

TOPICAL STUDY #6
THE TRUE STORY BEHIND
THE MIGHTY DOLLAR

Dr. Edward Yardeni

January 9, 1985

Economics

I. Introduction

The cover story of the October 8 issue of *BusinessWeek* was titled "Superdollar." Contrarians around the world instantly concluded that the editors of the influential business magazine had given the kiss of death to the dollar. Since late 1982, many analysts have argued that the dollar is grossly "overvalued." For the past two years, they've reasoned that the dollar couldn't continue to rise in the face of a swelling U.S. trade deficit. They warned that "some event," such as a decline in U.S. interest rates, could send the dollar into a tailspin.

During the second half of 1984, U.S. interest rates fell sharply. The government bond yield hit a high of 14% late in May and dropped to 11½% by late December. The Federal funds rate hit a high of 12% in August; by year-end, it was trading slightly under 8%. On Wednesday, November 21, the Federal Reserve cut the discount rate by 50 basis points to 8.5%; that was the first cut in this rate since December 14, 1982. Then on December 24, 1984, the Fed did it again; the discount rate was cut to 8.0%, the lowest level in six years.

What was the dollar doing while U.S. interest rates were falling? Why, making new highs of course! (True contrarians should have bet against the consensus of contrarians and concluded that this time the financial press would be right.) On January 2, the first trading day of the new year, the dollar reached a new high relative to the British pound and the French franc, a 12-year high of 3.18 German marks, a nine-year high of 2.62 Swiss francs, and a two-year high relative to the Japanese yen. On a trade-weighted basis, the dollar hit a record high of 149.2 (March 1973=100) during December 1984, up a whopping 76.3% from July 1980.

In this study we'll attempt to uncover the true story behind the dollar's incredible strength. If we can explain the past, then perhaps we can assess whether the mighty dollar is due for a fall in 1985. The following highlighted statements express commonly held views about the dollar's recent strength. Some are true, some are false:

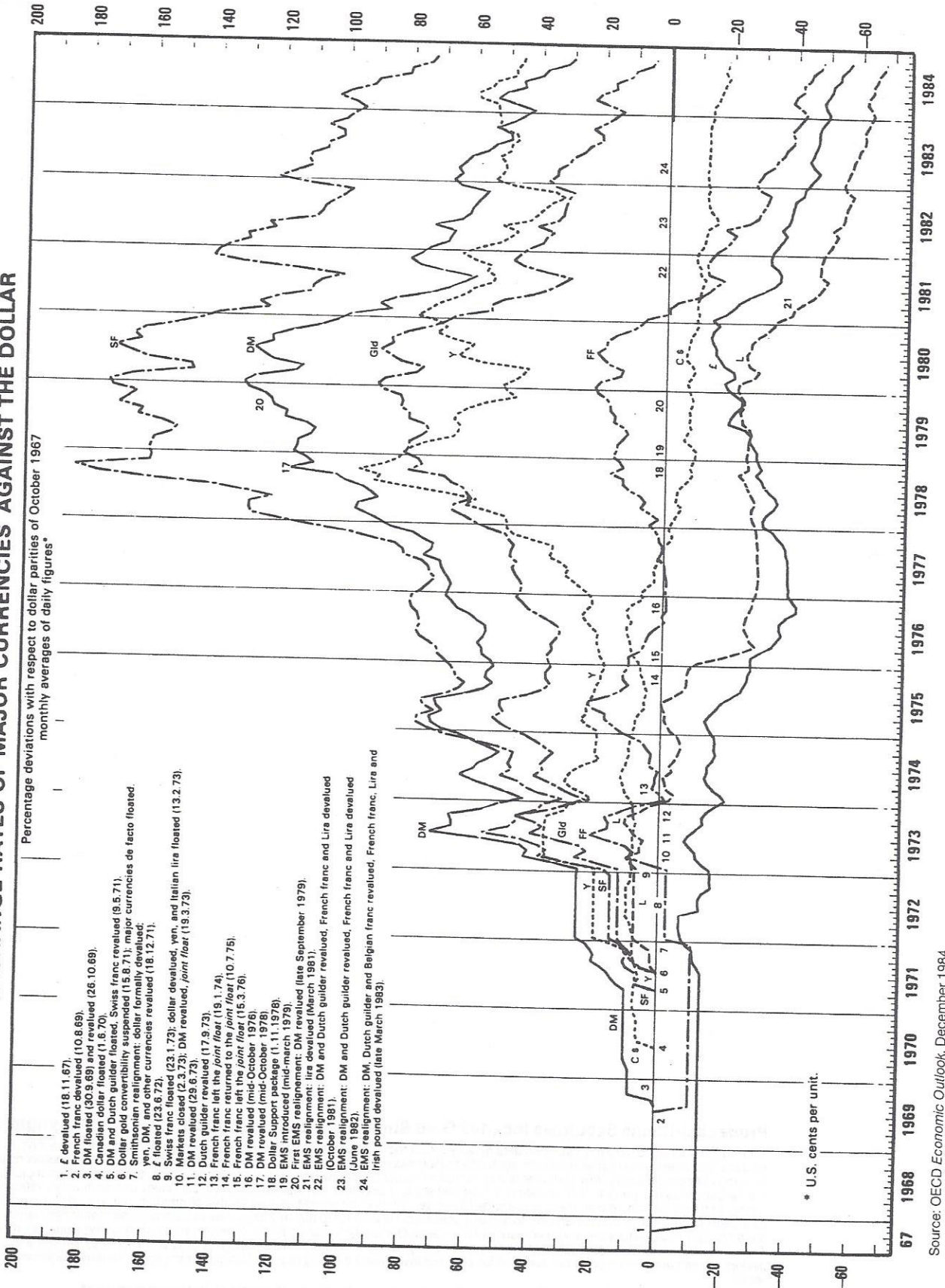
II. True Or False?

1) The dollar is overbought and overdue for a major correction.

False. On a trade-weighted basis, the dollar's bull market started July 1980. The trade-weighted dollar has been making new highs since June 1983. The dollar's bull market is itself a "correction" of the dollar's bear market which started during August 1971 when President Nixon suspended the U.S. government's commitment to convert dollars into gold and devalued the dollar on a de facto basis. The Smithsonian Agreement of December 1971 formally devalued the dollar and replaced the Bretton Woods fixed-exchange rate system with floating rates. A nine-year bear market in the dollar followed the Smithsonian Agreement.

Exhibit 1 displays the exchange rates of major currencies against the dollar as percentage deviations with respect to dollar parities during October 1967. The Swiss franc peaked October 1978 and dropped 39.9% by December 1984. That still leaves the Swiss franc 57.6% above its August 1971 value. The German mark peaked January 1980 and fell 44.3% by December 1984. It's 10.4% above its August 1971 level. The Japanese yen peaked October 1978 and declined 25.7% by year-end 1984. It's still 43.6% higher than August 1971.

Exhibit 1
EXCHANGE RATES OF MAJOR CURRENCIES AGAINST THE DOLLAR



Source: OECD Economic Outlook, December 1984.

The reason the dollar is making new highs on a trade-weighted basis is that the French franc, Canadian dollar, British pound, and Italian lira are making new lows. These currencies have been chronically weak even during much of the 1970s. From November 1967 to December 1984, the pound lost 55% of its value relative to the dollar.

In other words, if the chronically weak currencies continue to fall and the "strong" currencies return to their pre-Smithsonian values, the dollar will continue to move higher in 1985!

2) The dollar is overvalued.

False. Since late 1982, most economists have argued that the dollar was 20% to 40% "overvalued" relative to other major currencies. We've always wondered how anything whose price is set in a competitive marketplace could be overvalued. Obviously, someone for some reason has been buying dollars despite economists' warnings that the foreign exchange value of the dollar is too high.

Our main point is that *by definition* a rising foreign exchange value of the dollar means that there is a worldwide *excess demand* for dollars; the demand for dollars exceeds the supply. So the price of dollars expressed in foreign currencies must go up. Globally, the dollar is undervalued, not overvalued. (If something is undervalued, its price goes up; if it is overvalued its price goes down.)

3) In terms of purchasing power, the dollar is overvalued.

True. Usually, when economists talk about the foreign exchange value of the dollar as overvalued or undervalued, they are doing so within the narrow confines of the "purchasing power parity theorem." The idea is that the dollar price of a U.S.-made television set should be the same as the dollar price of a comparable unit made in Japan, adjusted for freight, insurance, and taxes. The dollar is 20% overvalued if you can buy a television in Tokyo and ship it to New York for a dollar price that is 20% below the price quoted for U.S.-made sets. The purchasing power parity theorem states that the New York dollar price, the Tokyo yen price, and the dollar/yen exchange rate will adjust so that the dollar price of TVs made in the U.S. are the same as those made in Japan. (That doesn't mean that U.S. citizens won't import Japanese sets anyway if they believe that Japanese sets are better. In this case the items aren't comparable.)

The purchasing power of the dollar will be brought into parity if the increased demand for Japanese TVs and the decreased demand for U.S. sets drive prices up in Japan and down in the U.S. Or, if prices are not that flexible, then the dollar might fall 20% relative to the yen as U.S. citizens sell dollars in exchange for yen which are needed to buy Japanese TVs.

So, a 20% overvaluation of the dollar can be corrected by a 20% depreciation of the foreign exchange value of the dollar. Alternatively, an infinite combination of higher Japanese prices, lower U.S. prices, and depreciation can restore purchasing power parity. *The dollar need not depreciate by 20%.*

Currently, purchasing power parity models of foreign exchange rates suggest that the dollar is too high in terms of the relative prices of comparable goods sold in the U.S. and abroad. That is evident in the swelling U.S. trade deficit. The merchandise trade gap widened from \$36.5 billion during 1982 to \$61.1 billion during 1983 to an annualized \$113.1 billion during the first three quarters of 1984 (Exhibits 2 & 3).

Falling oil prices and reduced crude oil imports helped narrow the U.S. trade deficit with members of OPEC from \$38.2 billion in 1980 to an annualized \$12.9 billion during the first two quarters of 1984. At the same time, the U.S. trade deficit worsened with just about every other major trading partner (Exhibit 2).

The worst trade imbalance is with Japan. The U.S. trade deficit with Japan rose from \$19.6 billion in 1983 to an annualized \$31.1 billion during 1984's first half. (Actually, the Japanese

imbalance accounted for 30% of the U.S. trade deficit during the first half of 1984 which is an improvement from 47% during 1982.)

Exhibit 2: The U.S. Merchandise Trade Balance by Selected Countries

Item ¹	1979	1980	1981	1982	1983	1984
Total, all countries	-27.6	-25.5	-28.0	-36.5	-61.1	-103.2
Industrial countries	1.2	9.5	-2.3	-16.8	-27.9	-55.4
Members of OPEC	-30.5	-38.2	-28.8	-10.9	-10.0	-12.9
Other countries	-3.0	2.0	0.3	-11.4	-23.2	-34.9
West Germany	-2.3	-0.2	-0.9	-2.7	-4.3	-8.1
United Kingdom	2.8	3.0	-0.3	-2.4	-2.0	-2.3
Canada	-2.4	-1.0	-2.1	-9.2	-10.5	-14.4
Japan	-8.6	-10.4	-15.8	-17.0	-19.6	-31.1
Brazil	n.a.	n.a.	n.a.	n.a.	-2.4	-4.5
Mexico	1.1	2.6	4.4	-3.8	-7.7	-6.9
Venezuela	n.a.	n.a.	n.a.	n.a.	-2.2	-3.3
Hong Kong	n.a.	n.a.	n.a.	n.a.	-3.8	-4.4
Korea	n.a.	n.a.	n.a.	n.a.	-1.5	-3.2
Taiwan	n.a.	n.a.	n.a.	n.a.	-6.9	-9.6

¹All series shown are billions of dollars. Data for 1984 are averages of first two quarters, s.a.a.r.
Source: Bureau of Economic Analysis, *Survey of Current Business*.

4) The excess supply of dollars resulting from the trade deficit has been more than offset by an excess demand for dollars attributable to other U.S. international transactions.

True. The U.S. trade deficit creates an excess supply of U.S. dollars in foreign exchange markets: U.S. residents convert more dollars into other currencies to purchase foreign goods than foreign residents want dollars in exchange for their currencies to purchase U.S. goods. So the trade deficit should be bearish for the dollar. But instead the dollar has appreciated in the face of the widening trade deficit.

Obviously, other U.S. international transactions have created a demand for dollars which has overwhelmed the supply of dollars resulting from the trade deficit. Exhibit 3 displays the U.S. balance of payments account. The services balance is in surplus and offsets some of the trade deficit. Unfortunately, the services surplus has declined steadily from \$41.1 billion during 1981 to an annualized \$19.6 billion during the first three quarters of 1984.

A widening current account deficit (i.e., from \$9.2 billion in 1982 to over \$100 billion in 1984) and a soaring dollar imply that international capital transactions are generating a tremendous demand for dollars. (In other words, the dollar is *undervalued* on a balance of payments basis!)

Exhibit 3: The U.S. Balance of Payments

Item ¹	1979	1980	1981	1982	1983	1984
Current account	-1.0	1.9	6.3	-9.2	-41.6	-103.0
Merchandise	-27.6	-25.5	-28.0	-36.5	-61.1	-113.1
Services	32.3	34.5	41.1	35.4	28.2	19.6
All other	-5.7	-7.1	-6.8	-8.1	-8.7	-9.5
Capital outflows ²	-64.3	-86.1	-111.0	-118.9	-49.5	-6.7
Capital inflows ³	38.8	58.1	81.3	95.2	81.7	83.0
Statistical discrepancy	25.4	25.0	22.3	32.9	9.3	26.6

¹All series shown are billions of dollars. Data for 1984 are averages of first three quarters, s.a.a.r.
²Change in U.S. assets held abroad. (-) signifies net increase.
³Change in foreign assets held in the U.S. (+) signifies net increase.
Source: Bureau of Economic Analysis, *Survey of Current Business*.

5) The U.S. trade deficit has been financed by a huge inflow of foreign capital which helps to explain why the dollar is so strong.

False. Capital inflows equalled an annualized \$83.0 billion during the first three quarters of 1984, marginally higher than during 1981 and 1983 and slightly below 1982 (Exhibits 3 and 4). A reduction in capital outflows has been the major source of financing for the trade deficit. Capital outflows equalled \$111.0 billion during 1981. They rose to \$118.9 billion during 1982 and fell sharply to \$49.5 billion during 1983. During the first three quarters of 1984 they averaged an annualized \$6.7 billion (Exhibits 3 and 4).

Exhibit 4: The U.S. Capital Account

Item ¹	1979	1980	1981	1982	1983	1984
U.S. Assets Held Abroad (-) net increase, capital outflow	-64.3	-86.1	-111.0	-118.9	-49.5	-6.7
U.S. Government claims	-4.8	-14.4	-10.3	-11.1	-6.2	-9.0
U.S. bank claims	-26.2	-46.8	-84.2	-111.1	-25.4	-0.4
U.S. nonbank claims	-3.3	-3.2	-1.2	6.6	-5.3	7.6
Direct investments	-25.2	-19.2	-9.6	4.8	-4.9	-0.5
Foreign securities	-4.7	-3.6	-5.7	-8.1	-7.7	-1.8
Foreign Assets In U.S. (+) net increase, capital inflow	38.8	58.1	81.3	95.2	81.7	83.0
U.S. Treasury securities ²	-17.0	14.5	9.2	12.1	15.2	16.0
Other securities	1.4	5.5	7.2	6.4	8.6	5.0
Bank liabilities	32.6	10.7	42.1	65.9	49.1	34.3
Nonbank liabilities	1.6	6.9	0.9	-2.4	-1.3	16.9
Direct investments	11.9	16.9	23.1	14.9	11.3	20.7
All other ³	8.3	3.6	-1.2	-1.7	-1.2	-9.9

¹All series shown are billions of dollars. Data for 1984 are averages for first three quarters, s.a.a.r.

²Held by foreign official and private accounts.

³"Other U.S. Government liabilities" held by foreign official accounts plus "U.S. liabilities reported by U.S. banks" held by foreign official accounts plus "other foreign official assets."

Source: Bureau of Economic Analysis, *Survey of Current Business*.

The importance of U.S. international capital transactions in boosting the dollar can be seen by examining the inflows and outflows related to U.S. banks and to direct investment activity (Exhibit 5). U.S. banks' net capital transactions swung from net capital outflows averaging \$41.1 billion annually during 1980, 1981, and 1982 to net inflows averaging \$28.8 billion during 1983 and 1984.

The direct investment accounts showed net capital outflows every year from 1960 to 1980. Since then foreign direct investment in the U.S. has exceeded U.S. direct investment abroad by an annual average of \$15 billion from 1981 to 1984.

The statistical discrepancy item in the balance of payments accounts primarily captures unrecorded capital transactions. Prior to 1979, this item was small and usually a net outflow. Since 1979, it has shown a capital inflow averaging \$24 billion. Some of this inflow may represent "flight" money that is escaping political instability in other countries and finding a safe haven in the U.S.

6) In recent years, a significant and growing portion of the Federal deficit has been financed by foreign investors.

False. During the first three quarters of 1984, foreigners accounted for only 7.2% of the total funds raised by the U.S. Treasury (Exhibit 6). In 1983, they financed 9.1% of the Federal deficit.

Exhibit 5: Selected U.S. International Capital Transactions

	U.S. Banks ¹			Direct Investment			Statistical Discrepancy
	inflow ²	outflow ³	net	inflow ⁴	outflow ⁵	net	
1960	0.7	-1.1	-0.4	0.3	-2.9	-2.6	-1.0
1961	0.9	-1.3	-0.4	0.3	-2.7	-2.4	-1.0
1962	0.3	-0.5	-0.2	0.3	-2.9	-2.6	-1.1
1963	0.9	-1.6	-0.7	0.2	-3.5	-3.3	-0.4
1964	1.8	-2.5	-0.7	0.3	-3.8	-3.5	-0.9
1965	0.5	0.1	0.6	0.4	-5.0	-4.6	-0.5
1966	2.9	0.2	3.1	0.4	-5.4	-5.0	0.6
1967	1.8	-0.5	1.3	0.7	-4.8	-4.1	-0.2
1968	3.9	0.2	4.1	0.8	-5.3	-4.5	0.4
1969	8.0	-0.6	7.4	1.3	-6.0	-4.7	-1.5
1970	-6.3	-1.0	-7.3	1.5	-7.6	-6.1	-0.2
1971	-6.9	-3.0	-9.9	0.4	-7.6	-7.2	-9.8
1972	4.8	-3.5	1.3	1.0	-7.7	-6.7	-1.9
1973	4.7	-6.0	-1.3	2.8	-11.4	-8.6	-2.7
1974	16.0	-19.5	-3.5	4.8	-9.1	-4.3	-1.6
1975	0.6	-13.5	-12.9	2.6	-14.2	-11.6	5.8
1976	11.0	-21.4	-10.4	4.3	-11.9	-7.6	10.4
1977	6.7	-11.4	-4.7	3.7	-11.9	-8.2	-2.0
1978	16.1	-33.7	-17.6	7.9	-16.1	-8.2	-12.5
1979	32.6	-26.2	6.4	11.9	-25.2	-13.3	25.4
1980	10.7	-46.8	-36.1	16.9	-19.2	-2.3	25.0
1981	42.1	-84.2	-42.1	23.1	-9.6	13.5	22.3
1982	65.9	-111.1	-45.2	14.9	4.8	19.7	32.9
1983	49.1	-25.4	23.7	11.3	-4.9	6.4	9.3
1984	34.3	-0.4	33.9	20.7	-0.5	20.2	26.6

¹All series shown are billions of dollars. Data for 1984 are averages of first three quarters, s.a.a.r.

²U.S. liabilities reported by U.S. banks.

³Claims reported by U.S. banks.

⁴Foreign direct investment in U.S.

⁵U.S. direct investment abroad.

Source: Bureau of Economic Analysis, *Survey of Current Business*.

Exhibit 6: Who Is Buying The Treasury's Securities?

Sector ¹	1982	1983	1984		
			I	II	III
Federal Reserve System	8.4	12.6	22.6	11.9	-19.8
Foreign	8.0	16.9	-1.4	25.3	14.6
Households	19.9	42.2	42.2	127.3	71.3
Nonfinancial corporations	3.1	4.5	19.5	0.3	29.2
State & local governments	15.0	28.2	26.1	7.9	12.0
Commercial banks	20.4	45.5	22.0	-26.3	15.8
Nonbank intermediaries	85.8	37.6	48.5	10.3	79.0
Sponsored credit agencies	1.5	-0.8	4.9	5.0	-15.9
Total	161.4	186.6	184.2	161.7	186.2

¹All series shown are billions of dollars, s.a.a.r.

Source: *Flow of Funds Accounts*, Federal Reserve Board.

The demand for high yielding U.S. assets is commonly believed to be the main reason for the dollar's strength in foreign exchange markets. But if foreigners aren't buying U.S. Treasury securities. What are they buying instead? Foreign purchases of other U.S. securities amounted to only \$8.6 billion in 1983 and \$5.0 billion in 1984 (Exhibit 4).

The bulk of U.S. capital inflows is attributable to foreign holdings of U.S. banks' liabilities (Exhibit 4). But once again, don't conclude that foreign individuals are buying U.S. certificates of deposit. Rather, there is a good chance that the U.S. banks' own foreign offices are the source of this capital inflow. In 1983, U.S. bank liabilities to foreign private accounts rose \$49.1 billion. Of this sum, \$25.6 billion represented liabilities to own foreign offices, another \$9.9 billion was to unaffiliated foreign banks, and \$10.7 billion was to other private foreigners (Exhibit 7).

Exhibit 7: International Capital Transactions of U.S. Banks

Item ¹	1981	1982	1983	1984	
				I	II
Claims on Foreigners (-) net income, capital outflows	-84.2	-111.1	-25.4	2.0	-24.2
Own foreign offices	-31.3	-30.6	-16.7	-1.5	-11.3
Unaffiliated foreign banks	-20.7	-46.7	-1.4	3.8	-9.5
Foreign public borrowers	-9.9	-14.2	-11.8	-0.2	-1.5
Other private foreign borrowers	-12.5	-6.8	-1.9	2.2	-0.9
All other	-9.8	-12.8	6.4	-2.3	-1.0
Liabilities to Foreigners (+) net increase, capital inflow	42.1	65.9	49.1	8.8	21.7
Own foreign offices	28.8	21.7	25.6	1.5	11.5
Unaffiliated foreign banks	5.0	23.4	9.9	4.2	4.9
Other private foreigners	5.5	17.3	10.7	3.1	4.3
International financial institutions	0.2	1.3	2.7	-0.6	-1.1
All other	2.6	2.2	0.2	0.6	2.1

¹All series shown are billions of dollars. Data for first and second quarters of 1984 are n.s.a. and not annualized.
Source: Bureau of Economic Analysis, *Survey of Current Business*.

7) The international capital transactions of U.S. banks represent "hot money" that could turn against the dollar.

True. U.S. banks are key players in the foreign exchange markets. They can move currencies up or down sharply as they take advantage of speculative and arbitrage profit opportunities. They can also use the world financial markets to avoid regulatory and monetary controls. For example, during the second quarter of 1984, large credits to consortiums of foreign banks were arranged to finance U.S. merger activity, because loan-to-capital ratios of many U.S. banks limited the amount of funds that each could advance to a single borrower. That explains the bulk of the \$24.2 billion increase in U.S. bank claims on foreigners during the second quarter (Exhibit 7).

U.S. bank lending abroad has slowed considerably since late 1982. *The reduction in this important capital outflow has clearly contributed to the strength of the dollar.* Recession in many countries, the related decline in international trade, and difficulties of a number of developing countries in meeting their external debt service payments are major reasons for the lending slowdown.

When U.S. economic growth and credit demands are relatively more robust than in the rest of the world, U.S. banks can raise funds for domestic lending by decreasing their claims on their own foreign offices and unaffiliated foreign banks while increasing their liabilities to their own overseas offices and other foreigners. Such transactions can partially offset tight monetary policies and also boost the foreign exchange value of the dollar.

Will the banks turn against the dollar in 1985? Not very likely as long as U.S. economic growth and real interest rates remain high relative to other countries. (The LDC debt crisis and the skittish U.S. bond investor should guarantee these two conditions.)

8) The switch from U.S. bank overlending to underlending has created an unprecedented and massive "short-squeeze" demand for dollars.

True. The flip side of this statement is that LDCs have switched from overborrowing to underborrowing. In the 1970s, many LDCs had bet on inflation by borrowing huge sums of money to exploit their natural resources (Exhibit 8). *In effect, they took a long position in real assets and a short position in the dollar.* The borrowed funds helped to drive down the foreign-exchange value of the dollar as the LDCs converted some of these proceeds into other currencies.

The debt crisis started early in the 1980s when interest rates soared above inflation. Suddenly, interest costs rose above projections while revenues fell below expectations as commodity prices collapsed. The dollar flood turned into a trickle. LDCs that were used to having more dollars than they needed now desperately scrambled to cut their imports and boost their exports to earn the dollars needed to service their debts. The foreign-exchange value of the dollar soared.

Exhibit 8: Disbursed Debt of Non-OPEC Developing Countries, Selected Years, 1971-83

Item ¹	1971	1975	1977	1980	1981	1982	1983
Total debt	n.a.	n.a.	292	522	596	656	702
Short-term bank debt ²	n.a.	n.a.	31	77	95	104	96
Medium & long-term debt	86	173	262	445	501	552	606
Bank ³	n.a.	n.a.	83	170	204	232	270
Other	n.a.	n.a.	179	275	297	320	336

¹All series shown are billions of dollars.

²Original maturity of less than one year.

³Includes officially guaranteed export credits.

Source: Organization for Economic Cooperation and Development, *External Debt of Developing Countries: 1983 Survey*.

III. Conclusions

Don't bet against the dollar in 1985. As long as the international debt crisis persists, the dollar is likely to remain very strong. The debt crisis is probably the major force behind the soaring dollar, the swelling U.S. trade deficit, and plummeting commodity prices. To offset these deflationary pressures, the Fed is likely to push interest rates still lower. If the dollar remains strong, then we foresee near-zero inflation, lower interest rates, and solid economic growth in 1985.

Dr. Edward Yardeni
Director of Economics
& Fixed Income Research
Senior Vice President
(212) 214-1419

©Prudential-Bache Securities Inc., 1985, all rights reserved. One Seaport Plaza, New York, N.Y. 10292

Information contained herein is based on data obtained from recognized statistical services, issuer reports or communications, or other sources, believed to be reliable. However, such information has not been verified by us, and we do not make any representations as to its accuracy or completeness. Any statements non-factual in nature constitute only current opinions, which are subject to change. Prudential-Bache Securities Inc. (or one of its affiliates) or their officers and directors may have positions in securities or commodities referred to herein, and may, as principal or agent, buy and sell such securities or commodities. Neither the information, nor any opinion expressed, shall be construed to be, or constitute an offer to sell or a solicitation of an offer to buy any securities or commodities mentioned herein. Opinions based on technical factors are suited primarily for the trader. Our fundamental opinions, however, are geared for the longer term investor. Therefore, there may be instances when these opinions may not be in concert. This firm (or one of its affiliates) may from time to time perform investment banking or other services for, or solicit investment banking or other business from, any company mentioned in this report.

Additional information on the securities discussed herein is available upon request.