger balance of payments deficits for everyone's good. But Mundell perceived that, by forcing the immobilization of gold, the United States intensified this process and increased its deficits beyond the "normal" level. Then, instead of regaining control of the deficit by tightening up on dollar creation, which would have made possible once again the conversion of dollars into gold (or creating a world money into which the dollar was convertible), a grievous policy error was made. President Johnson sought to slow the outflow of dollars to reduce the U.S. payments deficit, first by voluntary restrictions on U.S. overseas investment (1965), then by making it mandatory (1968). A series of regulations was put in place to keep dollars from going abroad. The result was that the private market found a way around the U.S. regulations, and through financial innovation created a much worse headache for Washington. As Mundell stated in April 1972:

Failing an international money, a market solution will always develop, but it is one field in which market solutions are not optimal. The commercial banks, using the dollar, have now created an international money. It is the Eurodollar system or the international dollar system.

The financial innovation, which has taken on a life of its own, was the private substitute for the imperfectly working official system. The foreign branches of U.S. commercial banks accommodated the thirst for dollar liquidity abroad that the U.S. government was trying to choke off. Because foreign deposits of U.S. dollars are not subject to the reserve requirements imposed against domestic deposits, the banks could and did become efficient *private creators of money*. When the Fed slowed its creation of dollars, the Eurodollar market speeded up its creation, and vice versa. In an important 1974 empirical study, Laffer found this relationship to hold in each of the last 14 years. *The Federal Reserve could now only kid itself into thinking it could slow down the economy by contracting money growth, or stimulate the economy by expanding money supply.* The marketplace had found a substitute for the Fed.

In their imperfect understanding of what was happening in the world economy from 1967 on, U.S. policy makers dealt a quick *coup de grâce* to the Bretton Woods system. In Mundell's words:



No event in history can be said to have a single cause. But if one were seeking the most important policy origins of the 1971 [monetary] crisis one would have to blame it on excessive monetary looseness in the U.S. in the first six months of 1971, when monetary expansion was more rapid than in any comparable period in a quarter century! . . . The monetary acceleration exaggerated the overflow of dollars and engulfed Europe in dollar liquidity in the spring of 1971. In August, European central banks demanded gold. Rather than pay it out, the U.S. suspended convertibility. The 1934-71 era of \$35 an ounce became a closed book in history.

There followed, between August 1971 and February 1973 (when currency exchange rates were set on a common float), a further comedy of errors. U.S. policy makers, hypnotized by the idea that the U.S. economy was suffering from an overvalued dollar, "won" a 13 per cent devaluation of the dollar in the agreement Treasury Secretary John Connally got from foreign ministers at a meeting in the Smithsonian Institution. The U.S. officials grumbled that the devaluation should have been three or four per cent higher to get all the benefits. As events demonstrated, there were not going to be any benefits at all.

### Recreating the "money supermarket"

In the Mundell-Laffer perspective, the world after 1944 had enjoyed all the efficiencies and economies of scale of a "money supermarket." But with flexible—then floating—exchange rates, the supermarket would close and be replaced by "mom and pop" money stores. It is the global equivalent of what would suddenly happen if each of our 50 states were forced off the common U.S. currency into independent monetary systems.

Nor will Mundell and Laffer be surprised if the world comes back to a money supermarket, a fixed-exchange-rate system that again tries to approximate a world currency. In June 1969, at a conference celebrating the 25th anniversary of Bretton Woods, Mundell took note of the powerful forces driving toward exchange-rate flexibility and predicted that by 1980 the world would have tried it, abandoned it, and turned away from any further advocacy of it. It will probably not take that long. Already, many U.S. officials no longer look upon dollar depreciation as signaling an improvement in the U.S. "competitive" position. And West German bankers, economists, and politicians no longer worry that an appreciation of the Deutschmark will harm the German economy. Once this reality is accepted, the "political impracticalities" of putting together a world currency

vanish. If politicians can see that their internal economies do not benefit from depreciation of the currency, and if they further see that their internal economies cannot be stimulated to increased output and decreased unemployment by money creation, they will willingly give up this device in order to gain the enormous benefits of the money supermarket, the common currency.

Once this political problem is put aside, all that Laffer and Mundell see is a difficult, but straightforward, engineering problem. In a dozen different ways, the mechanism can be reconstructed so that the benefits of Bretton Woods are back without the flaw of the system.

Thus, instead of all currencies tying to the dollar, and the dollar tying to gold, all currencies can tie to the International Monetary Fund's Special Drawing Rights (SDR)—"paper gold"—which in turn fix the price of gold. The difference is subtle, but it removes the worst problems of the Bretton Woods system. Instead of the United States getting all the banking profits that were accruing to it because of the international dollar standard, each nation linked into the system would get a proportional share of the profits. The dollar would still be powerful, but the United States could not, as DeGaulle once complained, echoing his friend and adviser Jacques Rueff, enjoy "a deficit without tears." The Eurodollar market would be replaced by the SDR market, and while the dollar would still be dominant, it would not be as conspicuous. And in holding the price of gold at arm's length instead of at the pivot of the system, the West could protect its monetary system should the Soviet Union or South Africa—the biggest producers of gold—suddenly try to dump the metal on the market and reap unreasonable rewards. With this SDR anchor, the finance ministers of the West would be able calmly and precisely both to maintain external balance and to increase world money in the desired and appropriate amounts.

The economic and social costs of not having such a system operating since 1967, and especially since 1971, have been colossal. Monetary discipline ended when the world moved away from convertibility and onto flexible rates. Much of the world inflation has resulted from the breakdown of Bretton Woods, bringing in its train the crisis in confidence in Western institutions and doubts about the appropriateness of free economies in the modern environment. In return for this mess, the United States now has an independent monetary policy, which amounts to a "right" to have more unemployment when policy errs on the side of tightness and the "right" to have more inflation when policy errs on the side of looseness.

### Dealing with "stagflation"

To deal with the domestic economy, the U.S. policy maker operating under a fixed-exchange-rate system would still be left with fiscal policy, which is all that is necessary. Since 1961, Mundell has argued *that monetary and fiscal policies are totally distinct policy instruments that can be employed for separate purposes and even utilized in opposing directions*. Monetary policy is the appropriate instrument to maintain external balance; fiscal policy is the appropriate instrument to maintain aggregate demand and internal balance. *If the world economy has inflation and unemployment at the same time, the proper policy mix is tight money and fiscal ease*. The latter should preferably take the form of tax reductions although Mundell agrees that government purchases of good and services will also have beneficial effects.

The essence of this revolutionary idea is that *with a given supply of money, increasing unemployment in the modern age almost certainly means an increase in inflation*. In an earlier age, when there were no unions and only minimal welfare and unemployment benefits to those unemployed, a slowing in production would translate itself into lower money wages. Today, an increase in unemployment translates into lower money wages only over a long period. The supply of goods and services simply declines, and the supply that is produced is bid up in price by the employed (with their still high wages) and the unemployed (with their transfer payments).<sup>4</sup>

Mundell's first explicit public insistence that the current U.S. "stagflation" called for tax-cutting and tight money was made in April 1971 at a conference in Bologna, Italy, on world inflation. The 180-degree turn in the Ford Administration's policy in January 1975 came in part as a result of Laffer's presentations in late November to White House chief-of-staff Donald Rumsfeld. Laffer, who took the insight from his friend Mundell and refined it to embrace the

---

<sup>4</sup> Taxes should be cut and government spending maintained through deficit financing only when a special condition exists, a condition Mundell and Laffer say exists now. "There are always two tax rates that produce the same dollar revenues," says Laffer. "For example, when taxes are zero, revenues are zero. When taxes are 100 per cent, there is no production, and revenues are also zero. In between these extremes there is one tax rate that maximizes government revenues." Any higher tax rate reduces total output and the tax base, and becomes counterproductive even for producing revenues. U.S. marginal tax rates are now, they argue, in this unproductive range and the economy is being "choked, asphyxiated by taxes," says Mundell. Tax rates have been put up inadvertently by the impact of inflation on the progressivity of the tax structure. If the tax rate were below the rate that maximizes revenues, tax cuts would reduce tax revenues at full employment. But a multiplier effect operates if the economy is at less than full employment, and the tax cut then

debilitating effects of transfer payments, also argued the case in a November memorandum to Treasury Secretary Simon:

The best program to combat inflation simultaneously reduces money growth and increases real output growth. In order to increase real output growth, it is first necessary to focus on why people, machines, land, and other factors of production choose to be employed. Secondly, it is necessary to focus on why firms choose to employ these productive factors.

It is taken here as a simple truth that in part productive factors' choice to work is based upon their ability to earn after-tax income. It is likewise taken as a virtually obvious proposition that the more an employer has to pay his factors of production the less he will want.

Marginal taxes of all sorts stand as a wedge between what an employer pays his factors of production and what they ultimately receive in after-tax income. In the case of payroll taxes, for example, if an employer pays an employee \$100 he must also pay his share of the social security contribution of about \$5.50. Thus the use of the employee's services costs the employer \$105.50. The employee on the other hand has \$5.50 deducted from his payroll for his share of the contribution and therefore receives \$94.50. . . . The \$11 wedge is only the social security taxes. In addition to these taxes, there are also income taxes, sales taxes, property taxes, state and local taxes of all sorts, etc. At our current levels these tax wedge effects are very significant.

In order to increase total output, policy measures must have the effect of both increasing firms' demand for productive factors and increasing the productive factors' desire to be employed. Taxes of all sorts must be reduced. These reductions will be most effective where they lower marginal tax rates the most. Any reduction in marginal tax rates means that the employers will pay less and yet employees will receive more. Both from the employer and employee point of view more employment will be desired and more output will be forthcoming.

What is especially interesting about this line of reasoning is not its heterodoxy. Heterodox it most certainly is: For more than a generation conservative economists have been insisting that inflation must be fought with monetary and fiscal restraint, while liberal economists have been demanding monetary and fiscal ease to com-

---

raises output and the tax base, besides making the economy more efficient. Even if a bigger deficit emerges, sufficient tax revenues will be recovered to pay the interest on the government bonds issued to finance the deficit. Thus, future taxes would not have to be raised and there would be no subtraction from future output. Tax cuts, therefore, actually can provide a means for servicing the public debt.

In May 1974, Mundell said the U.S. economy needed an immediate tax cut of \$10 billion, or as the economy deteriorated, the figure would grow. In October, he said the implied tax cut should be \$30 billion; in February, both he and Laffer moved the figure to \$60 billion. The tax cut numbers are only "implied" in the sense that Mundell and Laffer believe deficits would not materialize in those amounts since the tax base would rise; employment, price stability, and revenues would be optimized by putting the unemployed resources back to work.

bat recession. Even more heterodox, perhaps, is the fact that Mundell and Laffer think of tax-cutting as a way of augmenting supply, when virtually all of their peers see it only as a way to augment demand. Still, what is most interesting is not any particular conclusion but the way of thinking itself: It is so uncommon to hear economists analyze the nation's economic problems—in such microeconomic terms—in terms of what makes people want to work and produce. It is a distinctly different approach from the monetarist who sees everything as depending on the proper amount of money printed by the Federal Reserve, or from the neo-Keynesian who sees everything as depending on “demand management” by the government. Both of these “macroscopic” theories are inherently managerial in nature. Mundell and Laffer go back to an older style of economic thought in which the incentives and motivations of the individual producer and consumer and merchant are made the key-stone of economic policy.

Moreover, this individual producer and consumer and merchant are seen as members of a world economic community. Thus, Mundell-Laffer's global view of what must be done follows from this same kind of microeconomic reasoning. Governments cannot change the terms of trade either by changing money supplies or by varying exchange rates. Some of them only think they can. If they gave up trying, and pooled their mistakes in a simulated common currency, they would avoid the dreadful cost of their illusion. They need only then manage the rate of growth of the common currency—a task they can also relieve themselves of by tying the growth rate to the limitations of the planet's resources (of which gold, of course, is one), knowing that if they do not do this, the planet will bark back with a shortage of its treasures. According to Mundell-Laffer, conservationists who fear the West is plundering the earth's resources little realize the enchanting possibilities of international monetary reform.

### A “Copernican revolution”?

It is still much too early, of course, to estimate the status of the Mundell-Laffer hypothesis. Though many distinguished economists are beginning rather grudgingly to allow that “there may be something in it,” resistance and disapproval are still strong. The suggestion that gold (or an equivalent to gold, say a basket of commodities) could have a useful role in international finance certainly raises the hackles of a generation of economists who were raised

to think that the "gold standard" was one of yesteryear's most awful superstitions. And the Mundell-Laffer hypothesis does irritate the ideological sensibilities of those—whether economists or politicians—who believe that, world economy or no, a national economic policy can still be "made" by national authorities. And it is always possible that further research and analysis will reveal that Mundell and Laffer have only a part of the truth.

Still, it is unlikely that the hypothesis will simply fade away. The world phenomenon of inflation-with-recession is one of the striking features of our era, and existing economic theories—whether emanating from Cambridge or Chicago—do not seem able to give a clear and simple explanation. And as the "epicycles" required for an explanation become even more complicated and tortuous, some sort of Copernican revision will become more appealing. Just where the Mundell-Laffer hypothesis fits into such a revision remains to be seen. Theirs may or may not be the "Copernican revolution" in economics that is needed. But at the very least, one suspects, it can legitimately claim a proto-Copernican status.

---

### CONTRIBUTORS

WILLIAM C. BAER is Assistant Professor of Planning and Urban Studies at the University of Southern California. . . . EDWARD JAY EPSTEIN, who writes frequently for the *New Yorker*, is a fellow of the Drug Abuse Council. The views expressed in his article are not necessarily those of the Council. . . . NATHAN GLAZER is Professor of Education and Social Structure at Harvard. . . . DAVID A. MUSTO is Associate Professor of Psychiatry and History at Yale. In 1967-69 he served as Special Assistant to the Director of the NIMH. . . . DAVID A. STOCKMAN, who is Executive Director of the Republican Conference in the U.S. House of Representatives, is on leave as a Kennedy Fellow at the Institute of Politics at Harvard. . . . JUDE WANNISKI writes editorials for *The Wall Street Journal*. . . . JAMES Q. WILSON is Professor of Government at Harvard.

---

Publication of the article by David A. Musto was made possible by a grant from the Charles E. Merrill Trust.