Do not write your name on the assignment. Write your name only on the back of this sheet of paper and staple your answers on the front of this sheet of paper. Failure to follow these directions will cost you 1 point on the assignment.

- 1) (20 points) A devaluation of a currency can cause a short-run trade deficit, followed by a long-run trade surplus. Explain the economic reasons this may occur.
- 2) (15 points) Draw the supply and demand for foreign exchange that has an unstable equilibrium. Prove the equilibrium is unstable.
- 3A) (30 points) The supply of foreign currency may be backward bending. Explain the economic reason for this using the supply and demand for a good. Explain how you know that good will be the supply of foreign currency.
 3B) (15 points) State the simplified Marshall-Lerner condition. Using your answer to part explain it is logical that elastic demand curves will lead to a stable exchange rate.
- 4) (15 points) Use economic theories to explain two things from the article, first, why the import prices may not have changed and, second, why the trade deficit has gotten worse. The article came from the Wall Street Journal on Jan. 14, 2004. (Somehow, the scanner cut off the first line of the second column. It should say, "But Mr. Greenspan also noted that in. . .")

Dollar's Decline Has Little Impact On Import Prices

While Euro-Zone Nations Feel Pressure, Trade Deficit Remains Unaffected So Far

By GREG IP

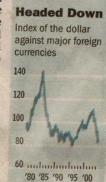
The falling dollar hasn't yet done what it is supposed to do.

While the drop in the currency is causing increased pain in Europe, it has yet to narrow the gaping U.S. trade deficit. Blame that on the peculiar nature of the current economic cycle. Excess capacity world-wide, intense competition and Asian currency intervention all have limited the dollar's impact on prices in the U.S. And because the falling dollar isn't triggering more inflation, the Fed has seen no reason to raise interest rates, which would rein in U.S. growth and Americans' appetite for imports.

Some economists say it will take more time and a bigger decline in the dollar to shrink the trade deficit. It could happen

much more quickly, of course, if foreign investors become reluctant to finance the deficit and sell U.S. stocks and bonds, driving up interest rates and weakening the U.S. economy.

Yesterday, Federal Reserve Chairman Alan Greenspan noted in a speech in Berlin that because of the euro's rise to record levels against the dollar,



Source: Federal Reserve

"Euro area exporters have been under considerable pressure." Speaking at the same event, Ernst Welteke, president of the German central bank, which is part of the European Central Bank, added: "The euro appreciation could put brakes on [Europe's] economic upswing." The euro dipped briefly on the remarks to \$1.2715, but rebounded to close at \$1.2766, below its record of \$1.29 Monday.

the U.S., "inflation, the typical symptom of a weak currency, appears quiescent." Since February 2002, the dollar has fallen 26% against the world's major currencies, and 14% against an index of all U.S. trading partners' currencies, including Asian countries. But in that same period, import prices excluding petroleum are up just 2%. The Labor Department said yesterday that import prices rose just 0.2% in December from November, and were up 0.1% excluding petroleum. As a result, the dollar has had little impact on underlying consumer price inflation, which is at a 40-year low.

Excess capacity and intense competition around the world have discouraged foreign producers from trying to raise prices in the U.S., even though their costs are rising in dollar-terms. That is because of appreciating local currencies or because dollar-denominated prices for raw material and energy are rising. Instead, they are accepting narrower profit margins or seeking to cut costs in other ways to maintain market share.

For instance, because of the price war in the U.S. car market, German auto makers now sell some high-end models in the U.S. for far less than they fetch in Europe, according to a study by Ferdinand Dudenhöffer, managing director of the Center for Automotive Research in Geisenkirchen, Germany. For example, Volkswagen AG's luxury Audi A8L with a V8 engine lists for \$68,500 in the U.S., a third less than its dollar-equivalent price in Europe. "We are definitely not going to make a huge profit," VW Chief Executive Bernd Pischetsrieder said at the Detroit motor show last week.

Japan's Toyota Motor Corp. has insulated itself against dollar fluctuations by building about 60% of the cars it sells in North America locally. Last week, Toyota did raise prices on some luxury Lexus sport-utility vehicles, which are still built in Japan or Canada, but by just 0.4%. It has left the base price of its LS430 Lexus sedan unchanged at \$55,125.

The dollar hasn't fallen as much against many emerging market curren-Please Turn to Page A2, Column 4

Dollar's Decline Has Little Impact on Import Prices

Continued From First Page

cies. China, 'a supplier of a growing share of U.S. imports, has kept its currency, the yuan, from rising against the dollar through massive purchases of dollars which it has invested in U.S. Treasury bonds. Still, some suppliers in emerging countries do face higher costs from increased raw materials, fuel and shipping. Producers of oil and other commodities have been boosting dollar-demominated prices in part because the dollar buys less world-wide than it had.

Oil futures briefly topped \$35 a barrel yesterday in New York, a 10-month high, but closed lower.

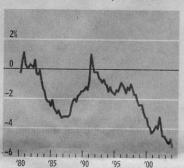
Robert Skinner, president of St. Louis, Mo.-based Kellwood Co., a major marketer of branded and private-label garments, such as Calvin Klein, says some of its suppliers in Asia, such as fabric mills, sewing factories and transport companies, have asked about raising their prices because of higher costs. But apparel is an industry with "significant global overcapacity" and suppliers realize that if they raised prices, there are many competitors in other countries that would love to have Kellwood's business instead, Mr. Skinner said. "Our retail partners are not able to charge more to their consumers, ergo we are not able to charge more to our retail partners, so we're all going to have to survive together." Kellwood hasn't raised prices in the past year, he said.

Economists say there is a limit to how long importers will operate that way, and eventually the falling dollar will force import prices higher. That would cut demand and narrow the trade deficit. Furthermore, while the dollar's drop hasn't produced much inflation, it has weakened the odds of deflation, or generally falling prices. Import prices had declined almost 10% as the dollar rose from 1996 to 2002.

But it could take a much bigger drop

Deeper Hole

U.S. current account deficit as percent of GDP



Note: Data for fourth quarter 2003 is estimated Sources: Commerce Dept. via Economy.com; Goldman Sachs

to make a meaningful dent in the U.S. trade deficit. "The over-arching phenomenon in the U.S. economy is that it has gotten more competitive over the past five or 10 years," said Harvard University economist Kenneth Rogoff, former chief economist at the International Monetary Fund. The old "rule of thumb" was that 50% of a decline in the dollar would get passed through to consumers within a year. Now, he said, it is more like 30%. To quickly wipe out the U.S. trade deficit would require the dollar to fall three times as much as it already has, he said.

There are signs the dollar's decline is helping U.S. exporters. "Manufacturers are pretty upbeat about an export recovery emerging in many sectors, or most sectors, in 2004," said Jerry Jasinowski, president of the National Association of Manufacturers. But the gaping U.S. trade deficit is due primarily not to weak exports, but to imports, which surged to 14% of gross domestic product last year from 11% in 1993, while exports fluctuated between 9% and 11%. As a result, the U.S. current account deficit-the shortfall on goods and services trade and investment income between the U.S. and the rest of the worldaveraged \$530 billion at an annual rate through the first nine months of last year, or a record 5% of GDP.

Reducing imports normally would require either that their prices rise, prompting U.S. consumers and businesses to choose locally made products over imports, or for overall spending to weaken,

or both. But so far neither has happened; with inflation so low, the Fed is unlikely to rein in consumer spending by raising interest rates, currently at 1%.

A study last year co-written by New York Fed economist Linda Goldberg found that a change in the exchange rate has a far smaller impact on U.S. import prices than in other countries. Just 26% of a change in the exchange rate is passed through to import prices in the U.S. in the short run, the study found, compared with 53% in France, 59% in Germany and 88% in Japan. That helps explain why the dollar's decline has caused far more consternation abroad than in the U.S.

This is a big departure from the late 1980s when the 39% plunge in the dollar that began in 1985 was a persistent source of concern at the Fed. In late 1986, the Fed began a series of interest-rate increases, which continued until the fall of 1987, aimed at restraining inflationary pressure caused in part by the weaker dollar. Those increases, plus U.S. anger at Germany's refusal to lower interest rates and take the pressure off the dollar, helped drive up bond yields and trigger the October 1987 stock market crash.

So far, there is no sign of a repeat. While stocks tumbled yesterday on Mr. Greenspan's remarks before recouping some of their losses, 10-year bond yields fell to a three-month low of 4.02%. "This has been, so far, a painless devaluation," said David Hale, chief economist of Hale Advisors LLC in Chicago. Previous comparable dollar declines would have pushed bond yields and mortgage rates up by a half to full percentage point, he said.

That could change if foreign investors turn reluctant to finance the U.S. current-account deficit or if Asian central banks stop purchasing so many bonds to keep their currencies from rising against the dollar. That would put downward pressure on U.S. bond prices and upward pressure on yields, and probably hurt stocks. Many analysts have warned that the unprecedented scale of U.S. foreign borrowing is raising the risks of such a dollar crisis.

Mr. Greenspan yesterday said that the more sophisticated international finance system can accommodate a bigger U.S. current account deficit than before. If it continues to rise, at some point investors will become reluctant to lend any more to the U.S., and that will reverse the process, he said, but it is "unclear at what point." But as long as the world economy becomes more flexible, "history suggests that current imbalances will be defused with little disruption."

 Neal Boudette and G. Thomas Sims contributed to this article.