

The Fed's Consistent Monetary Policy

A Long Term Perspective

Cornelis A. Los

Associate Professor of Banking & Finance
Nanyang Business School
Nanyang Technological University
Singapore 639798

In 1978 the Full Employment and Balanced Growth Act, known as the Humphrey-Hawkins Act (HH Act), established in the U.S. the current monetary policy procedures, which the Federal Reserve ("the Fed") has consistently executed in the past two decades. The HH Act requires the Federal Reserve to target a stable and low inflation rate, consistent with sustainable growth and a low unemployment rate. This explains why two monthly U.S. economic reports receive major attention from the world's financial markets: the inflation and employment reports.

The analytical framework consistent with the HH Act, within which the decisions are made by the Federal Open Market Committee (FOMC), was constructed in the early 1980s under the Chairmanship of Mr. Paul Volcker, who had announced a major change in monetary policy in October 6, 1979. I know, because I helped to construct the new framework, starting from an internal memo written by Mr. Volcker himself in 1976.

The Fed's analytical framework has not changed since, as was recently acknowledged, on the Internet, by the Federal Reserve Bank of Cleveland. 1./ Dr. Alan Greenspan still uses it, when he presents his biannual HH testimony before Congress in February and July each year. Let me explain the Fed's analytical framework in as concise terms as possible, to see how we should interpret the Fed's current monetary policy and its near term consequences for the interest rates in the U.S. and the value of its dollar.

The Fed's Analytical Framework

The analytical framework that we constructed in the early 1980s consists of three fundamental economic relationships:

- (1) the expectations-augmented Phillips (EAP) curve;
- (2) the definition of the growth in unit labor costs; and
- (3) Okun's Law

- (i) The expectations-augmented Phillips (EAP) curve is taken to be one of the most reliable in macroeconomics. Rising unemployment tends to lower wage growth and vice versa. But there is a twist, because of the adaptively adjusting inflation expectations. People's expectations catch on and after a while the effect of a higher, respectively lower unemployment rate, i.e., of more or less slack in the labor market wears off. So, on the surface one can observe higher inflation rates to coincide with higher unemployment rates and there is no obvious trade-off between the two. However, adjusted for inflation expectations, the trade-off between unemployment and inflation clearly holds true in the States.
- (ii) Growth in unit labor costs equals the difference between wage growth and growth in labor productivity. In other words, the growth in labor costs can be lowered not only by reducing wage growth, but also by increasing productivity growth. The growth in labor productivity is caused by efficiency enhancing technological innovations, which are considered exogenous to the policy domain of the Federal Reserve.
- (iii) Okun's law provides the final link in the chain between inflation and output growth. Okun's Law is the negative correlation found between unemployment and output growth. An increase in the growth of output tends to lower the rate of unemployment and vice versa.

In the words of the Federal Reserve Bank of Cleveland: "The Phillips curve, together with Okun's law, essentially codify much of the conventional wisdom about monetary policy in a formal statistical way." 1./

Implications Of The Fed's Framework

The first implication of this macro-economic framework is that the EAP curve, together with the definition of unit labor cost growth provide a way to compute a Non-Accelerating-Inflation-Rate-of-Unemployment (NAIRU), the unemployment rate below which inflationary pressures build up and above which inflationary pressures subside. 2./

What is often not recognized, however, is that this NAIRU is not static, but changes under the impact of ,i.a., the growth in labor productivity. When the growth in labor productivity decreases, the NAIRU rises, and when productivity growth increases, the NAIRU declines. Thus the NAIRU rose during the 1970s, in the aftermath of the two oil price shocks of 1974 and 1979, when the U.S. economy adjusted with difficulty to higher energy costs. But the NAIRU appears now to (very slowly) decline, after the massive efficiency restructuring of the U.S. economy, which was triggered by several deregulations in the transportation and financial services industries under the Reagan Administration..

The second implication of the Fed's analytical framework is that there is a potential GDP growth rate, i.e., a rate of long-run sustainable output growth. But again, because of exogenous factors, like technological innovation and consequent productivity growth (not

only of labor, but also of capital), this sustainable rate of output growth is not a constant but gradually changes over time.

The third implication is that expectations play an important role: the faster the expectations of inflation adjust, the less effective is monetary policy. In the extreme theoretical case of instantaneous adjustment implied by rational expectations, monetary policy is impotent. Surprisingly, despite the avalanche of raw economic and financial data, empirical expectations adjust only slowly. One important reason is, perhaps, that the raw economic and financial data are not consistently analyzed, different interpretations result and consensus expectations form only very slowly.

During the past two years, in 1994 and 1995, Dr. Greenspan, in his HH testimonies, has explicitly acknowledged that despite its formidable reservoir of capable and proficient research staff, the Fed's own knowledge and understanding of what is happening in the economy is very weak and uncertain. In reference to the framework the Cleveland economists even stated in July: "Unfortunately, the measure of our ignorance about these important variables is large indeed, and the magnitudes really matter."

The Fed's Track Record

Question: how well has the Fed fared with this simple analytical framework for its monetary policy decisions? Answer: remarkably well!

In the summer of 1982, when I was an Economist of the Federal Reserve Bank of New York, I was asked to compute the required unemployment trajectory to bring down inflation and to keep it at three percent, using this analytical framework. The reason was, that the Fed wanted to opportunistically use the impending recession at the end of 1982 to reduce inflation to a sustainable level. Consumer price inflation had raged at a peak of 14% immediately after the second oil shock of 1979. The question was: to what level must the unemployment rate be pushed up to bring inflation down to the three percent required by the HH Act and to keep it there?

This was a simple dynamic control problem, where the unemployment rate was viewed as the controllable variable and the rate of inflation the target variable. 3./ The analytical framework could be simplified to a controllable differential equation, which I used to trace out on graph paper (PC were not yet *en vogue* at the New York Fed in 1982) the mutually consistent trajectories of the rates of total unemployment and official CPI inflation (Graph 1).

In 1983, when the success of Volcker's monetary policy had already become clear, my colleague Steven Englander and I were allowed to publish the details of our analytical framework in the *Quarterly Review*, the flagship publication of the Federal Reserve Bank of New York 4./ It was the ultimate official imprimatur of the Fed's new decision framework.

Later, in 1990, when I worked as a Senior Economist for Nomura Research Institute in New York, I plotted the historical trajectories of these same rates of unemployment and inflation, and demonstrated to my Japanese superiors that the Fed had remarkably closely followed the originally projected paths. A wider historical perspective confirms this track record (Graph 2)

There is an important implication of the Fed's framework, though, which is not well understood by the markets. When I had traced the projected paths in the summer of 1982, I had calculated the NAIRU to be 6.5%. But Dr. Greenspan had apparently fully absorbed and understood our framework, when he became Chairman in 1987. Dr. Greenspan realized that the deregulations and efficiency restructuring of the U.S. economy could have lowered the NAIRU and during his first term he immediately started to push actual unemployment below our computed "barrier" of 6.5%, down to 5.5%.

Dr. Greenspan's interpretation was correct, but his timing was off, since the NAIRU had not yet sufficiently declined. Consequently, the actual rate of unemployment came out below the NAIRU and inflation started to rise from its 3% trend to a 4% trend and sometimes even occasionally even higher (Graph 3).

It did not take too long for the Fed's economists to realize that Dr. Greenspan had made a policy mistake. But Dr. Greenspan preferred to wait until the 1991/92 recession to bring inflation opportunistically down again to the 3% trend level by raising the unemployment rate to 8% again. He was also forced to wait, since in 1987 he had been immediately confronted with the unenviable task of functioning as "lender-of-last-resort" to prevent the consequences of "Black Monday's" stock market crash of 1987 from spreading through the economy. Although the Fed had, within two weeks after the provision of extra liquidity for the stock brokers, pumped this excess liquidity out of the markets again, it wanted to avoid the impression that it was tightening too much.

Furthermore, Dr. Greenspan has made it perfectly clear in his HH testimony in July that he thinks that holding the line on inflation "does not impose a speed limit on economic growth." He said to have observed that "the inability to pass cost increases through to higher prices provides a powerful incentive to firms to increase profit margins through innovation and greater efficiency, which boosts productivity and ultimately standards of living over time." 5. It is only through increased economic efficiency and a rise in productivity growth that the NAIRU can be lowered and the sustainable growth rate of the U.S. be raised.

Currently, now that Dr. Greenspan's third term has been confirmed, the Fed clearly makes another attempt to test if the NAIRU has declined. This is part and parcel of the Fed's opportunistic inflation policy. When there a period of slow growth looms, the Fed will use its monetary control to marginally enlarge the resulting unemployment rate, by maintaining monetary tightness and by restricting bank lending just a bit longer than expected, to bring inflation down to the 1.5% which Dr. Greenspan would like to see in the long run.

However, Dr. Greenspan's Fed will not induce a recession to achieve that target. It prefers to surf the natural wave of the business cycle to do so and waits for a suitable opportunity.

The Current State of the U.S. Economy

After a small bout of consumer price acceleration this past spring, mainly due to food and energy items, overall consumer price inflation in the U.S. has returned to 3% in July and remains now, in the words of Chairman Greenspan, "quiescent." Inflation has thus returned to the 3% trend path it has followed the last five years. Better still, the closely watched core inflation rate stood in July at 2.7%, the lowest year-to-year percentage increase in 30 years and it's been about 3% for the past three years. In addition, the July wholesale prices showed a zero increase. Although the rate of producer price inflation is very volatile and only loosely correlated to (lagged) retail price inflation, it is now on average more than two percentage points below last year's rate.

These moderate inflation figures combined with a July unemployment rate of 5.4%, close to its 30 year low too, suggest that the Fed's second test - if the NAIRU has declined - may have turned out to be successful. Indirectly these indicators imply a new NAIRU of close to 5.5%. 6/ This full percentage point drop in comparison with the NAIRU of the early 1980s can then be attributed to the remarkable technological innovations that have occurred in the U.S. in the past decade.

By implication, the sustainable growth rate of the U.S. has somewhat increased, probably from close to 2.0% to about 2.5%. According to the Commerce Department's final figures expanded at a 2.2% in the first quarter and not at the too high 2.8% rate, which was revised down because of a massive drawdown of inventories. Much of this reflected a strike-induced reduction in automobile stocks.

Today's U.S. economy has thus been called a "Goldilocks" economy with moderate growth, accompanied by low unemployment and relatively low inflation. The next question is: which way will the U.S. economy be going? Its answer will determine if there is potential upward pressure on inflation to be expected or not.

In contrast to Volcker's Fed, Greenspan's Fed is not openly pro-active although Dr. Greenspan still claims that "Federal Reserve policy has, for some time now, been designed to act preemptively." Because of the uncertainties involved in estimating magnitudes, it has adopted a more conservative policy mode. As Dr. Greenspan testified: "...we respond to evidence that those strains themselves are developing."

The current economy appears to slow down a bit after the rebuilding of inventories in the second quarter, although a recession in the second half of 1996, originally expected already since the end of 1995, isn't clearly materializing (Graph 4). According to the Employment Report of August 2nd, subdued job growth and declining working hours and reduced growth in hourly wages in July (at 2.9%, down from 3.4% in June) offered the

clearest signs yet that the U.S. economy is throttling down from the second quarter's fast pace. This takes the pressure of the Fed to raise interest rates at its policy meeting on August 20th. But since the Fed's monetary policies impact the economy with a lag of half a year according to the latest phase correlations, the Fed's forecast horizon is between half a year and a year and it has to look ahead (Graph 6).

The Fed's Current Action Plan

The particular question the Fed faces is thus: where is the U.S. economy heading in the spring and summer of 1997? The Blue Chip survey foresees the economy expanding at 2.6% real GDP growth in the whole of 1996, with a slower 2% through the remainder of 1996 and into 1997. The Survey sees next year's rate of inflation similar to this year's 2.8% - 3.2%.

The Governors of the Federal Reserve Board and the Presidents of Federal Reserve Banks officially expect 2.5% - 2.75% throughout 1996 (Table 2.). Given the strong performance of real GDP in the first half of the year, this forecast implies still somewhat slower growth in the second half of this year, similar to the Blue Chip survey forecast, and a slowdown to 1.75% to 1.25% in 1997.

The answer of what will happen in 1997, may, perhaps, be provided by the Fed's latest business cycle prediction tool. Within the Fed there is currently strong support to use the Treasury yield curve as main predictor of the U.S. business cycle, by looking at the ratio between the short-term bill rates and the 10-year bond rates. When this ratio is below unity, i.e., the yield curve is upward sloping, the unbiased expectation is that in the near future short term interest rates will rise due to excess demand for cash resulting from a business expansion. Vice versa, when this ratio is above unity and the yield curve is inverted, the expectation is that the short term interest rates will drop due to a lack of demand for cash resulting from a business contraction. The rationale for using this prediction tool is that it reflects the collective wisdom of all market participants, whose decisions and expectations help determine bond yields (Graph 7.)

Currently the spread between the three-month rate and the 10-year rate is still about 140 basis points (i.e., above its mean spread of 120 basis points) and their ratio is 0.79: the U.S. yield curve is clearly upward sloping (Graph 4.). That ratio puts the likelihood of a recession four quarters from now at less than 5%, according to two Senior Economists of the Federal Reserve Bank of New York.

Combining the tightness in the labor market with this prediction of no major slowdown within the period of a year and with Dr. Greenspan's cautionary HH testimonies in July, suggests that he will keep his finger on the trigger, ready to tighten credit if and when there is any sign of rising price inflation emerges. But, for the moment, I'm sure, he savors the not yet completely corroborated possibility of a lowered NAIRU, which implies that it may not be necessary to raise interest rates for another half year to keep inflation at 3%.

Fact is that Greenspan's Fed has almost given up to lower the inflation rate to its proffered long term goal of 1.5%, i.e., the current rate of inflation in Germany. Lately Fed economists have publicly talked about the opportunistic element in the Fed's monetary policy. As said, the Fed will lower the inflation rate only riding on the back of an already occurring recession or period of slow growth, which can then be marginally deepened and lengthened. Such a policy looks similar to the policy Chairman Volcker implemented in 1982, but is much less drastic and more marginal.

In this context it is significant that Dr. Greenspan did allow in his HH testimony for a somewhat higher unemployment rate than 5.4% when so required, since he stated, "for the remainder of this year and the next in these projections, the unemployment rate remains in the range of the past 1-1/2 years." That period includes at the very beginning an unemployment rate of close to 6.0%, i.e., clearly above the new NAIRU!

A slightly increased unemployment rate once in a while is less feared by politicians in the U.S. than in Europe. In the U.S. labor markets have always been remarkably flexible and efficient, since about 3/4 of the 5.4% unemployment rate consist of friction unemployment, i.e., unemployment caused by workers and employees geographically and functionally moving from old to new jobs. Furthermore, the employment-to-population ratio of 63.2% shows a healthy employed-dependent ratio in the U.S.

In the past 3-1/2 years alone more than 10 million net new jobs have added to the U.S. economy. Diffusion indices reveal that this net increase has been distributed among a wide variety of industries. This is in sharp contrast to Europe, where since 1979 no net new jobs have been created. Europe's 10-12% unemployment rates consist primarily of structural unemployment, thanks to its highly inefficient labor markets. Therefore European politicians view any further increase in their unemployment rates with much trepidation.

Interaction With Federal Fiscal Policy

In the early part of the 1980s fiscal policy in the U.S. was dominated by increased spending on both "guns and butter." It was President Reagan's confirmed policy to outspend the "evil empire" of Soviet Communism, while maintaining and even increasing the standard of living for all Americans. Reagan's simple economic understanding was that the efficient U.S. production system could adjust to this vast economic expansion, but that the inefficient command economy of the Soviet Union would collapse under the imposed strains. His assessment was correct. The Soviet Economy started to break down already in the second half of the 1980s and produced a thunderous implosion in 1989.

There was one flaw in Reagan's policy of increased defense spending combined with a tax cut: it led to the perennial "double deficit problem", i.e., huge Federal deficits combined with current account deficits. These deficits have thus far been financed by substantial net

capital inflows from abroad. Obviously, the allied partners of Europe and Japan helped to finance Reagan's policy to secure a future world free of Soviet Communism.

The increased production potential of the U.S. together with the retirement savings of the aging baby boomers should be able to pay off these foreign debts in the 21st century. It is important to recognize, however, that most of the accumulated federal debt is owed to (and owned by) American citizens and not to foreigners, thus the foreign debt burden is not choking the U.S. economy in any way. It is similar to the debts the U.S. incurred in the 19th century, when it was an emerging nation (and for five years embroiled in a civil war), or to the debts it incurred during the Second World War (which have all been paid off). Thus the U.S. considers servicing these Cold War debts the price to be paid for freedom.

In his HH Congressional testimonies Dr. Greenspan continues to make the obligatory remarks about the need to reduce the federal deficits, although they are relatively small now. The Federal deficit is estimated to be US\$117 billion for fiscal year 1996, or a projected 1.6% in fiscal '96, sharply down from a peak US\$290 billion or 4.9% of GDP in fiscal '92. 7./ Dr. Greenspan remains worried about "the dying out of serious discussions that might lead to a bipartisan agreement to eliminate the budget deficit over time." Greenspan's Fed has always been a strong proponent of a balanced budget and it would like to see these deficits further decreased, because they tend to complicate monetary policy, for two reasons.

First, the federal deficits tend to keep U.S. interest rates higher than in the other industrialized countries, to attract the required capital to finance the continuing federal deficits. These net capital flows make the U.S. dependent, since the resulting foreign debt has to be serviced.

Second, high government deficits tend to induce high domestic interest rates, which tend to slow project financing by bank lending. This phenomenon is called "crowding out." Fortunately, the relative shortage of debt capital has been compensated in the 1980s and, in particular, in the 1990s by the (until recently) booming U.S. stock market, which has found new cheaper (equity) funding from 160 million Americans, who now invest in the stock market via mutual funds. Mutual funds have begun to seriously replace bank accounts in the U.S.

Unfortunately, Congressional Budget Office projections show that under current fiscal policies the Federal deficits will widen again after 1997 (Graph 8.) Total federal revenue as a share of GDP will marginally decline from 18.9% in 1995 to 18.5% in 2001 and will remain at that level through 2006. These trends reflect a continuation of those observed in the past. What remains worrisome is that the upward trend in projected federal spending continues to be dominated by increased mandatory outlays for Medicare and Social Security, despite the fact that already in 1983 Dr. Greenspan succeeded in getting Social Security partially funded.

The Clinton Administration has not succeeded to dent these mandatory spending trends, which were already meticulously researched by the Office of Management and Budget under the Bush Administration, despite the rather successful Deficit Reduction Act of 1993. A new deficit reduction effort is required, but the proposed entitlement reform for fiscal year 1996 has just been vetoed. Excluding offsetting receipts, mandatory spending is thus expected to grow from 10.3% of GDP in 1995 to 12.9% in 2006, mainly as the result of increased health care costs. As a result, the baseline federal deficit is on course to jump from 2.3% of GDP in 1995 and a projected 1.6% in 1996 back to 3.3% in 2006, barring any change in fiscal policies.

The current Republican Presidential candidates Robert Dole and his Vice Presidential candidate Jack Kemp advocate a 15% federal tax cut, based on supply side arguments, and Mr. Dole is in favor of increased defense spending. History shows that such a Reaganesque combination will lead to larger and not to smaller deficits as percentage of GDP, unless this new Administration can miraculously overcome the strong forces of resistance to cut the mandatory outlays.

In this context it must be heartening to the Fed that Mr. Dole endorses a bill which would force the Fed to make price stability its only goal, by amending the Humphrey-Hawkins Act, which requires the Fed to target simultaneously price stability and low unemployment. Apparently, Mr. Dole wants to put the political burden of inducing or deepening a recession to keep inflation stable squarely on the shoulders of the Fed. But, at least, he attempts to make the Fed less vulnerable to Congressional fire during the biannual HH testimonies.

To maintain the resulting higher interest rates stable, the Fed, by implication, has to carefully provide monetary liquidity, without inflaming the inflation expectations. In the past two and a half decades, since the Smithsonian Agreement of 1971 and the introduction of the floating exchange rate system in 1973, the U.S. implicitly printed money and gradually devalued the dollar. Via the double deficits this excess currency ended mostly ends up overseas in the form of Eurodollars or in the form of physical dollars used as preferred medium of exchange in some dollarized emerging markets, including, ironically, the former Soviet Union. In fact, of the about US\$400 billion of the currency in circulation, an astonishing more than 50% is held outside the U.S.. Chairman Greenspan acknowledged in his July HH testimony that the foreign seigniorage of the generation of these excess dollars is about US\$10 billion annually in favor of the U.S. Treasury.

But an important change may be in the making. The foreign demand for U.S. currency, which has expanded at an average annual rate of nearly 8.5% over the past 22 years, has drastically dropped this year. U.S. currency is growing this year at only 3% and has slowed the growth in the monetary base to an annual rate of only 1.8% since January, while the monetary aggregate M1 has fallen at a 1.5% annual rate through June. Recently the U.S. Treasury has started to replace the old "greenbacks" with more sophisticated

anti-fraud dollars, but this may have scared the shadow economies in the emerging markets to keep the U.S. dollar as its preferred medium of exchange.

The Fed Ignores The Dollar Value

It has been customary policy for the Federal Reserve to ignore the fundamental value of the dollar. The Fed's foreign currency desk in New York occasionally intervenes in the FX markets to maintain continuous trading and to prevent "gapping," and it occasionally assists the interventions by the Bundesbank and the Bank of Japan, for the same reason. But that is the extent of its FX involvement. The fundamental value of the dollar is of policy concern to Mr. Robert Rubin, the U.S. Treasurer, since he has to sell U.S. Treasury securities. But the dollar's value is clearly more of concern to foreign governments than to the U.S. government.

Recall that since the Smithsonian agreement of 1971, the U.S. dollar's fundamental value has been in a secular decline, with a massive hick-up in 1986, around the time of the Plaza Accord. In fact, thanks to the continuation of the double deficit, the dollar is destined to lose even more of its fundamental value.

Mind you, the U.S. dollar is still the dominant anchor currency: it is used in about 60% of the world transactions. The Deutschmark in 20% and the Yen in 16%. Many emerging markets, even the non-dollarized ones, have linked their currencies to the U.S. dollar, thereby further increasing the U.S. dollar's influence.

Still, this all does not concern the non-mercantilist American consumers, who hardly take the dollar's value versus that of other currencies into account, except, perhaps, when they travel overseas on a tourist vacation. (Corporate producers are apparently the only ones concerned, be it in the U.S. or in Japan). It is also easy to see why there is such a domestic lack of concern for the dollar's value. The 260 million U.S. citizens spend only about 10% of their income on foreign goods and services. To hedge the risks associated with imported inflation because of the decline in the dollar's value (on a trade-weighted basis, which is much less dramatic than the partial declines versus the Deutschmark or the Japanese Yen!), which could hurt their standard of living, American consumers would have to invest only 10% of their assets in foreign securities. To do otherwise would create a purchasing power mismatch.

But the data show an even smaller percentage: Americans invest only about 4% of their assets abroad and are apparently mismatched by 6%. However, this is evidence of rational collective behavior, because 60% of the imported goods and services in the U.S. are dollar-denominated (e.g., imported oil) or denominated in currencies linked to the dollar. There are thus no inflation risks associated with these goods and services. Since 60% of 10% = 6%, Americans have to hedge only against the imported inflation on the remaining 40% of goods and services and invest thus only 40% of 10% = 4% of their assets in foreign denominations.

In addition, it can be demonstrated that on a risk-adjusted basis the rates of total return on investments in emerging markets, even the one in Asia, is about the same to those within the U.S.. Thus, when the currency volatility of the Asian currencies increases because of political turmoil or weakening banking systems, there is even less reason for Americans to invest in Asia. All this explains why Americans don't invest many of their assets overseas, why they exhibit a relative lack of concern about their dollar's fundamental value and why they are fickle when it comes to committing their assets to Asia..

This is of course not true for the 180 million Japanese, since Japan is an island economy and quickly suffers from imported inflation (So does Germany). Japan benefits from the low dollar denominated oil price to keep its energy costs down (and so does Germany), which explains why it was willing to foot part of the bill for the Gulf War in 1990. However, the export manufacturers in both Japan and Germany experience competition from the low priced American products. But, instead of fighting the secular decline of the dollar, however, some producers, like the car manufacturers, overcome this problem by building greenfield operations in the now logistically very efficient and productive U.S., e.g., Honda, Toyota, Mazda, Volkswagen, Mercedes Benz, BMW, etc.

Clearly, the U.S. clearly does not have to fear from lower wages, even when the dollar would not decline in value, otherwise these car factories would have been built just over the border in Mexico. Global competition is executed on the basis of unit labor costs and high productivity, not on the basis of starving wages.

Why Doesn't The U.S. Dollar Collapse?

Overall, the dollar is in a secular decline, but it doesn't collapse, because

- (1) it is the dominant global medium of exchange;
- (2) too many countries hold huge U.S. currency reserves;
- (3) too many countries view the U.S. as their major export market and can't afford to let their currencies appreciate versus the dollar;
- (4) too many countries have now major earnings generating direct investments in the U.S..

The region enjoying the Pax Americana is dollarized, just like the region enjoying Pax Romana 2,000 years ago was "centurianized" by Rome's currency. Currently mercantilist foreign governments, in particular Asian governments, and more specifically Japan, quietly support the value of the U.S. dollar, because they still prefer the Pax Americana above a (now outdated) Pax Sovietica or a (still possible) Pax Sinica..

For example, we know that any tendency for the required foreign capital inflow not to finance the U.S. current account deficit will initiate a decline in the dollar's value. But in the first quarter of this year the preliminary U.S. current account deficit of \$142 billion (at

an annual rate) was accompanied by a contrary net private capital outflow (Graph 5.). Consequently, the dollar should have declined in value. However, it didn't, since the requisite net capital inflow came when foreign governments rescued the dollar by adding US\$206.5 billion (at annual rate) to their official holdings.

Foreign governments purchased the dollar to avoid their own currencies to appreciate versus the U.S. dollar, which could hurt their exports to the deepest and most liquid export market in the world (Graph 6.). 8./ The rise in the dollar to a 2-1/2 year high against the Yen, has tended to divert the domestic U.S. demand toward imported goods and distressed corporate America.

Since most economists expect this year's current account deficit of the U.S. to deteriorate and to exceed last year's US\$148 billion somewhat, the dollar should fundamentally remain weak and more support by foreign governments may be required. The multi-billion dollar question is: how long can foreign governments support the U.S. dollar's value? The recent rather sudden reversal in the dollars 15 month rally from its record lows suggests "not too long."

Because of the actions of foreign governments, the dollar had gained ground against the Yen in spite of periodic expectations of Japanese monetary tightening. Recent statements suggest that Japan's central bank is still attempting to sustain Japan's economic recovery with low and stable rates, because of the considerable weakness and risk in its faltering banking system.

On the other side of the U.S., there is concern that the European Monetary Union will be delayed, since now none of the members is expected to meet the unrealistic economic convergence criteria by the deadline of January 1997 or even the official starting date for a European single currency in 1999. The Bundesbank appears not ready, under these circumstances, to hand over its monetary reins to the new European Monetary Institute, i.e., the newly created "central bank" of Europe. Following President Reagan's example of the early 1980s, it prefers to continue its fight with the German unions about Germany's too lavish welfare policy.

Consequently, the Deutschmark strengthened recently versus most other European currencies, in particular against the French franc and the Italian lira. Although the U.S. dollar had generally risen against the Deutschmark this year on signs of a strengthening U.S. economy, it recently dropped in the wake of reports showing renewed German growth.

Currently, of the three leading currency economies, Germany has the steepest yield curve, with an interest-rate spread of 330 basis points between the 10-year and the 3-month rates, followed by Japan (260 basis points spread) and then the U.S. (150 basis points). Thus at this moment the financial markets expect the short term rates in Germany to increase first and most, followed by Japan and only then the U.S. In addition, the U.S. inflation rate is at 3.% the highest, followed by Germany at 1.5% and Japan's close to

zero. Thus on a purchasing power basis there is another argument for a fundamentally weaker dollar.

Does Politics Influence the Fed?

The fact that this is an election year does not influence the Fed's independent and collective decisions. First, Dr. Greenspan is a Republican and he may therefore personally favor Mr. Dole as Presidential candidate. But recall Dr. Greenspan raised, when so required, the Fed Funds rate in August 1988, when the Republican Bush Administration ran for reelection, just to prove that the Fed was politically independent.. For the same reason he may now prefer not to raise the Fed Funds rate.

Secondly, the Federal Open Market Committee is a collective body, whose members reflect a wide diversity of political and non-political views. The Fed is very proud of its political independence, which year after year is challenged by newly proposed Congressional bills and time after time has been reasserted. Its staff of dedicated, capable and proficient Ph.D. economists performs high quality analysis and independent research. Politics does not influence the Fed. When the FOMC takes the decision to raise interest rates, it will be on the basis of analysis of only the economic and financial facts, viewed through the glasses of the analytical framework I have described above. Therefore speculation about the political motives of the Fed is a wasted effort.

Conclusion

Both the U.S. and German central banks hold their major meetings in the week of August 19. The FOMC meets on August 20th and 21st, and the Bundesbank on August 22nd. My current prediction (made on August 15th) is that the Fed will not raise the Fed Funds rate at its August meeting. It can afford to wait, since the latest inflation figures show the inflation rate to be stable at about 3% and even somewhat declining at the producer level.

But when the Dole-Kemp team wins the November Presidential elections and a serious possibility of a 15% tax cut combined with increased defense spending materializes, the Fed is sure to raise interest rates either late this year or early in 1997 to preemptively offset such an expansionary fiscal policy.

Considering the continuing saga of the U.S. double deficit problem, the fundamental value of the dollar must remain in decline for as long as no surpluses are run. In addition, the higher rate of inflation in the U.S. in comparison with the rates in Germany and Japan, continues to erode its value. Assuming that the three anchor currency markets are fully integrated and efficient, the yield curves in the respective markets unbiasedly signal higher short term interest rates to come first in Europe, then Japan and only then in the U.S. But then again, we have seen that foreign governments do not always heed what the private

financial markets expect them to do. So let the customer be aware, in particular in the \$1.3 trillion a day currency markets!

Acknowledgment and Disclaimer

This paper is based on an address delivered by the author at the Second International Conference on Forecasting the Singapore Economy and Annual Review of Central Banking Policies in the Asia-Pacific Basin in Singapore on August 29, 1996. The author is grateful to a number of former colleagues at the Federal Reserve Bank of New York, in particular Paul Bennett (New York), A. Steven Englander (Paris), Menahem Prywes (Washington, D.C.) and William Melton (Minneapolis), to the Federal Reserve Bank of Cleveland, to Rudolf Kalman of the ETH (Zürich), and to his current colleagues Lim Chong Yah and Tan Khee Giap and the seminar audience at the Nanyang Technological University in Singapore, who were excited by preliminary versions of this paper and made many useful suggestions. The views I express here are my own and not necessarily those of the current Federal Reserve System.

Footnotes

1. The Internet URL for the Federal Reserve Bank of Cleveland (FRBC) is <http://www.clev.frb.org>. The FRBC publication quoted here is: *July Economic Trends: The Economy in Perspective*, July 1996, from where Graphs 3., 5. And 6. Are borrowed. The yield curve in Graph 6. is from *The Asian Wall Street Journal*, August 15, 1996 and refers to the yield curve of Tuesday August 13, 1996 in the U.S. For an excellent reference on the operational implementation of the Fed's monetary policy, see the official book by Ann-Marie Meulendyke, *U.S. Monetary Policy and Financial Markets*, Federal Reserve Bank of New York, 1989. For an insightful history of policy making under Mr. Paul Volcker, see the book by William C. Melton, *Inside the Fed: Making Monetary Policy*, Dow Jones-Irwin, Homewood, Illinois, 1985.
2. See the attached *Technical Appendix: Computation of the Natural Rate of Unemployment* for the details. This appendix was published in 1983 as part of the article cited in footnote 4.
3. In the 1970s several Ph.D. dissertations had been devoted to the topic of dynamic control of inflation via controlling the growth rate of the economy, e.g., a Yale University dissertation (1974) by Guiellermo Calvo, who was one of my Professors of Economics at Columbia University (1973-86) and who became later a Senior Advisor of the International Monetary Fund (1988-93).
4. A. Steven Englander and Cornelis A. Los, "Recovery Without Accelerating Inflation?", *Federal Reserve Bank of New York Quarterly Review*, Vol. 8, No. 2, Summer 1983, pp. 19 - 28. If I were to do the analysis again, I would completely discard the prejudiced econometrics of single equation regression equation analysis we employed then to compute the reaction coefficients of the EAP curve and Okun's Law, based on the critique in my article "The Prejudices of Least Squares, Principal Components and

Common Factor Schemes,” *Computers and Mathematics with Applications*, Vol. 17, No. 8-9 (1989), pp. 1269 - 1283. When I was a Senior Economist at the Federal Reserve Bank of New York, I advised in 1986 and 1987 that the econometric procedures used by the Board were prejudiced and faulty. In 1993 I sent letters to both the Senate and House Banking Committees and to Dr. Greenspan to warn about the serious consequences of continued use of such prejudiced research methodology by the Fed. Only Dr. Greenspan responded with a thank you note and he incorporated the warning about the uncertainty inherent in the Fed’s analytic capabilities in his HH testimonies (Cf. Section 3.0, last paragraph). Now I would use Kalman’s advanced algebraic geometric system analysis to identify and compute the required parameters consistent with the empirical data, as suggested in my articles “Scientific View of economic Data Analysis,” *Eastern Economic Journal*, Vol. 17, No. 1 (January-March 1991), pp. 61 - 71, and in “A Scientific View of Economic and Financial Data Analysis” in *Advances in Stochastic Modelling and Data Analysis* (Eds. J. Janssen and C. H. Skiadas), Kluwer Academic Publishers, 1995, pp. 111 - 127. This new methodology results in a much better understanding of the amount of analytical uncertainty inherent in the empirical data. But the new methodology would probably not have changed the computation of my dynamic control trajectories.

5. Alan Greenspan, “Monetary Policy Testimony and Report to the Congress,” July 18, 1996, 13 pages. This testimony can be found on the homepage of the Board of Governors of the Federal Reserve, with <http://www.bog.frb.fed.us>. Dr. Greenspan’s testimony is usually at 10:00am, but was delayed by one hour until 11:00am, because of a Senate vote. This roiled the global financial markets a bit. His testimony was, as always, accompanied by a more elaborate official document from the Board of Governors of the Federal Reserve System, *Monetary Policy Report to the Congress Pursuant to the Full Employment and Balanced Growth Act of 1978*, July 18, 1996, 24 pages, from where I took Table 1. This is the document distributed to the press beforehand. I had also the benefit of receiving from Dr. Paul Bennett, the current Director of Research of the Federal Reserve Bank of New York and a former colleague, the transcripts of both HH hearings before the U.S. Senate Committee on Banking, Housing and Urban Affairs on July 18, 1996 and before the House of Representatives Subcommittee on Domestic and International Monetary Policy of the Committee on Banking and Financial Services. I thank Dr. Bennett very much for his expeditious response to my urgent request.
6. Within the Fed economists currently discuss even the possibility that the NAIRU may fall to 5.25% in the coming year. The National Association of Manufacturers estimates it to be already at 5.2%.
7. Interestingly, the U.S. has currently the lowest deficit as percentage of GDP of all major industrial countries. Japan’s is at 3.1%, Germany’s at 3.5%, Canada at 4.2%, France’s at 5.0%, the U.K.’s 5.1% and Italy’s at 7.2%. The problem is that the U.S.’ federal deficit is projected to widen again after 1997 if there is no change in fiscal policies.
8. Some analysts argued that, perhaps, the U.S. dollar was bought by Taiwanese during the build-up of the political tension in the Taiwan Straits preceding the Presidential election in Taiwan. My response is that if the Straits tension had been the cause for the

dollar buying, one should also have observed a private net capital inflow into the U.S.. But there was a net private capital outflow. Of course, a Taiwanese government purchase of the dollar would still count as a vote of confidence in the U.S. economy, albeit an official vote of confidence instead of the private one, which Dr. Greenspan, mistakenly, observed behind the dollar's strength in his July HH testimony. Although we cannot discern it from the official data, it seems that it was mostly Japanese government purchases which supported the dollar for the stated mercantilist reasons.