Prudential Equity Group, LLC

RESEARCH

June 8, 2004

SUPER MONEY & GLOBAL BOOMS

Topical Study #68

All important disclosures can be found beginning on page 17.

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Prudential Financial

I. "Super Money" Makes The World Go 'Round

In this Topical Study, I present a model explaining "GSBs," i.e., Global Synchronized Booms. The model is relevant to global busts, but the focus here is on booms. I'll do some more work on explaining global busts next time it becomes relevant again. Simply put, U.S. fiscal and monetary policies are the main cause of global booms. "Super Money," which is what I call the sum of the U.S. monetary base and international reserves held by foreign central banks, is the main synchronizing link between the economy of the United States and the rest of the world.

Currently, Super Money is growing very rapidly, suggesting that there is plenty of global liquidity to fuel the current Global Synchronized Boom. In my GSB scenario:

1) Another round of U.S. dollar depreciation is possible over the rest of the year. The dollar tends to be weak when U.S. economic policies are aimed at reviving economic growth. In addition, international reserves are rising rapidly, suggesting that central banks are trying to offset forces pushing the dollar lower.

2) Industrial commodity prices are likely to remain high. This is partly because a weak dollar increases global demand for dollar-priced commodities. In addition, both rising commodity prices and a falling dollar are consequences of stimulative polices that are made in America. Furthermore, the rapid growth in Super Money suggests that commodity prices are likely to be strong over the next 12 months.

3) The Materials, Energy, Industrial, and Technology sectors of the S&P 500 should continue to grow earnings at above-average rates. They should also outperform the overall stock market over the rest of this year and next year, as they did last year, after underperforming so far this year.

When the U.S. is in a recession, economic policymakers typically respond with stimulative fiscal and monetary policies. The U.S. federal budget deficit is highly counter-cyclical. Relative to nominal GDP, it widens during recessions because tax revenues fall along with incomes and government spending tends to grow more rapidly. In addition, tax cuts are often enacted to boost disposable incomes. The federal deficit is currently running around 4% of GDP, near previous cyclical highs (Figure 1).

The federal funds rate is also counter-cyclical, and so is the growth in the monetary base, which is the sum of currency in circulation plus bank reserves. The Federal Reserve controls bank reserves through open-market operations. To revive the economy during a recession, the Fed tends to buy government securities, which increases bank reserves and lowers the federal funds rate, which is the cost of borrowing reserves. Monetary base growth usually increases during and just after recessions (Figure 2).

These policies revive economic growth. The resulting rebound in demand tends to widen the U.S. merchandise trade deficit because imports rise faster than exports. The growth of imports is boosted by recovering domestic demand. The growth of exports usually lags because overseas economic growth tends to trail the recovery in the United States. So the U.S. trade deficit as a percentage of nominal GDP tends to narrow during recessions and widen during expansions (Figures 3 and 4).

As the trade deficit widens during recoveries, the trade-weighted foreign-exchange value of the dollar tends to fall. At this early stage of the global recovery, foreign central bankers often choose to prop up the dollar relative to their currency. To do so, they purchase dollars and sell their own currency in the foreign exchange market. Why? When a nation's currency appreciates relative to the dollar, the nation's exports to the United States become more expensive and therefore less competitive in the biggest and fastest-recovering consumer and business market in the world. To participate in and to benefit from the recovery in the U.S., central bankers naturally tend to intervene in the currency markets. Rapidly growing exports to the United States spread the U.S. boom to the rest of the world.

Furthermore, the central banks also tend to spread and to amplify the Fed's easy monetary policy worldwide. If they don't "sterilize" their U.S. dollar purchases (and domestic currency sales) through open-market sales of domestic bonds—thus buying back their local currency—then the rapid growth of their international reserves, i.e., dollars, will increase their domestic monetary base and money supply.

I invented the concept of Super Money to show how the behavior of central banks tends to reinforce and to synchronize global booms. Super Money is the sum of the U.S. monetary base and the non-gold international reserves held by central banks. During March, Super Money totaled $4.1 trillion, with the U.S. monetary base totaling $0.7 trillion and international reserves totaling $3.4 trillion (Figure 5). Interestingly, on a year-over-year basis, the growth in international reserves has been much more volatile than the growth in the U.S. monetary base, supporting my view that foreign central banks tend to amplify the Fed's monetary policy cycle. In March, the monetary base was up 4.6% from a year ago, while international reserves were up 29.8% and Super Money was up 24.5% (Figure 6).

II. Highly Correlated

Also very interesting is the fact that the yearly percent change in the trade-weighted dollar is inversely and highly correlated with the growth in international reserves. This supports my view that during global economic expansions, global monetary policy synchronization happens because central banks are attempting to prop up the weakening dollar by buying U.S. government securities. The inverse relationship between international reserves growth and the trade-weighted dollar is just as strong with the euro and the yen (Figure 7).

The growth in Super Money tends to be an excellent leading indicator of industrial commodity prices. When it is pushed forward by 12 months, it is highly correlated with both the overall Commodities Research Bureau raw industrials spot price index as well as with its metals sub-index. The latest reading suggests that industrial commodity prices should either remain high or possibly move still higher (Figures 8 and 9). These sensitive prices are extremely good real-time indicators of global economic activity. The importance of Super Money as the drive shaft for Global Synchronized Booms is confirmed by the fact that its year-over-year growth rate is also a 12-month leading indicator of total world crude oil demand (Figure 10). The growth in Super Money is also highly correlated with the growth in U.S. merchandise exports, another useful coincident indicator of the global business cycle (Figure 11). The odds are that U.S. exporters enjoy boom times when the global economy is booming.

III. Real Time

The problem with the monthly version of Super Money is that it is history by the time the data become available. The International Monetary Fund (IMF) compiles the international reserves data, which tend to be released several months after the fact. For example, in early June the latest available data were for March.

Fortunately, I've been able to construct a weekly version of Super Money using data collected by the Federal Reserve on U.S. marketable securities held in custody for foreign official and international accounts at the Federal Reserve.[1] Here are some details on the frequency and composition of the Fed's statistics:

1) The data are monthly from 1952 to 1987 and include only U.S. Treasury securities over this period.

2) The weekly data, available starting in January 1988, include U.S. Treasury and federal agency securities.

The year-over-year growth in the Fed's data is highly correlated with the comparable growth in the IMF's data on international reserves. Both are currently up about 30% (Figures 12 and 13). This isn't surprising since central banks tend to hold a large portion of their international reserves in dollars. Indeed, U.S. marketable securities held in custody for central banks are currently 34% of non-gold international reserves (Figure 14). Obviously, central banks may have other dollar-denominated securities besides what they have with the Fed.

[1] The data are from the Fed's weekly release H.4.1 – Factors Affecting Reserve Balances, available online at http://www.federalreserve.gov/releases/h41/.

My Weekly Super Money proxy is the sum of U.S. monetary base plus U.S. marketable securities held for central banks at the Fed. In late May, it was up 19.4% from a year ago (Figure 15). Not surprisingly, the growth rate is also highly correlated with industrial commodity prices, with a 52-week lead time. It is also inversely and highly correlated with the yearly percent change in the trade-weighted dollar (Figures 16 and 17).

IV. The Boom Scenario Is Booming

Besides Super Money, several other global indicators support my Global Synchronized Boom scenario:

1) U.S. payroll employment is up 1.2 million from January through May, and more than two-thirds of industries have been expanding payrolls over the past three months. S&P 500 12-month forward consensus expected earnings rose to a record high of $68.42 per share at the beginning of June, with both 2004 and 2005 estimates still rising (Figure 18). This strongly suggests that my year-end target of $70 per share should be a slam-dunk, to paraphrase former CIA Director George Tenet. My forecast of a rebound in the forward P/E to 18.5 by year-end remains iffy, but if I'm right the S&P 500 would rally to 1295 by year-end.

2) Japan's economy grew at a faster-than-expected 5.6% annual pace in the first quarter. Japanese household spending rose 9.3% in April, its biggest one-month gain on record. Consumer spending has bumped exports as the driver of an expansion extending into a ninth quarter, the longest run of growth since 1997. Japanese manufacturing output jumped 3.3% in April, the biggest gain in seven months.

3) German factory orders posted their strongest one-month performance in 15 months in April, jumping 2.5%, led by strong foreign demand. European manufacturers are benefiting from strong U.S. and Asian economies, notably China's. The recent strong rebound in German forward earnings suggests that Germany's manufacturing sector is likely to continue to recover (Figure 19). The German economy is strengthening, led by foreign demand, with export orders growing at twice the pace of domestic orders—though there are signs of life in the latter.

4) World semiconductor sales rose in April to nearly a four-year high, led by a 52% year-over-year gain in the Asia-Pacific region.

5) China's government projected that its economy grew in the second quarter at a "similar" pace to the 9.8% recorded during the first quarter. Some slowing is expected during the second half of this year in response to various measures taken by the government to cool off the economy in recent months.

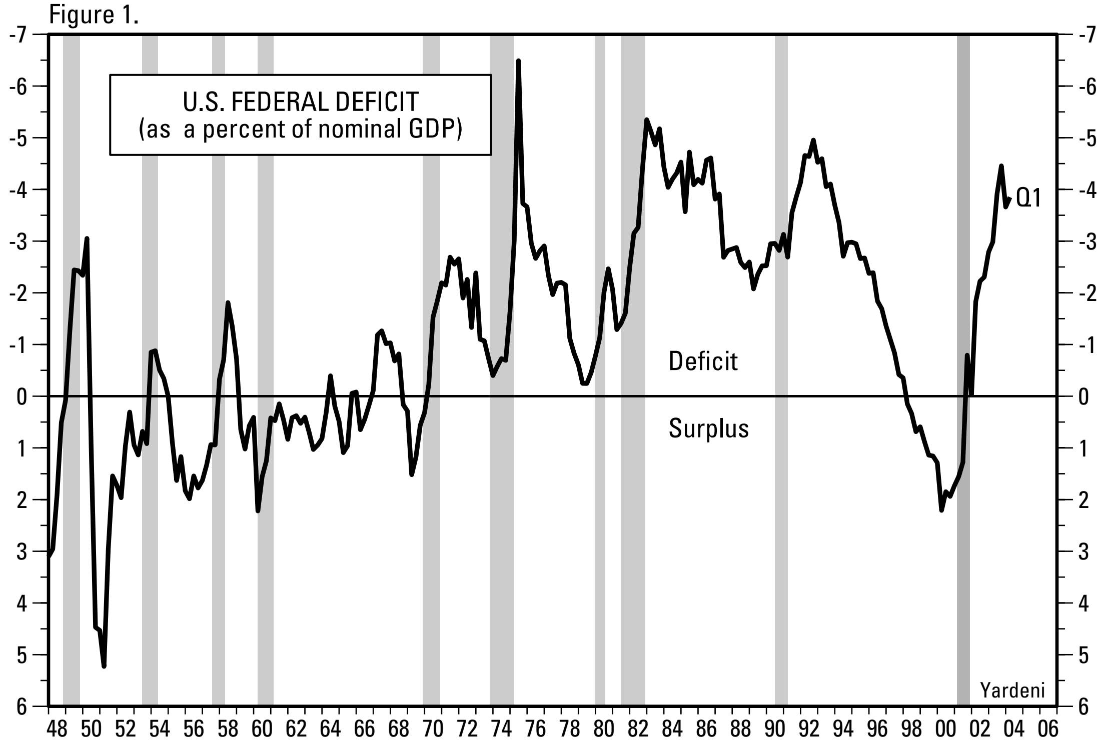
I conclude that the Global Synchronized Boom is alive and well, and should remain so at least over the next 12 months, according to my analysis of Super Money. This should be bullish for the stock market in general and for stocks in the Materials, Energy, Industrials, and Technology S&P sectors in particular.

* * *

Fiscal & Monetary Policies

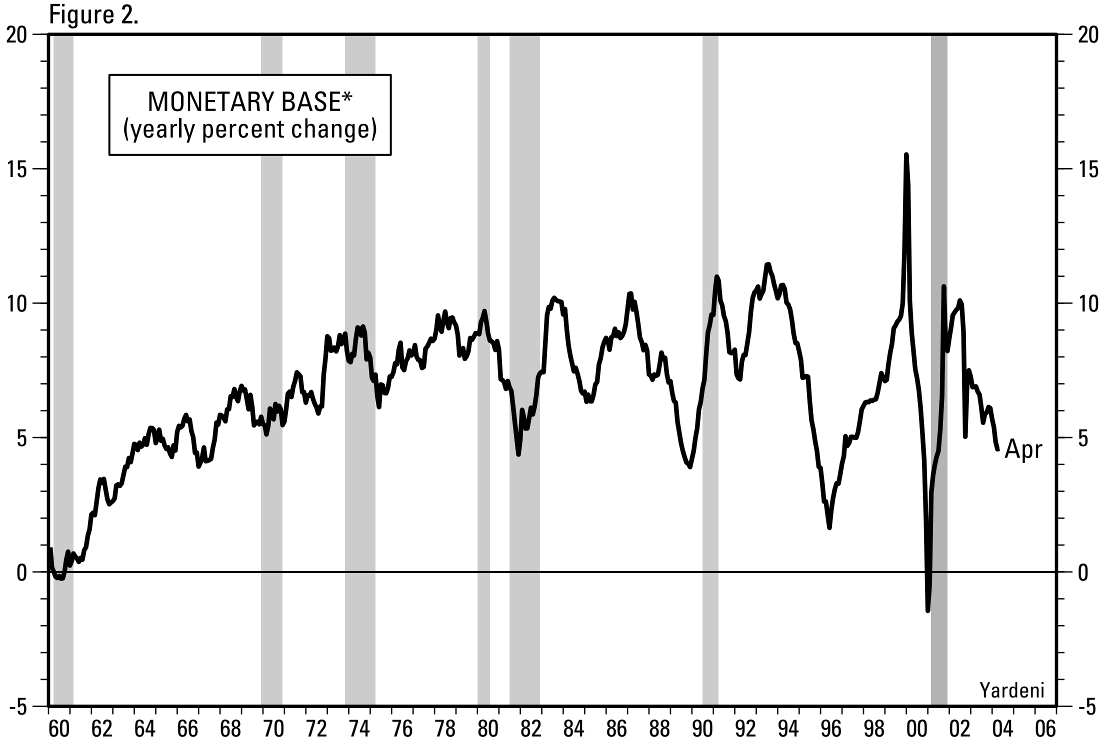
Counter-cyclical forces: The U.S. federal budget deficit tends to widen and the monetary base tends to grow more rapidly during recessions and early in recoveries.

Figure 1.



Note: Shaded areas are recessions according to the National Bureau of Economic Research.
Source: Bureau of Economic Analysis.

Figure 2.

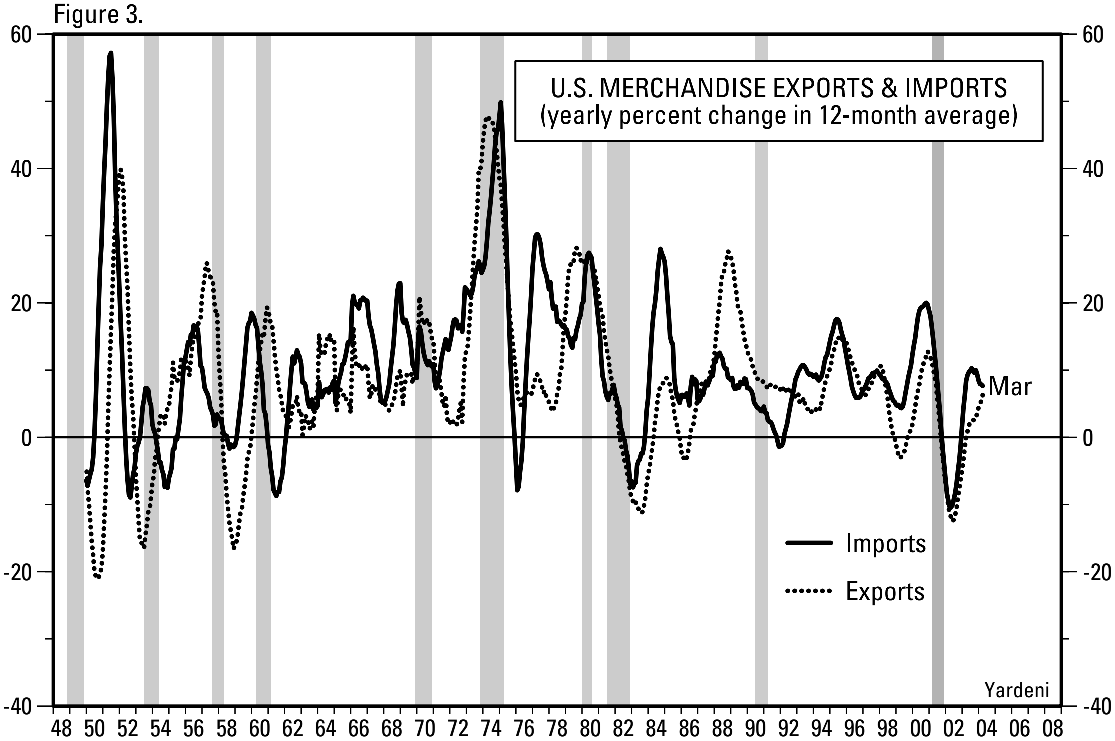


* Adjusted for changes in reserve requirements.
Note: Shaded areas are recessions according to the National Bureau of Economic Research.
Source: Board of Governors of the Federal Reserve System.

Merchandise Trade

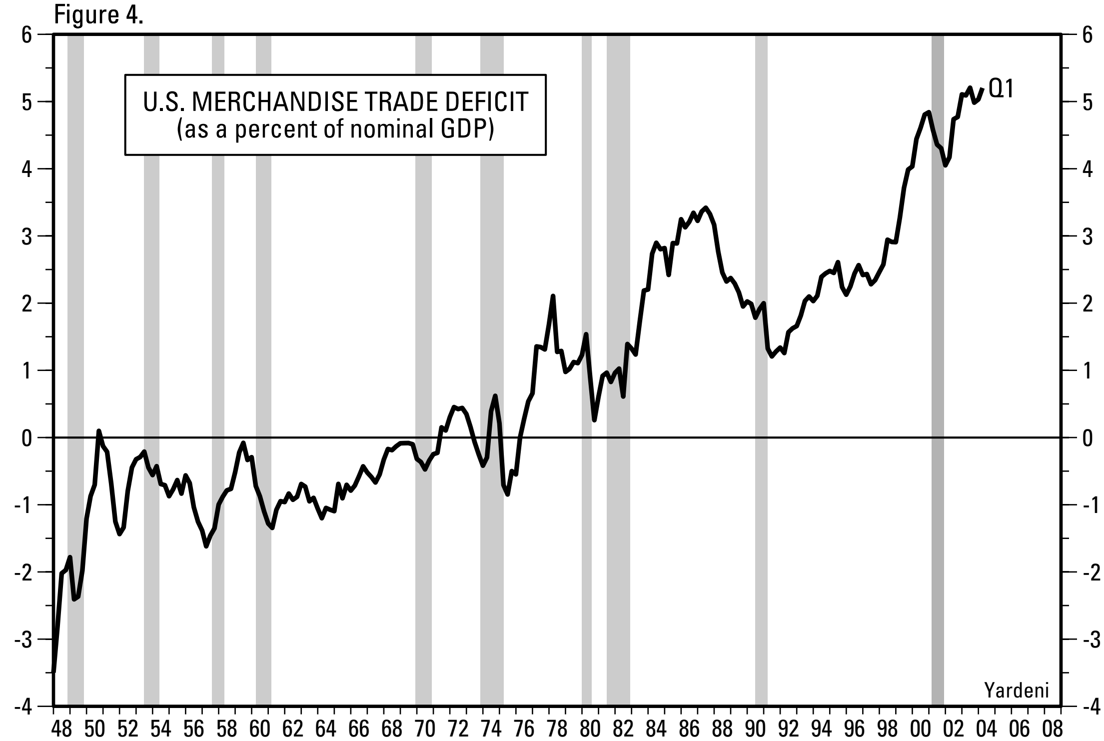
When the U.S. economy starts to recover from a recession, imports tend to grow faster than exports, widening the trade deficit.

Figure 3.



Note: Shaded areas are recessions according to the National Bureau of Economic Research.
Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Figure 4.

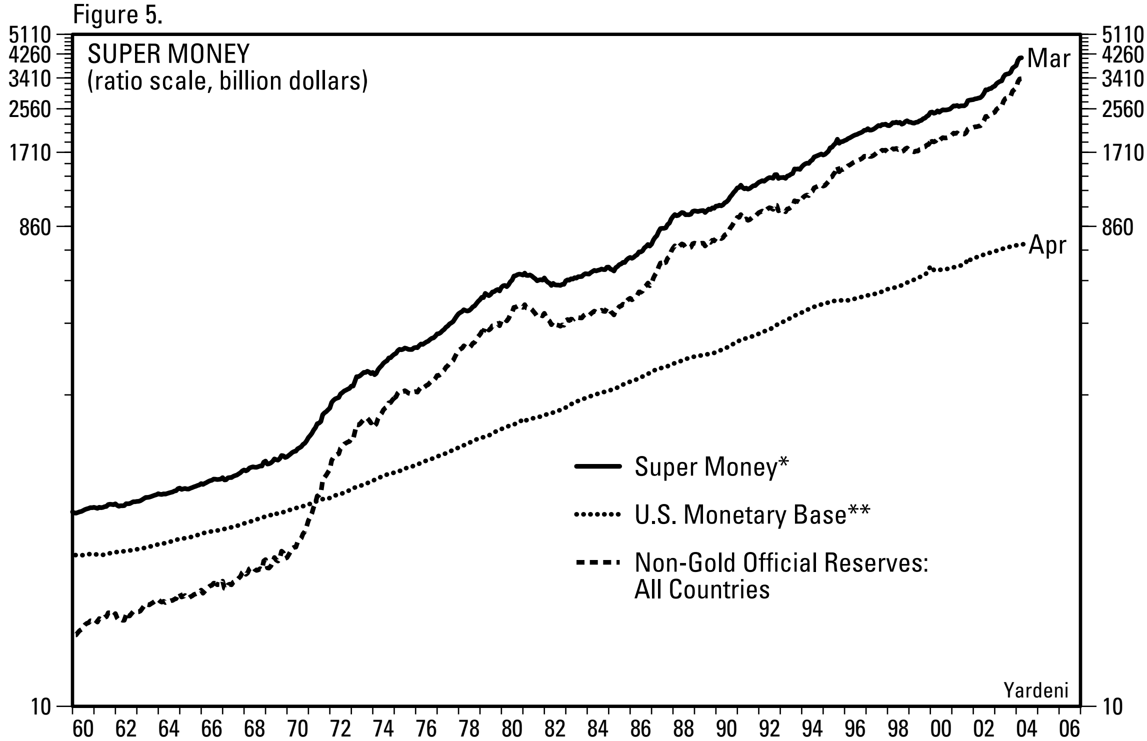


Note: Shaded areas are recessions according to the National Bureau of Economic Research.
Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Super Money

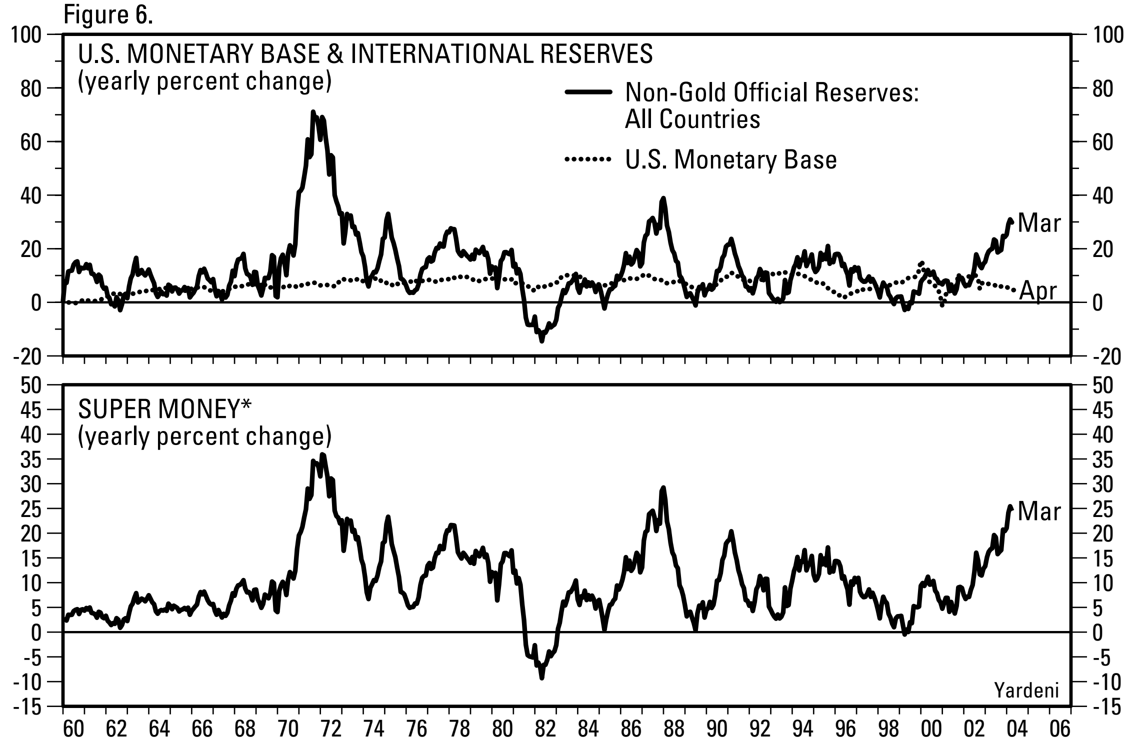
Super Money is growing very rapidly, providing lots of liquidity to fuel the Global Synchronized Boom.

Figure 5.



* U.S. monetary base (adjusted for changes in reserve requirements) plus non-gold international reserves.
** Adjusted for changes in reserve requirements.
Source: IMF International Financial Statistics and Board of Governors of the Federal Reserve System.

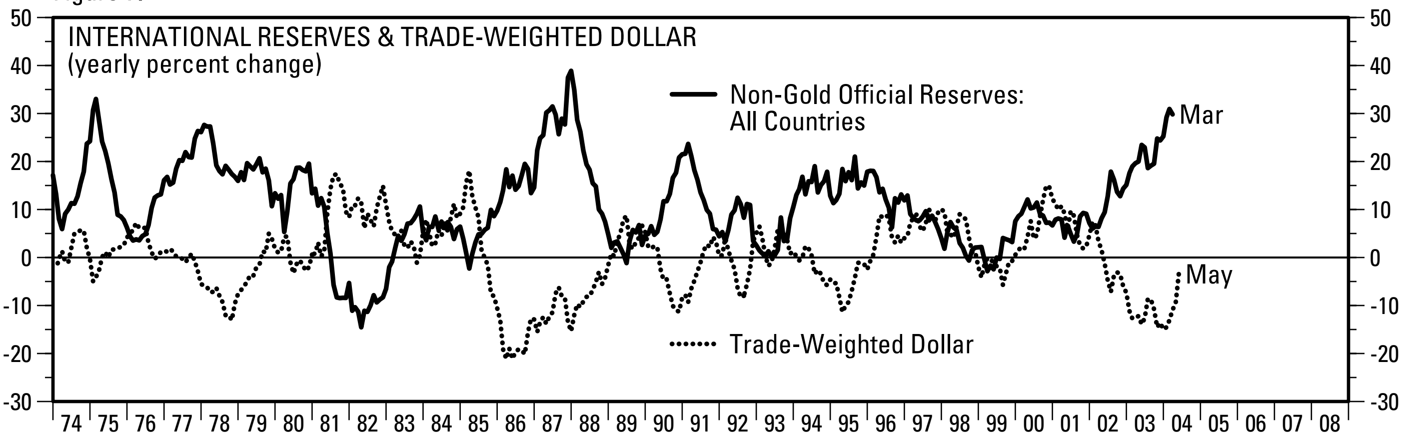
Figure 6.

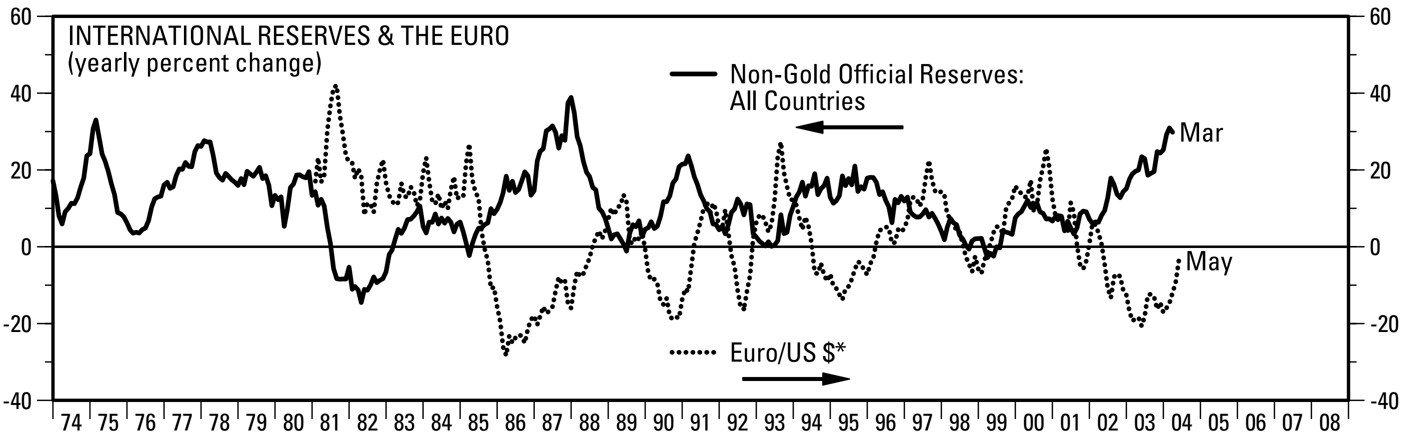


* U.S. monetary base (adjusted for changes in reserve requirements) plus non-gold international reserves.
Source: IMF International Financial Statistics and Board of Governors of the Federal Reserve System.

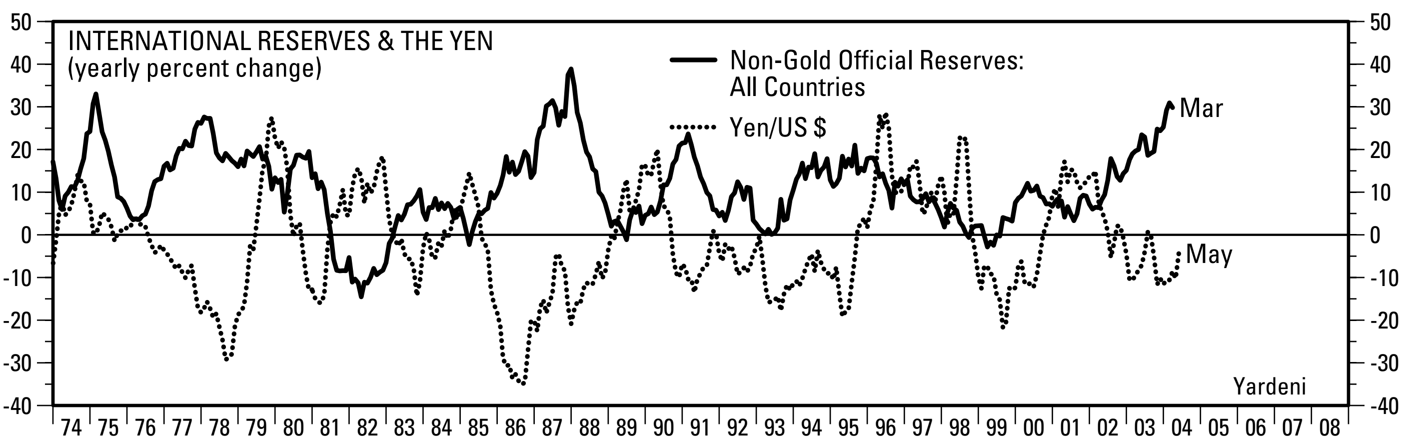
International Reserves & The Dollar

Figure 7.





* On January 1, 1999, the euro was introduced. On that date, the exchange rates of the participating currencies were irrevocably set. Data prior to 1999 are derived from European currencies.

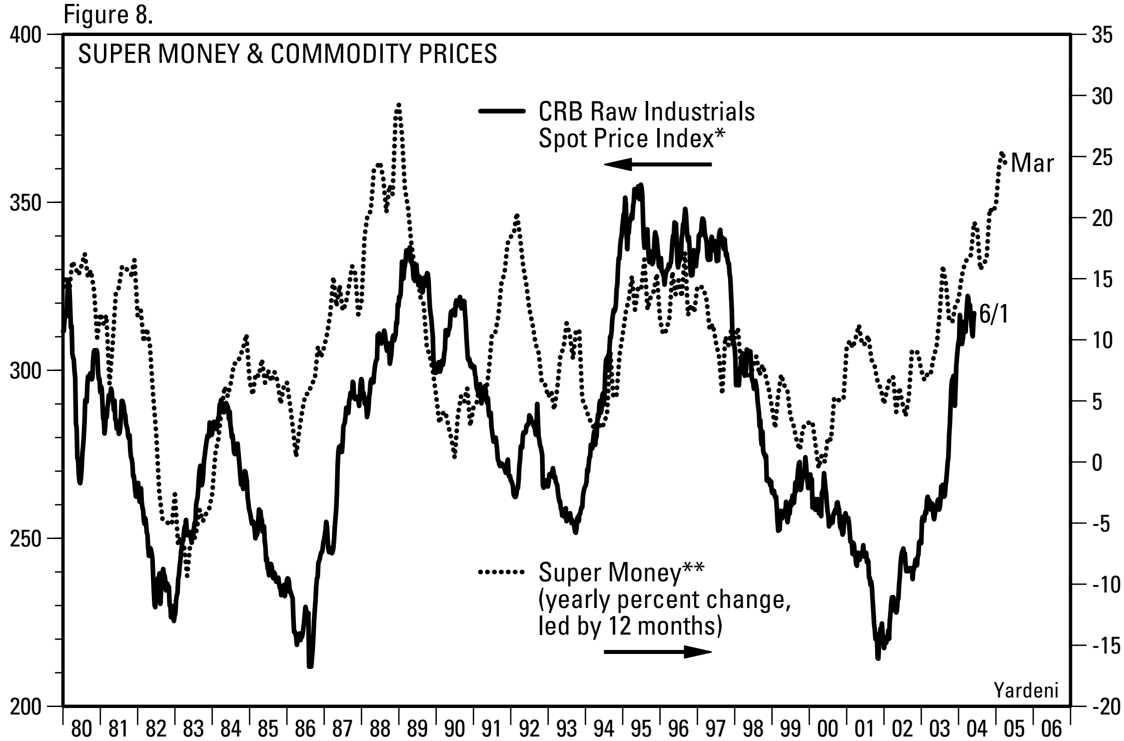


Source: IMF International Financial Statistics and Board of Governors of the Federal Reserve System.

Super Money & Commodity Prices

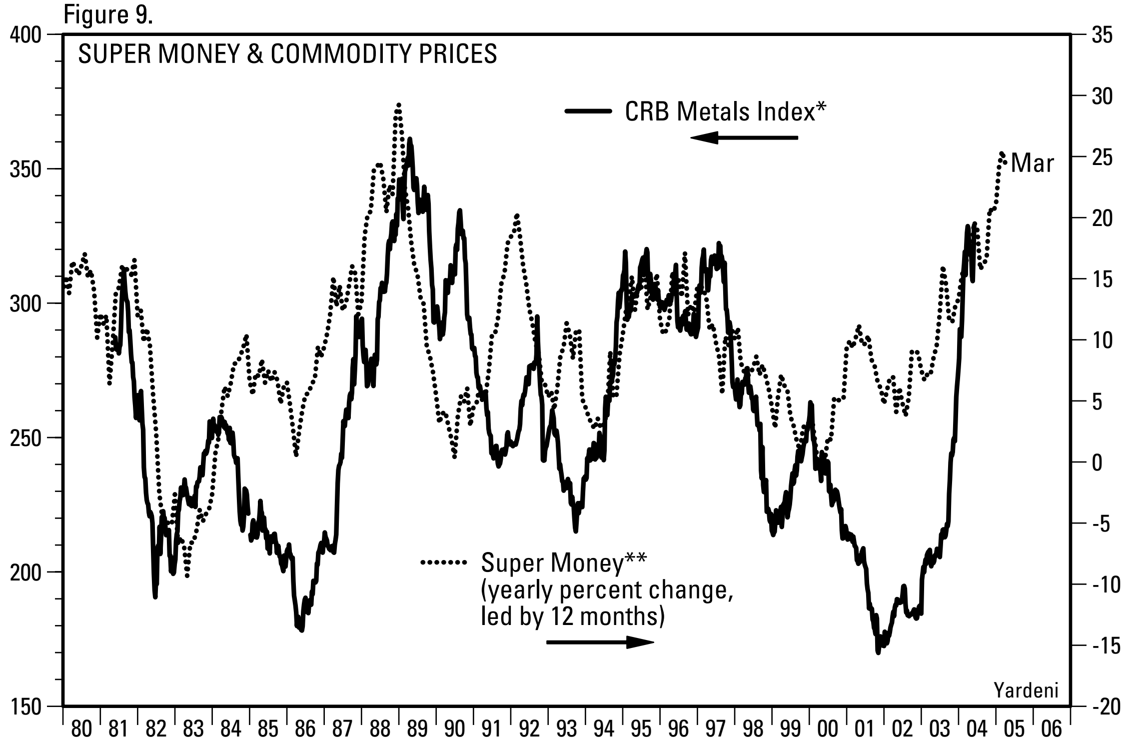
Super Money growth tends to lead industrial commodity prices by about a year. The latest data suggest that industrial commodity prices are likely to head higher.

Figure 8.



* Includes copper scrap, lead scrap, steel scrap, tin, zinc, burlap, cotton, print cloth, wool tops, hides, rosin, rubber, and tallow.
** U.S. monetary base (adjusted for changes in reserve requirements) plus non-gold international reserves.
Source: Commodity Research Bureau and Board of Governors of the Federal Reserve System.

Figure 9.

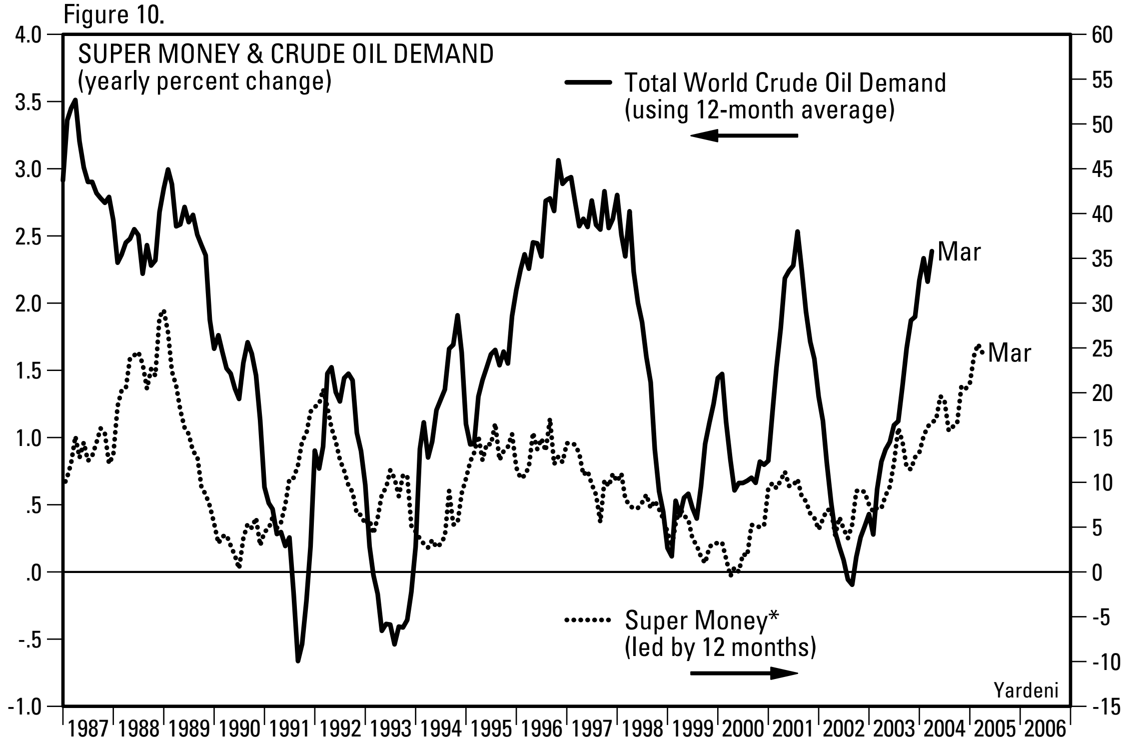


* Includes copper scrap, lead scrap, steel scrap, tin, and zinc.
** U.S. monetary base (adjusted for changes in reserve requirements) plus non-gold international reserves.
Source: Commodity Research Bureau and Board of Governors of the Federal Reserve System.

Super Money & Trade

Super Money growth also tends to be a good 12-month leading indicator of world oil demand growth. Both suggest that a global boom is underway.

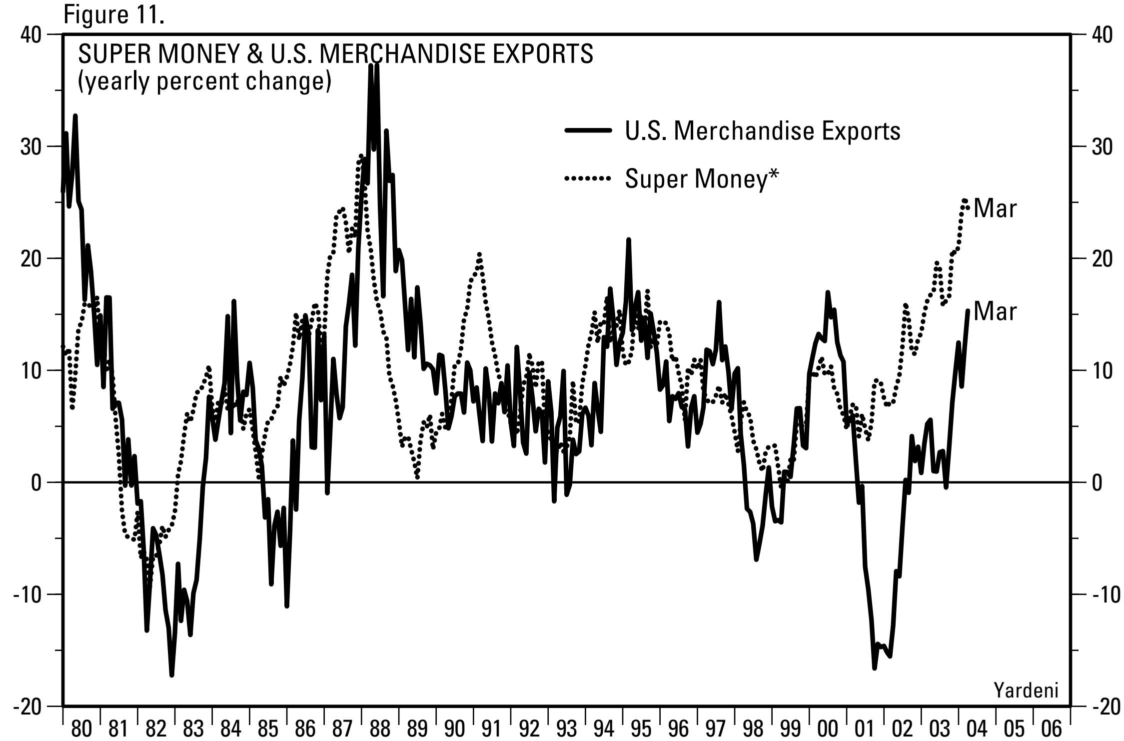
Figure 10.



* U.S. monetary base (adjusted for changes in reserve requirements) plus non-gold international reserves.
Source: Oil Market Intelligence and Board of Governors of the Federal Reserve System.

Super Money growth is highly correlated with growth in U.S. exports. Both suggest that the global economy is booming.

Figure 11.

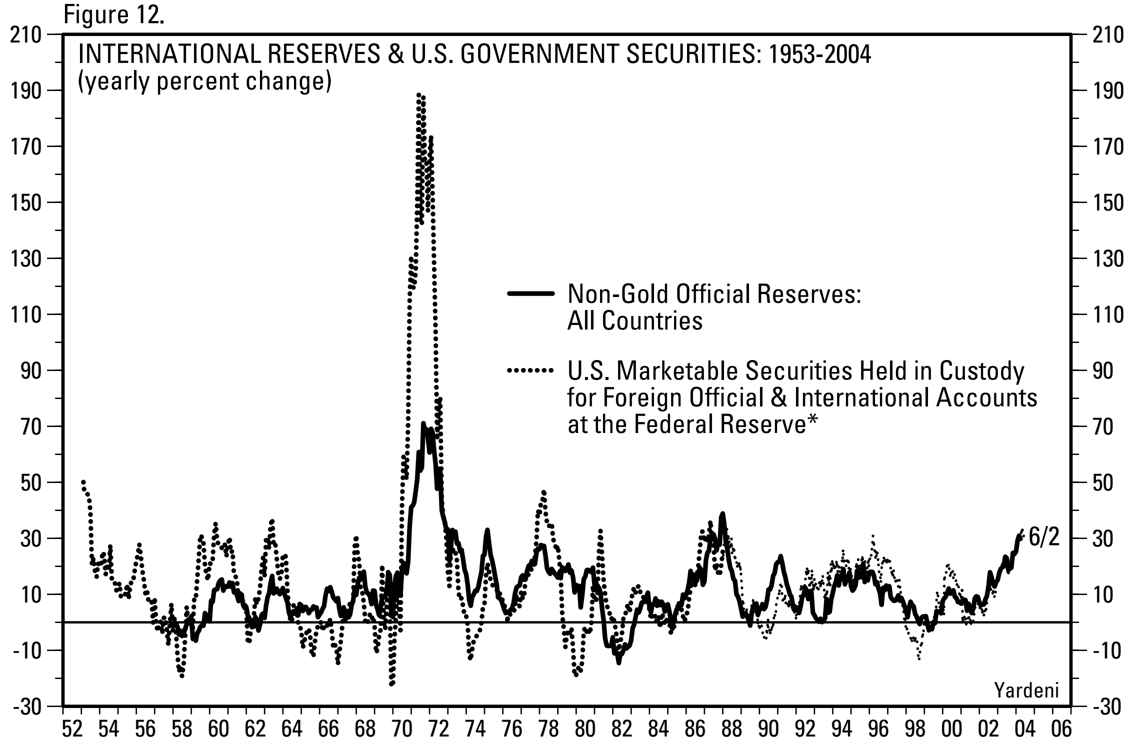


* U.S. monetary base (adjusted for changes in reserve requirements) plus non-gold international reserves.
Source: IMF International Financial Statistics, Board of Governors of the Federal Reserve System and U.S. Department of Commerce, Bureau of Economic Analysis.

Weekly Super Money

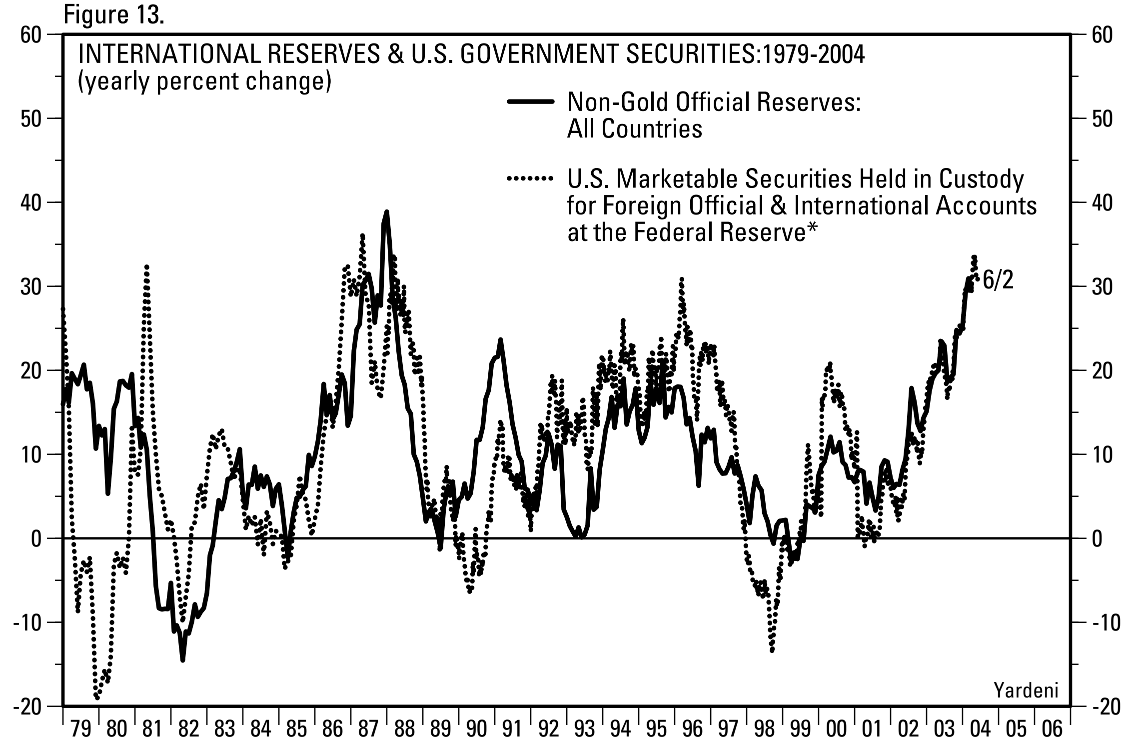
The Fed publishes weekly data on U.S. marketable securities held by central banks. The data are highly correlated with the International Monetary Fund data on international reserves.

Figure 12.



* Monthly data from 1952 to 1987 include only U.S. Treasury securities. Weekly data from 1988 to present include U.S. Treasury and federal agency securities.
Source: IMF International Financial Statistics and Board of Governors of the Federal Reserve System.

Figure 13.



* Monthly data from 1952 to 1987 include only U.S. Treasury securities. Weekly data from 1988 to present include U.S. Treasury and federal agency securities.
Source: IMF International Financial Statistics and Board of Governors of the Federal Reserve System.

Weekly Super Money

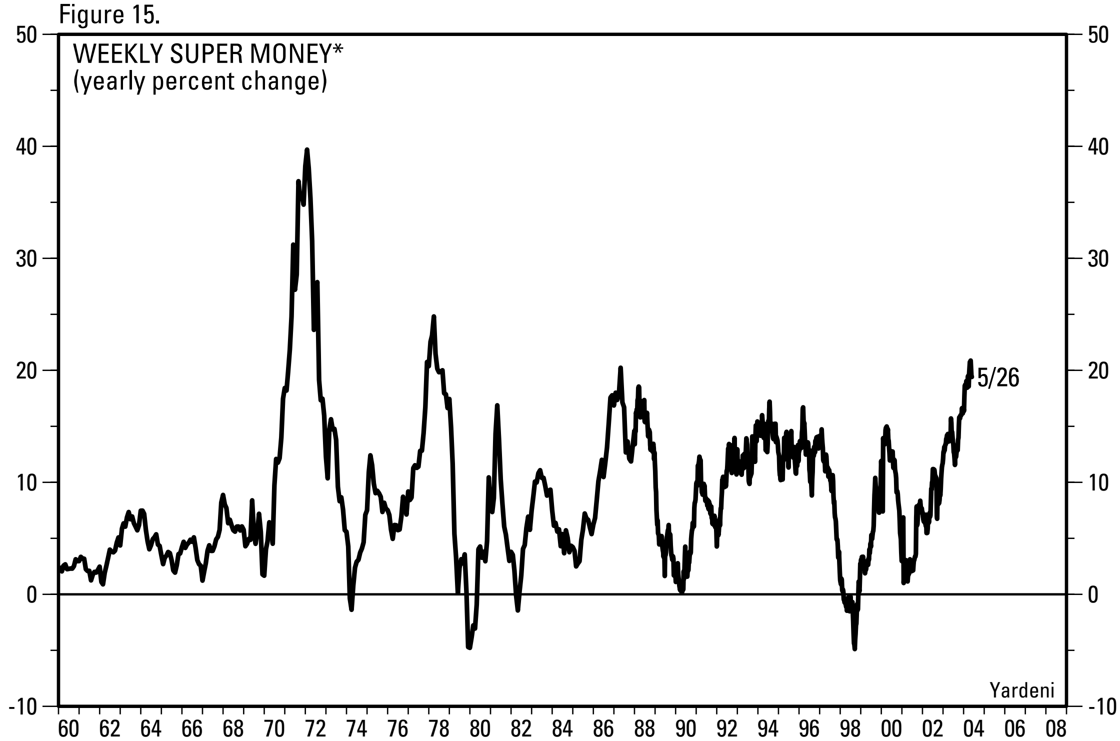
U.S. marketable securities held by the Fed for foreign central banks account for more than a third of international reserves.

Figure 14.

* Monthly data from 1957 to 1987 include only U.S. Treasury securities. Monthly data from 1988 to present include U.S. Treasury and federal agency securities.
Source: IMF International Financial Statistics and Board of Governors of the Federal Reserve System.

Weekly Super Money was up 19.4% from a year ago in late May.

Figure 15.

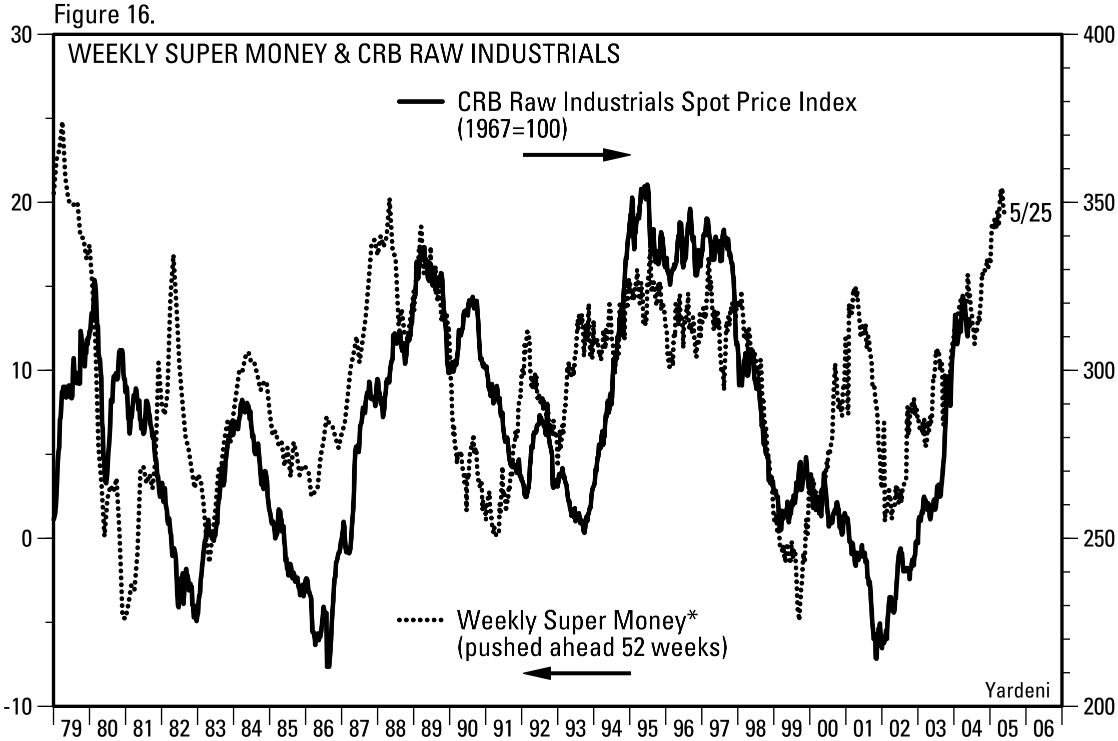


* U.S. monetary base (adjusted for changes in reserve requirements) plus U.S. marketable securities held in custody for foreign official and international accounts at the Federal Reserve. Monthly data from 1952 to 1987 include only U.S. Treasury securities. Weekly data from 1988 to present include U.S. Treasury and federal agency securities.
Source: Board of Governors of the Federal Reserve System.

Weekly Super Money

Weekly Super Money leads industrial commodity prices by about 52 weeks.

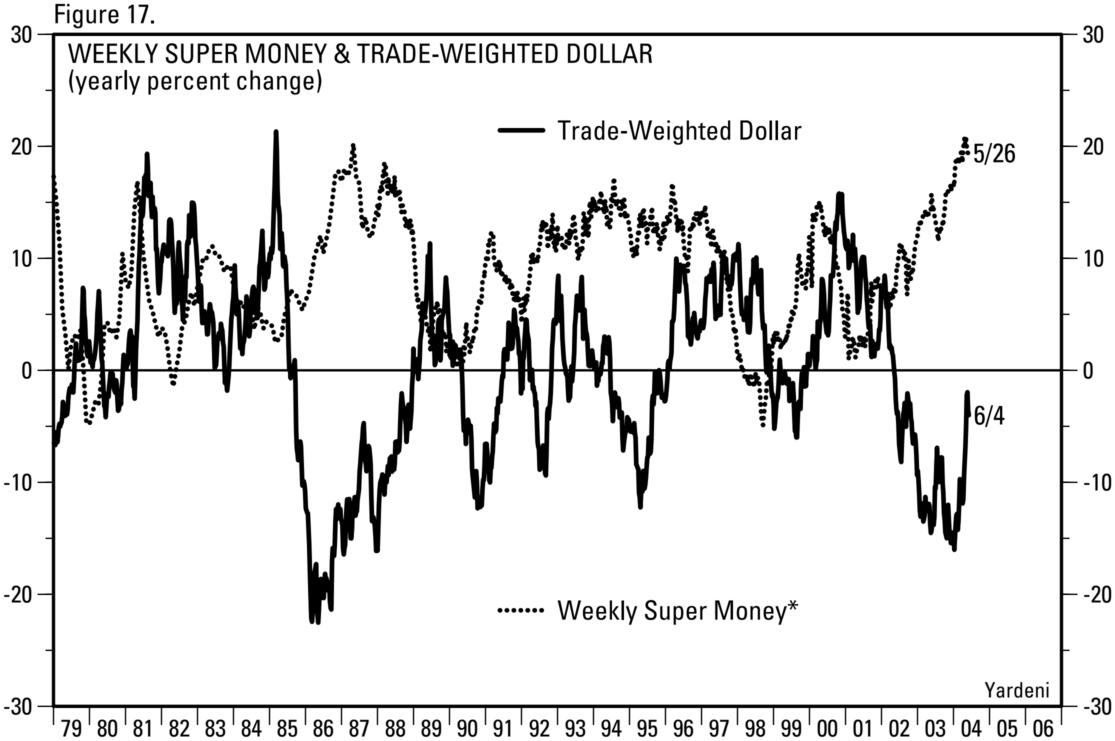
Figure 16.



* Yearly percent change. U.S. monetary base (adjusted for changes in reserve requirements) plus U.S. marketable securities held in custody for foreign official and international accounts at the Fed. Monthly from 1952 to 1987 include only U.S. Treasury securities. Weekly data from 1988 to present include U.S. Treasury and federal agency securities.
Source: IMF International Financial Statistics and Commodity Research Bureau.

Rapid growth in weekly Super Money suggests that the dollar is likely to remain weak.

Figure 17.

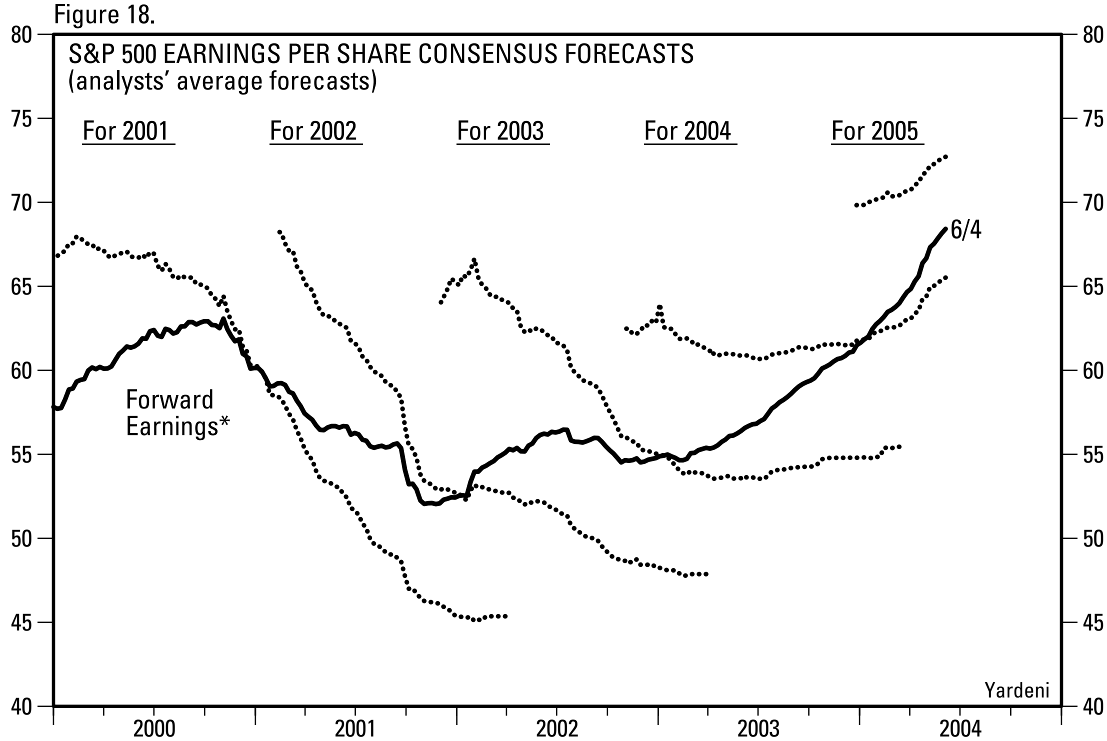


* U.S. monetary base (adjusted for changes in reserve requirements) plus U.S. marketable securities held in custody for foreign official and international accounts at the Fed. Monthly from 1952 to 1987 include only U.S. Treasury securities. Weekly data from 1988 to present include U.S. Treasury and federal agency securities.
Source: Board of Governors of the Federal Reserve System.

Forward Earnings

S&P 500 12-month forward consensus expected earnings is increasing along with estimates for 2004 and 2005.

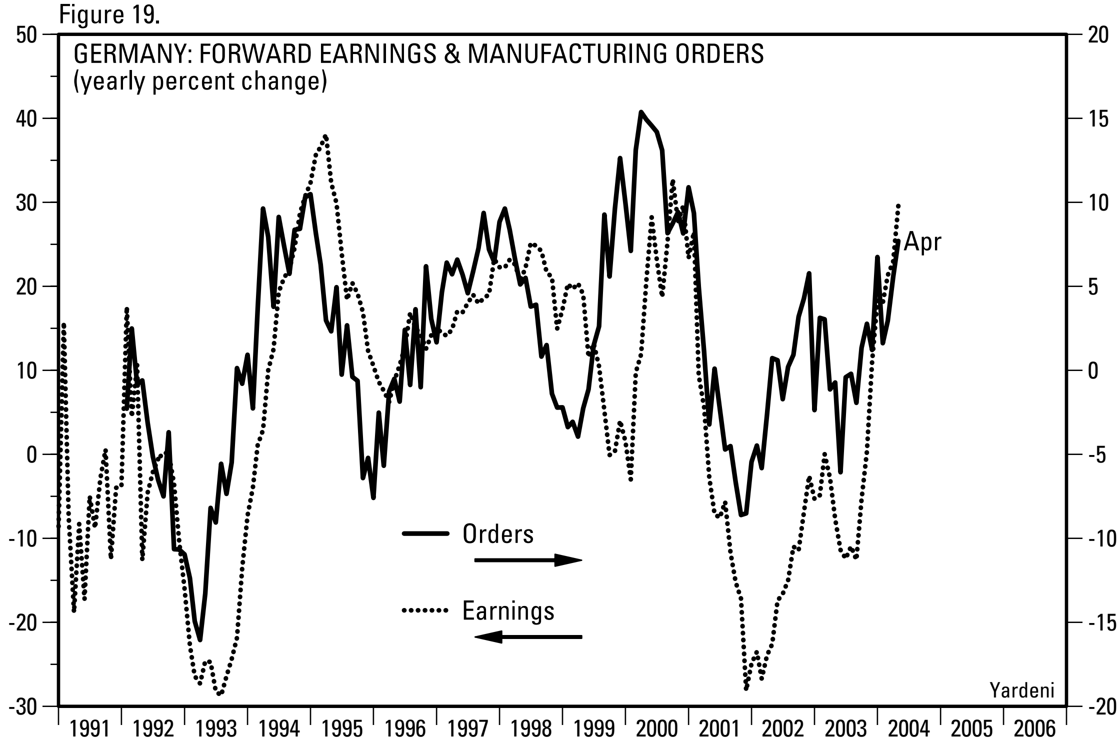
Figure 18.



* 52-week forward consensus expected S&P 500 operating earnings per share. Time-weighted average of the current and next year's consensus forecasts.
Source: Thomson Financial.

There's been a strong rebound in German forward earnings and factory orders.

Figure 19.



Source: Deutsche Bundesbank and Thomson Financial.

Important Disclosures

Rating Distribution

Prudential Equity Group, LLC Research Universe

06/07/04	Consolidated	Investment Banking Clients
Overweight(Buy)*	34.00%	1.00%
Neutral Weight(Hold)*	44.00%	1.00%
Underweight(Sell)*	22.00%	1.00%
Excludes Closed End Funds		
03/31/04	**Consolidated**	**Investment Banking Clients**
Overweight(Buy)*	36.00%	2.00%
Neutral Weight(Hold)*	43.00%	3.00%
Underweight(Sell)*	21.00%	1.00%
Excludes Closed End Funds		
12/31/03	**Consolidated**	**Investment Banking Clients**
Overweight(Buy)*	34.00%	2.00%
Neutral Weight(Hold)*	42.00%	4.00%
Underweight(Sell)*	24.00%	1.00%
Excludes Closed End Funds		
09/30/03	**Consolidated**	**Investment Banking Clients**
Overweight(Buy)*	34.00%	2.00%
Neutral Weight(Hold)*	41.00%	3.00%
Underweight(Sell)*	26.00%	1.00%
Excludes Closed End Funds		

* In accordance with applicable rules and regulations, we note above parenthetically that our stock ratings of “Overweight,” “Neutral Weight,” and “Underweight” most closely correspond with the more traditional ratings of “Buy,” “Hold,” and “Sell,” respectively; however, please note that their meanings are not the same. (See the definitions below.) We believe that an investor’s decision to buy or sell a security should always take into account, among other things, the investor’s particular investment objectives and experience, risk tolerance, and financial circumstances. Rather than being based on an expected deviation from a given benchmark (as buy, hold, and sell recommendations often are), our stock ratings are determined on a relative basis (see the, as defined below).

When we assign an **Overweight** rating, we mean that we expect that the stock's total return will exceed the average total return of all of the stocks covered by the analyst (or analyst team). Our investment time frame is 12-18 months except as otherwise specified by the analyst in the report.

When we assign a **Neutral Weight** rating, we mean that we expect that the stock's total return will be in line with the average total return of all of the stocks covered by the analyst (or analyst team). Our investment time frame is 12-18 months except as otherwise specified by the analyst in the report.

When we assign an **Underweight** rating, we mean that we expect that the stock's total return will be below the average total return of all of the stocks covered by the analyst (or analyst team). Our investment time frame is 12-18 months except as otherwise specified by the analyst in the report.

Prior to September 8, 2003, our ratings were Buy, Hold, and Sell. A **Buy** rating meant that we believed that a stock of average or below-average risk offered the potential for total return of 15% or more over the following 12 to 18 months. For higher-risk stocks, we may have required a higher potential return to assign a **Buy** rating. When we reiterated a **Buy** rating, we were stating our belief that our price target was achievable over the following 12 to 18 months. A **Sell** rating meant that we believed that a stock of average or above-average risk had the potential to decline 15% or more over the next 12 to 18 months. For lower risk stocks, a lower potential decline may have been sufficient to warrant a **Sell** rating. When we reiterated a **Sell** rating, we were stating our belief that our price target was achievable over the following 12 to 18 months. A **Hold** rating signified our belief that a stock did not present sufficient upside or downside potential to warrant a Buy or a Sell rating, either because we viewed the stock as fairly valued or because we believed that there was too much uncertainty with regard to key variables for us to rate the stock a Buy or a Sell.

When we assign an industry rating of **Favorable**, we mean that generally industry fundamentals/stock prospects are improving.

When we assign an industry rating of **Neutral**, we mean that generally industry fundamentals/stock prospects are stable.

When we assign an industry rating of **Unfavorable**, we mean that generally industry fundamentals/stock prospects are deteriorating.

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Information as of February 5, 2004

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