

**On the Cusp Again:**

# THE DOW/GOLD RATIO

**December 2000**

**GOLDEN SEXTANT ADVISORS LLC**

# INTRODUCTION

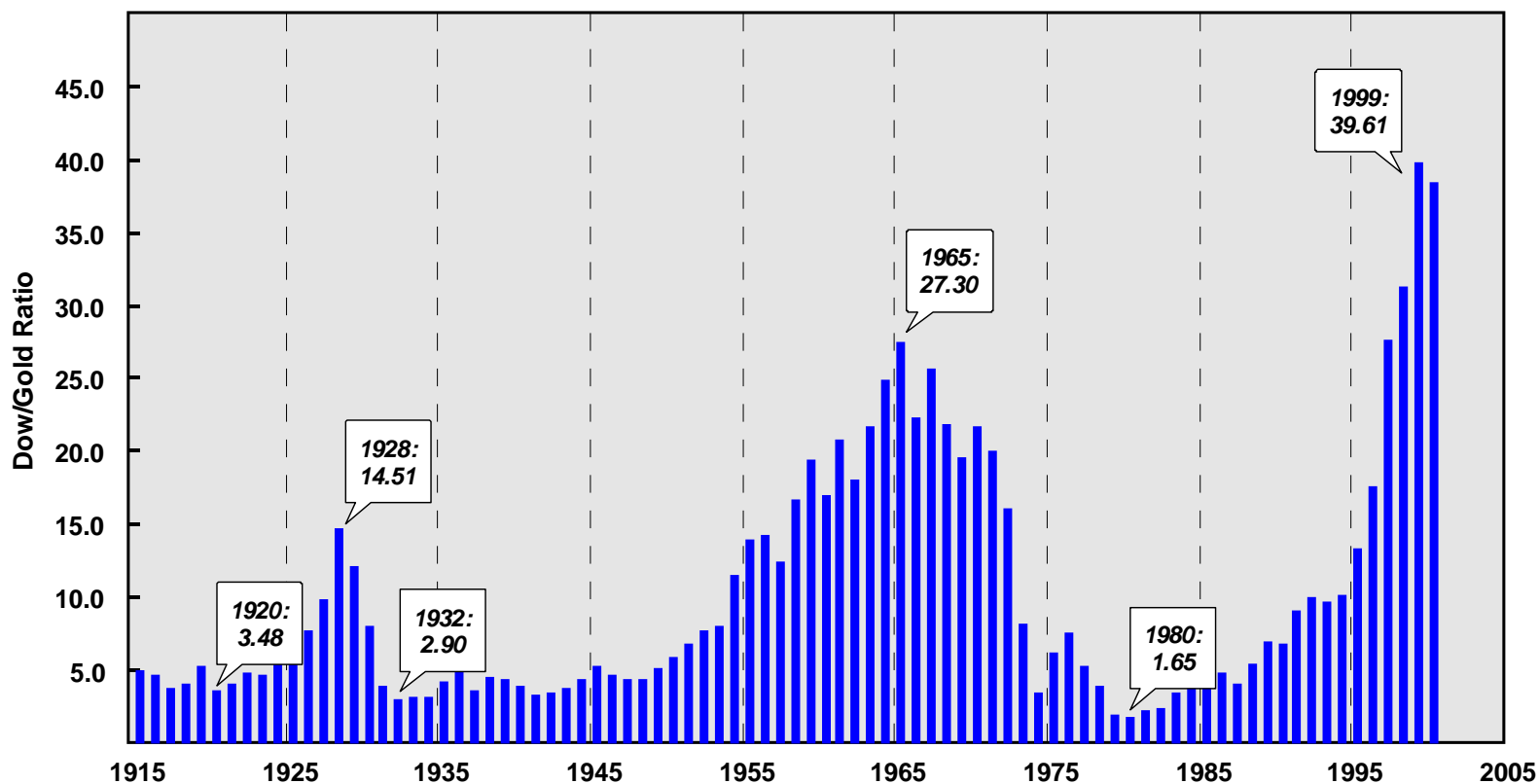
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- The three great bull markets of the Twentieth Century are dramatically reflected in a chart of the Dow/Gold ratio, which is simply the quotient of the Dow Jones Industrial Average divided by the gold price in US Dollars. It is basically the price of the leading index of paper claims on productive assets, divided by the dollar price of an ounce of gold.
  - When the ratio is high, as it is in a boom, equities are expensive and gold is cheap.
  - When the ratio is low, as it is in a bust, equities are cheap and gold is dear.
- Today, the Dow/Gold ratio is at its highest level ever. We believe this signifies the financial world is on the cusp of a huge inflection point, similar to that of the two prior peaks.
  - Just as at those prior peaks, financial assets are grossly overvalued, and gold is grossly undervalued.
  - Just as those prior valuation extremes resolved themselves through dramatic reversals in both the numerator and the denominator of the Dow/Gold ratio, so will today's, and soon.

# INTRODUCTION

At about 40, the Dow/Gold ratio is at a record high:

## Dow/Gold Ratio: 1915 - 2000



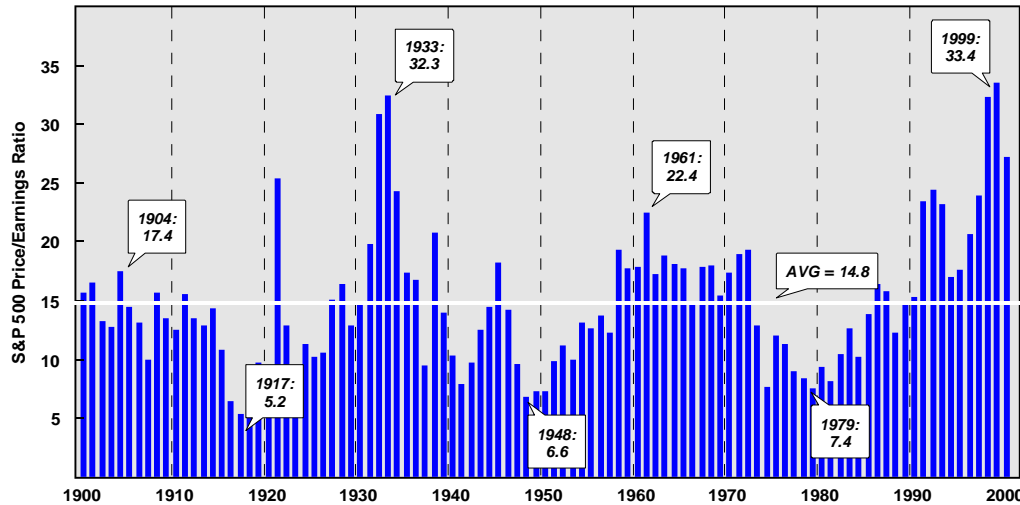
# INTRODUCTION

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- The key to understanding the Dow/Gold ratio and what it portends lies in isolating the principal factors that affect the numerator (equity prices) and the denominator (the price of gold).
  - At every peak, we find the same phenomena:
    - Overvaluation of equities
    - Over-ownership of equities
    - Excessive liquidity
    - Excessive credit
  - At every trough, we find their opposites.
  - And at each extreme, we find a background of breakdown in the global monetary system:
    - Collapse of gold exchange standard (1929 - 1934)
    - Collapse of Bretton Woods standard (1961 - 1971)
    - Collapse of floating rate standard (pending)
- Today, gold is dead. In 1980, equities were dead. We know how this chapter ends.

# THE NUMERATOR

## Price/Earnings Ratio: S&P 500

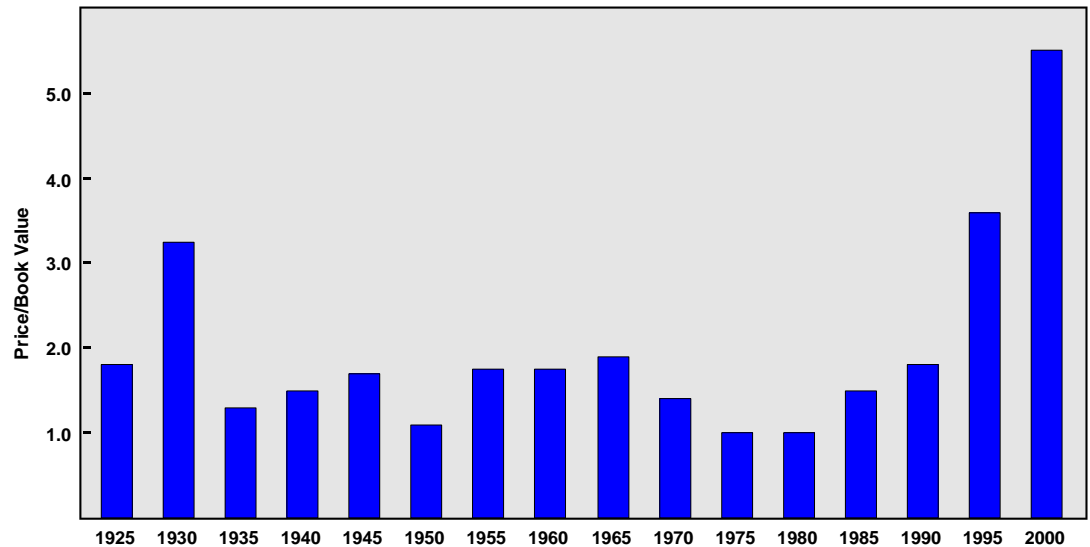


*By every rational measure, equity values are off the charts, exceeding their 1929 and 1966 highs. Here are just a few examples.*



*P/E ratios are at an all-time high.*

## Price to Book Ratio: S&P 500

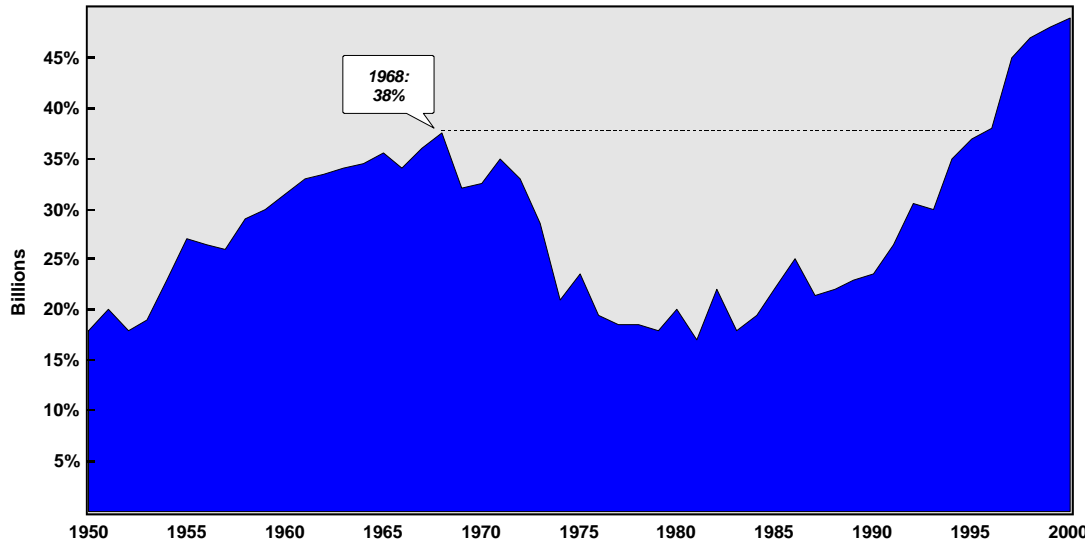


*So are Price to Book Ratios.*



# THE NUMERATOR

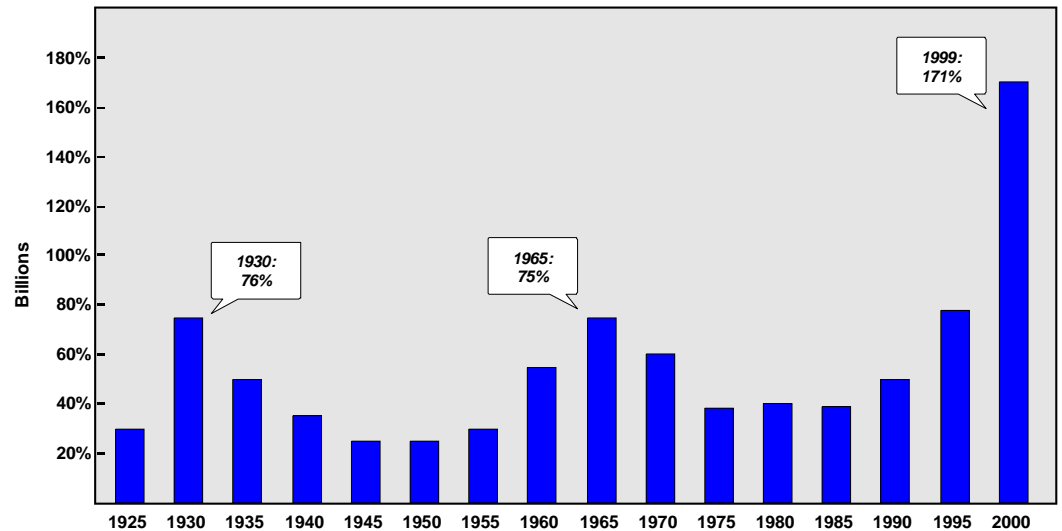
## Percent Household Participation in US Equities



*It's been so good for so long,  
"Everybody's in."*

*Public participation in the  
stock market today  
dwarfs prior levels.*

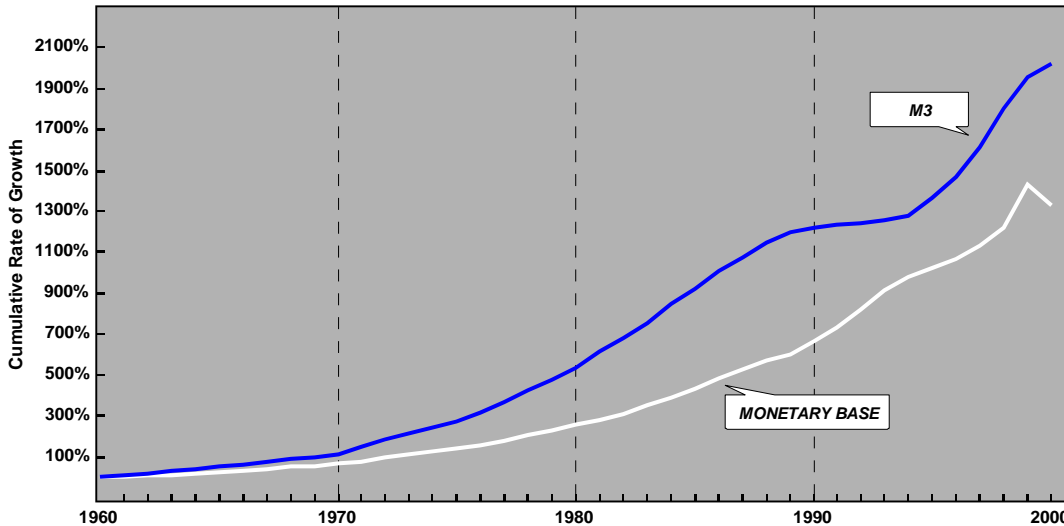
## Aggregate Market Capitalization/GDP



*Relative to GDP, the aggregate  
capitalization of the stock  
market is at an all-time high*

# THE NUMERATOR

## Cumulative Growth: M3 and the Monetary Base

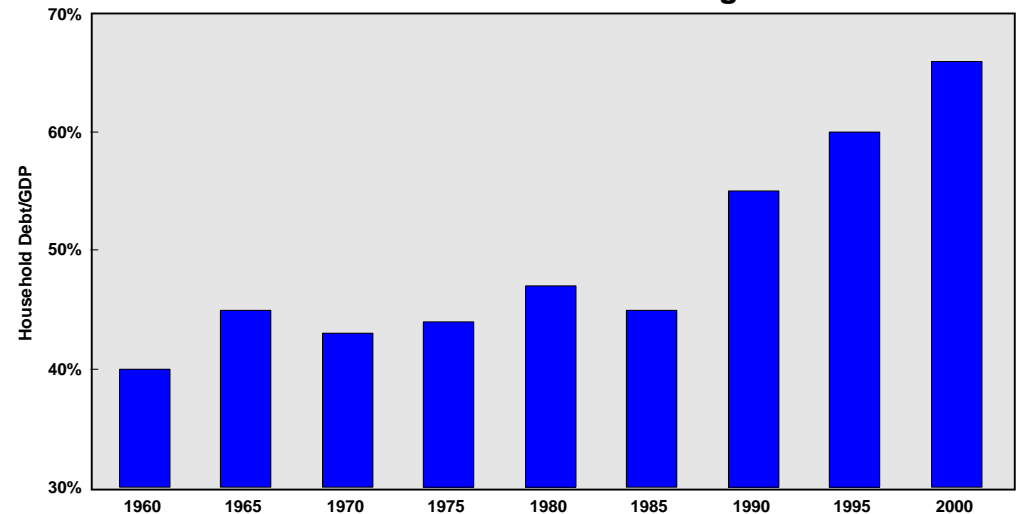


*A peak in the Dow/Gold Ratio is at heart a monetary phenomenon. The fuel for the imbalance is always the same: excessive liquidity and excessive credit.*

Since 1960, the aggregates known as M3 and the Monetary Base have increased by over 2000% and 1300%, respectively.

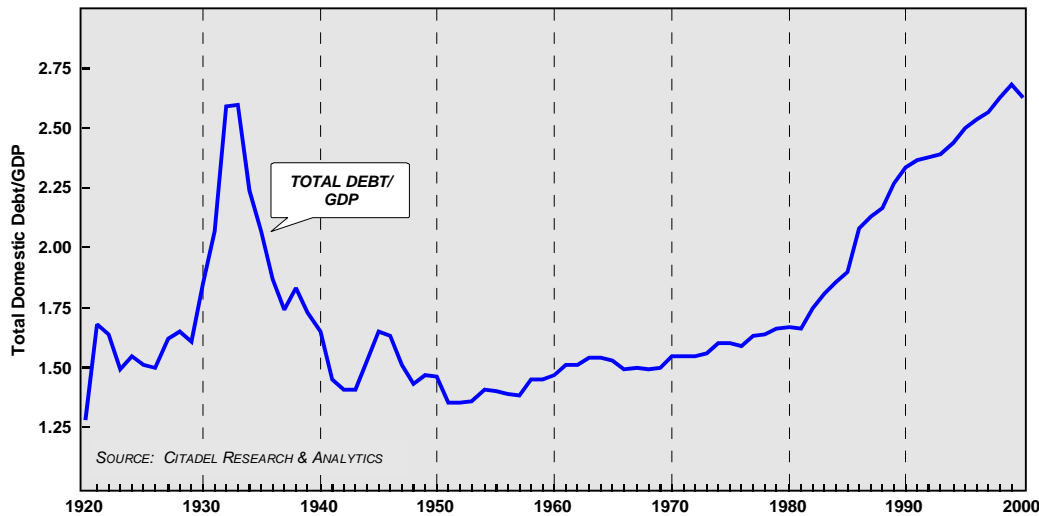
*During the same period, Household Debt as a percentage of GDP has grown by more than half to over 65%.*

## Household Debt as a Percentage of GDP



# THE NUMERATOR

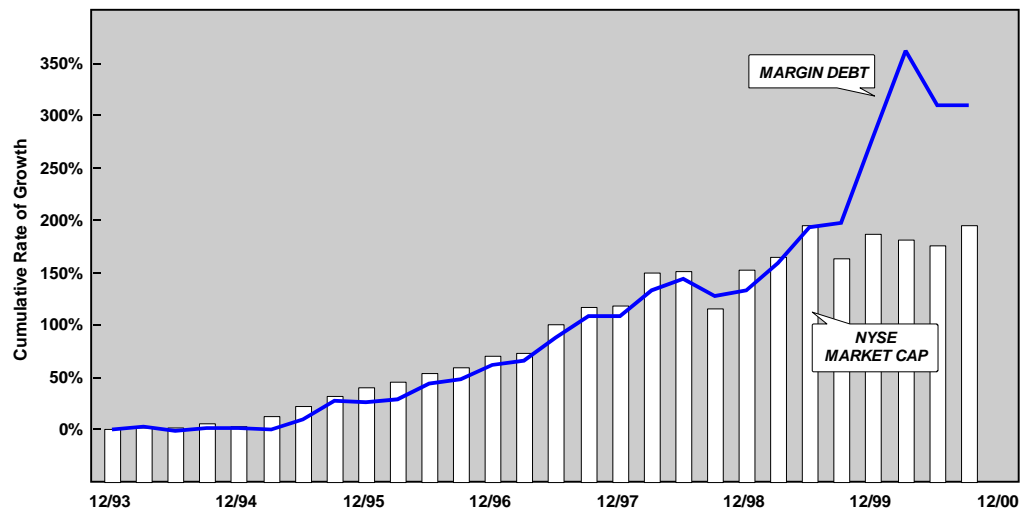
## Total Debt (All Sectors)/GDP



*Despite the fanfare associated with the recent paydown of the long bond, the United States economy is saturated with debt.*

▶ *Total debt as a percentage of GDP is at record levels.*

## Margin Debt versus NYSE Market Capitalization

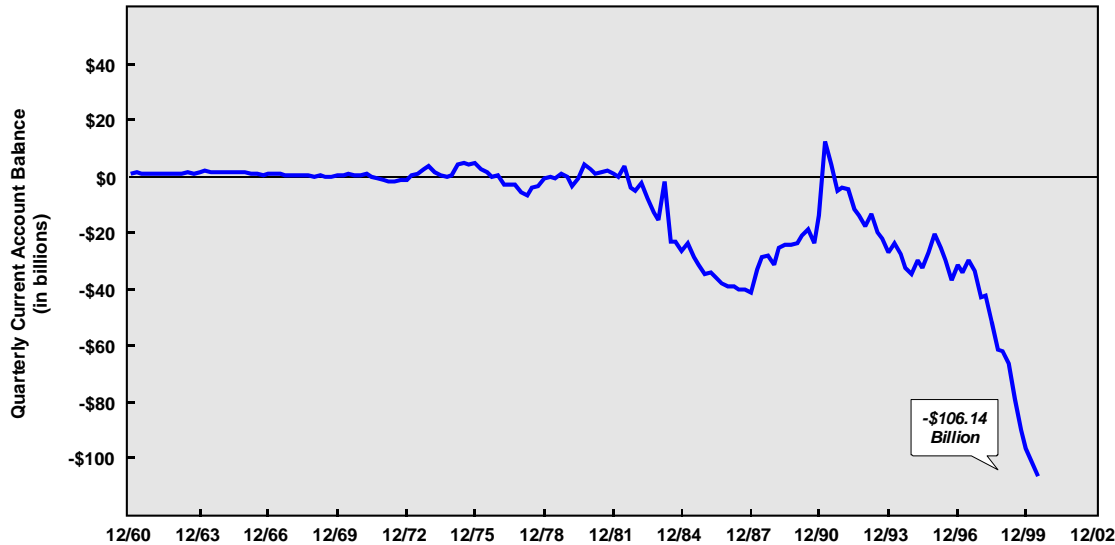


*Margin debt has grown by over 300% to more than \$250 billion since 1993.*





## US Quarterly Current Account Deficit



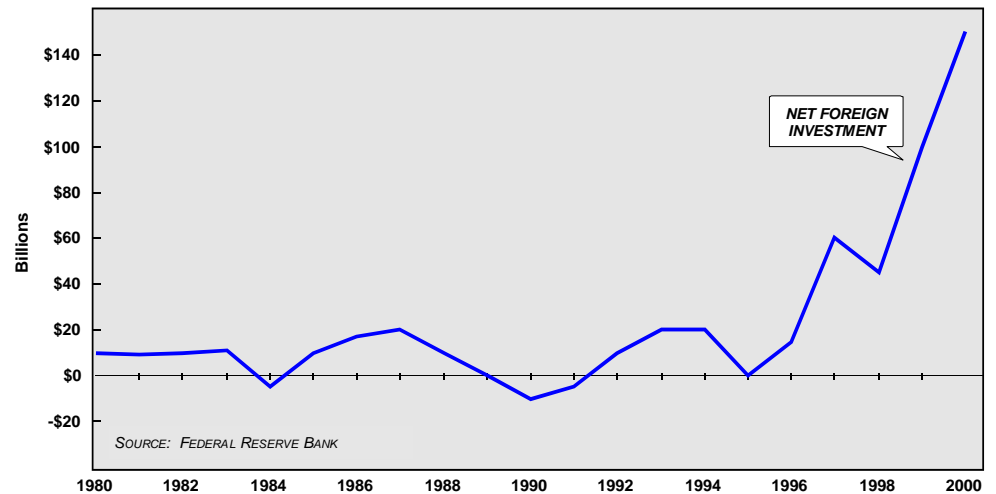
*The US economy and its capital markets are increasingly reliant on the kindness of strangers.*

◀ *The Current Account Deficit is at record levels.*

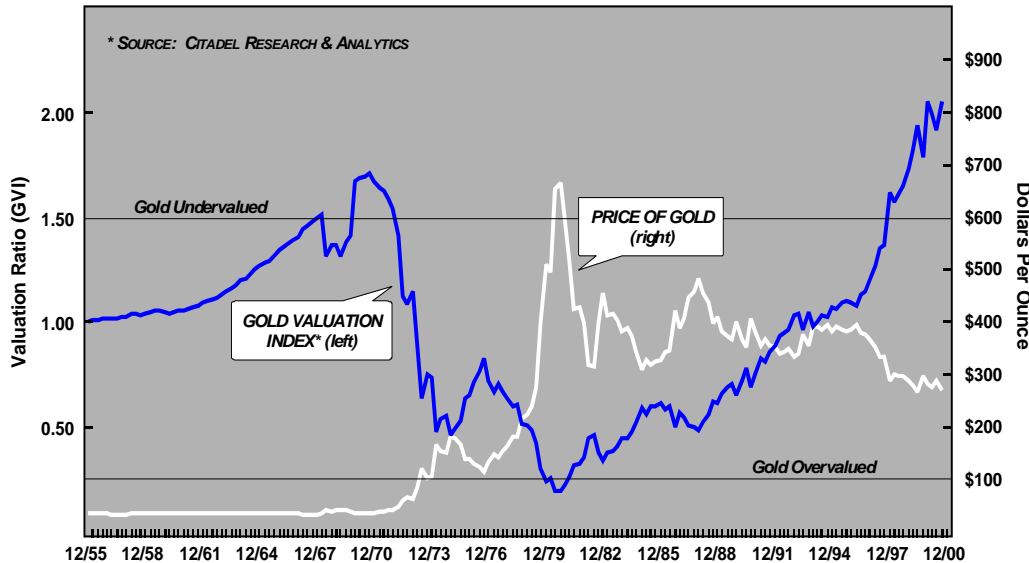
*Foreign ownership of US financial assets is also at record levels.*



## Net Foreign Investment in US Equities



## Gold Valuation Index versus Gold Price

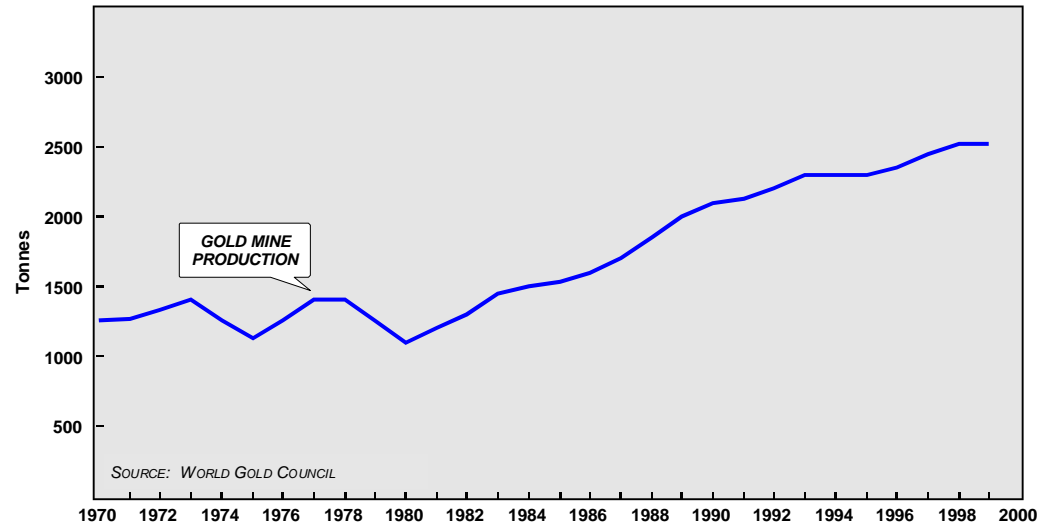


**Conversely, gold is extraordinarily cheap.**

*This chart compares the Gold Valuation Model (GVM; left scale) with the actual price of gold (right scale) since 1971. The GVM is derived by dividing the Federal Reserve's Adjusted Monetary Base by the price of gold bullion. The model indicates that gold is as cheap today, relative to the Monetary Base, as in 1971.*

*New mine supply has peaked and will decline for the next few years irrespective of gold prices.*

## Annual Gold Mine Production



And yet, while precise estimates vary, it is generally accepted that annual bullion demand substantially exceeds supply.

<u>Gold Supply/ Demand - 1999</u>	
	<u>Tonnes (a)</u>
<b>DEMAND (b)</b>	<b>4,500</b>
<b>SUPPLY</b>	
<b>Mine</b>	<b>2,500</b>
<b>Scrap</b>	<b>600</b>
<b>Total</b>	<b>3,100</b>
<b>SHORTFALL</b>	<b>(1,400)</b>

**Notes**

(a) One "tonne" is a metric ton containing approximately 32,150 oz.

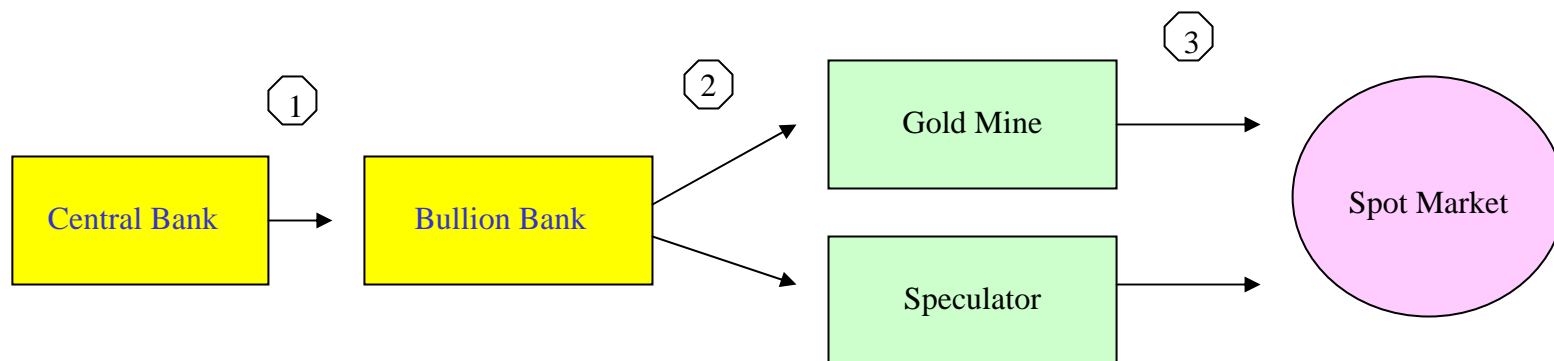
(b) Estimated total global demand for jewelry, bar, coin & other

# THE DENOMINATOR

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“Official Sector” activity makes up much of the difference between annual demand and new mine production. This consists of outright sales of monetary gold reserves as well as “leasing” of physical gold by central banks. Gold leasing is basically gold banking in a new guise, and results in adding new supply to the physical market while at the same time creating a short physical position typically hedged with paper gold derivatives such as forward contracts, futures or options.

## Anatomy of a Short Sale



In a typical lease transaction, a central bank deposits gold with a bullion bank on a demand or other short term basis at the current “lease rate” (1). The bullion bank in turn lends the gold to a gold mine or a speculator such as a hedge fund (2), generally at a longer maturity and higher lease rate. In each case the leased gold is sold short (3) and the proceeds are expended or reinvested in financial assets. The central bank now holds the bullion bank’s promise to return its gold. Similarly, the bullion bank now holds its customer’s promise to deliver gold in the future. Both sets of promises are typically hedged through the use of derivatives. In the case of the gold mine, future delivery is presumed to be possible out of future production. In the case of the speculator, future delivery must be purchased in the spot market. In practice, most leases and related gold loans are rolled over, so the cumulative balance continues to increase. The gold, meanwhile, likely finds its way to India.

The cumulative exposures created as a result of leasing and related derivatives activity are substantial in relation to the world's total supply of physical gold.

<u>The Gold Derivatives Market: Fun Facts</u>		
	<u>Tonnes</u>	<u>US \$</u> <u>(Billions)</u> (a)
<b>Total Above Ground Supply of Physical Gold</b>	<b>125,000</b>	<b>1,105</b>
<b>Total Physical Gold Nominally Held by All Central Banks</b>	<b>33,500</b>	<b>296</b>
<b>Total Physical Gold Nominally Held by Central Bank Signatories &amp; Other Observers of Washington Agreement</b>	<b>28,500</b>	<b>252</b>
<b>Total Notional Amount of Gold Derivatives on Books of G-10 Banks, December 1999 (Source: BIS)</b>	<b>27,485</b>	<b>243</b>
<b>Total Notional Amount of Gold Derivatives on Books of Chase/JP Morgan, December 1999 (Source: OCC)</b>	<b>7,352</b>	<b>65</b>
<b>Total Physical Short Position (high estimate)</b>	<b>&gt; 10,000 (b)</b>	<b>88</b>
<b>Total Physical Short Position (low estimate)</b>	<b>5,000 (c)</b>	<b>44</b>

**Notes**

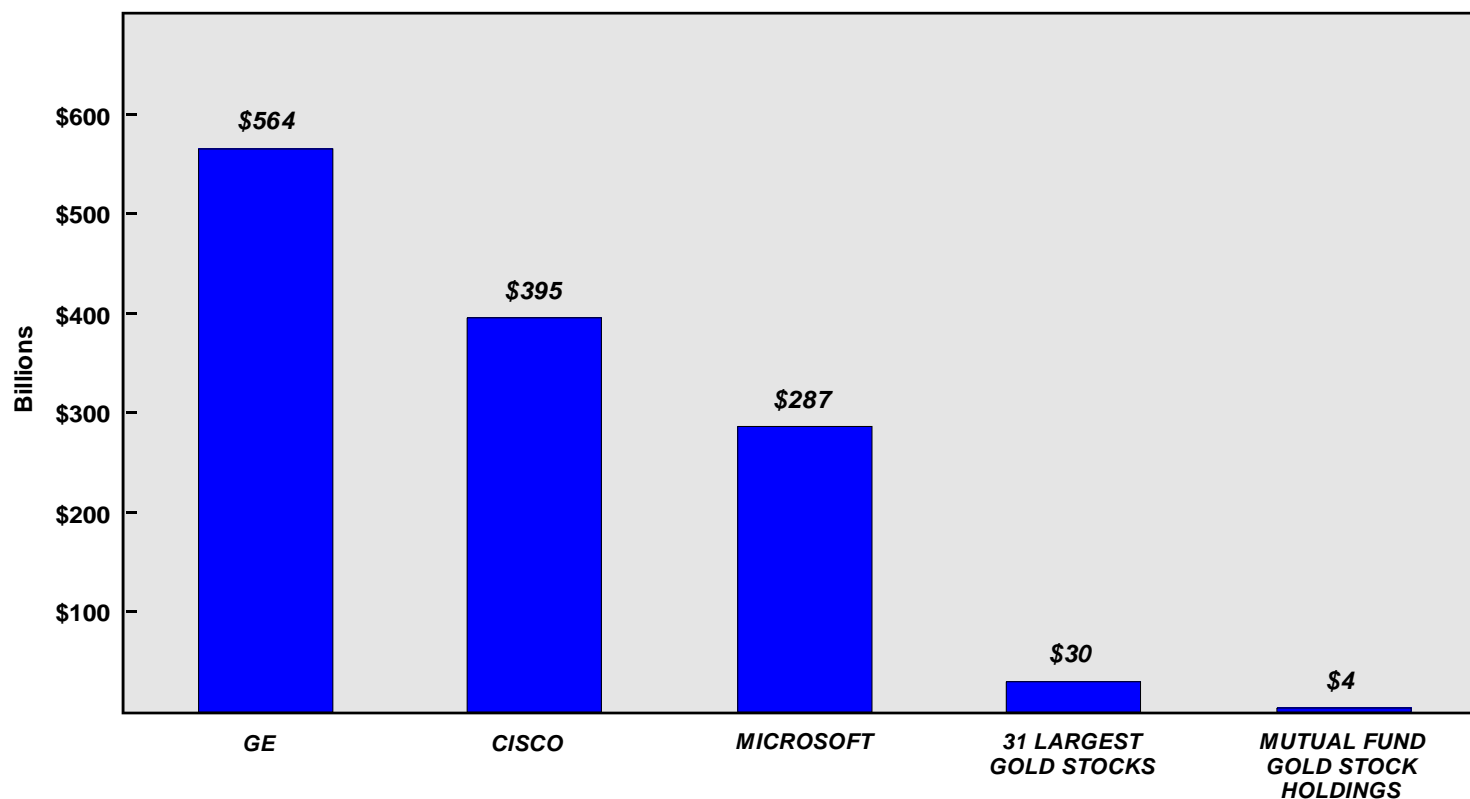
(a) Conversions between tonnes and US \$ expressed at \$275/ ounce.  
(b) Veneroso Associates.  
(c) Gold Fields Minerals Services Ltd.

# THE DENOMINATOR

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***The cumulative effect of this activity has been devastating to the gold market and the shares of gold producers. In effect, “Everybody’s out,” and many are short.***

*At under \$40 billion, the market capitalization of the entire gold sector is a fraction of that of GE, Cisco or Microsoft as of September 30, 2000. Meanwhile, aggregate holdings of gold shares by mutual funds have declined to de minimis levels.*



A steady drumbeat of negative news and commentary captures the pessimism in the gold market:

**“Precious Metals Funds Sinking”** - Associated Press, November 26, 2000

**“Gold Production from Yukon’s Placer Mines Hits 21-Year-Low”**

- Associated Press, November 20, 2000

**“Gold No Longer Glitters for Investors”** - Chicago Daily Herald, November 15, 2000

**“In the Golden Sunset / Is gold the dog that barked and may even be dead?”**

- Financial Times, October 6, 2000

**“Gold’s Slide Triggers Exit by Long-Patient Investors: Spotlight”**

- Bloomberg, October 5, 2000

**“Homestake Announces Closure of the Homestake Mine; Expects Further Reductions in Overall Cash Costs”** - Homestake Press Release, September 11, 2000

The first stirrings of change are evident. Liquidity to support further leasing/derivative activity will be severely restricted going forward. The text of the Washington Agreement, September 26, 1999:

<b>Oesterreichische Nationalbank</b>	<b>Banque Nationale de Belgique</b>	<b>Suomen Pankki</b>
<b>Banca d'Italia</b>	<b>Banque centrale du Luxembourg</b>	<b>De Nederlandsche Bank</b>
<b>Banque de France</b>	<b>Deutsche Bundesbank</b>	<b>Central Bank of Ireland</b>
<b>Banco do Portugal</b>	<b>Banco de España</b>	<b>Sveriges Riksbank</b>
<b>Schweizerische Nationalbank</b>	<b>Bank of England</b>	<b>European Central Bank</b>

In the interest of clarifying their intentions with respect to their gold holdings, the above institutions make the following statement:

1. **Gold will remain an important element of global monetary reserves.**
2. **The above institutions will not enter the market as sellers, with the exception of already decided sales.**
3. **The gold sales already decided will be achieved through a concerted programme of sales over the next five years. Annual sales will not exceed approximately 400 tonnes and total sales over this period will not exceed 2,000 tonnes.**
4. **The signatories to this agreement have agreed not to expand their gold leasings and their use of gold futures and options over this period.**
5. **This agreement will be reviewed after five years.**



# INTERNATIONAL MONETARY CONTEXT

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The factors which inform the Dow/Gold Ratio do not operate in domestic isolation, but are instead a function of global monetary conditions.

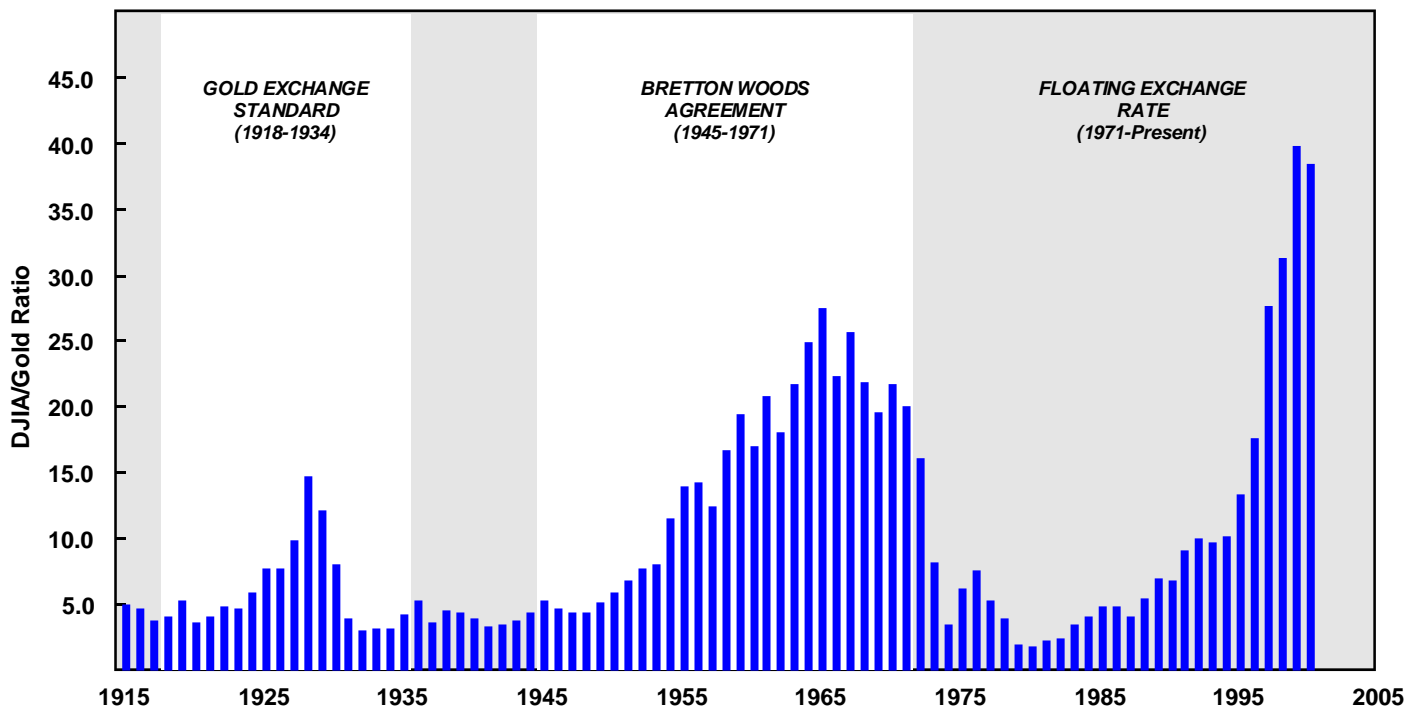
Each peak in the Dow/Gold Ratio corresponds to a backdrop of excess global credit and liquidity arising from progressive loosening of constraints in the international monetary system.

- The post-World War I boom of the 1920's occurred in the context of the gold exchange standard, which permitted a much larger expansion of credit than would have been possible under the classical gold standard in place prior to the Great War.
- The post-World War II boom of the mid-1950's to the mid-1960's occurred in the context of the US dollar-based gold exchange rate system of Bretton Woods, which allowed a similar unprecedented expansion.
- The post-Cold War bubble of the 1990's occurred in the context of the US dollar-based floating exchange rate system, which has permitted the greatest explosion in international credit and liquidity in history.

# INTERNATIONAL MONETARY CONTEXT

Neither the gold exchange standard nor the Bretton Woods system produced permanent prosperity. Rather, they resulted only in larger and more destructive economic cycles: two great global booms ending in the worst economic decades of the 20th century: the 1930's and the 1970's. Each peak marks the beginning of a swift descent into near complete international monetary breakdown, from 1929 to 1934 in the first cycle and from 1966 to 1971 in the second, although gold did not reach its peak price until 1980.

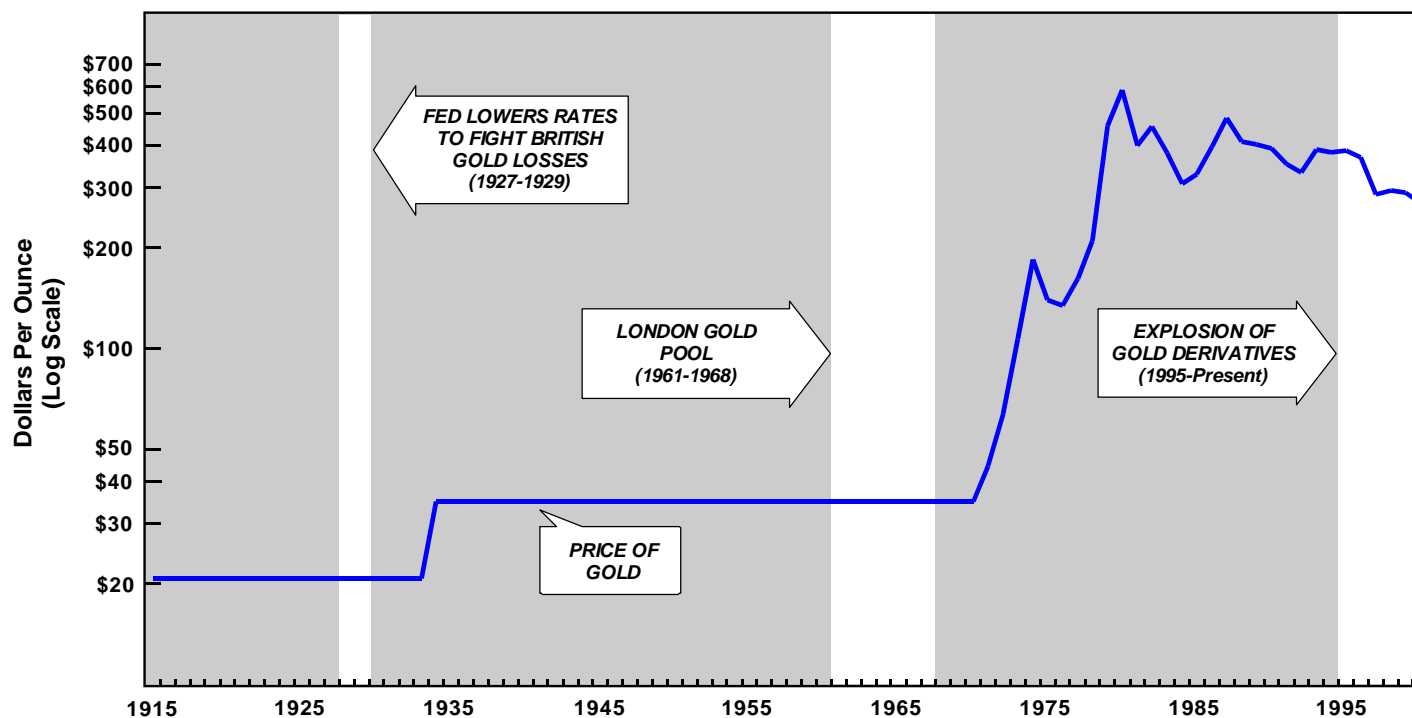
**The Dow/Gold Ratio and Global Monetary Regimes (1915-2000)**



# INTERNATIONAL MONETARY CONTEXT

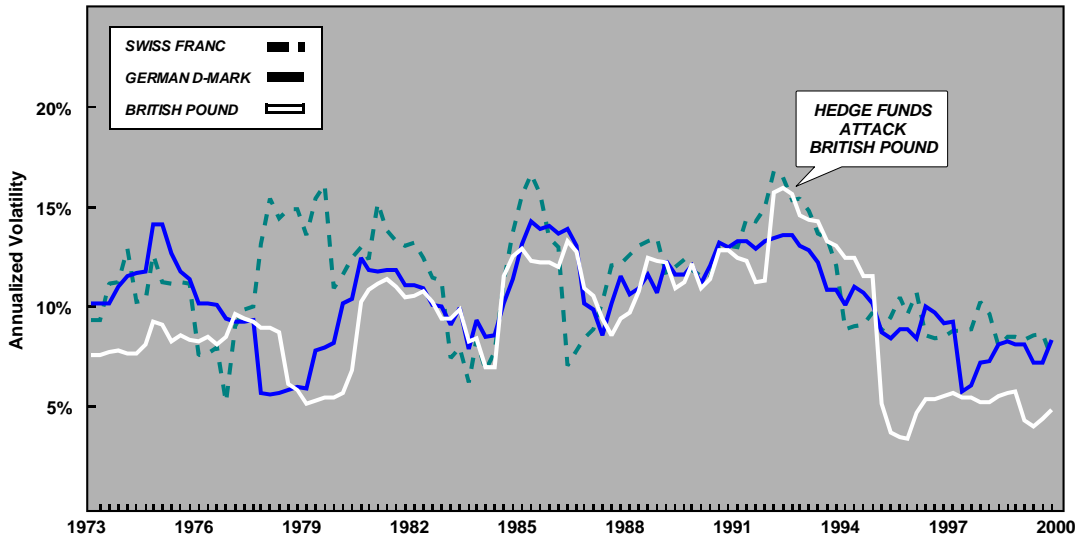
In both prior cycles, gold prices were held at unrealistically low levels during the peak years to hide inflation and make governments look good. In each case, much higher gold prices were subsequently a necessary part of the adjustment process. By the end of the last cycle, gold prices were so low relative to mining costs that much of the gold mining industry had closed down amidst a level of devastation not since approached until today.

## Gold Market Interventions (1915-2000)



# INTERNATIONAL MONETARY CONTEXT

Foreign Currency Volatility

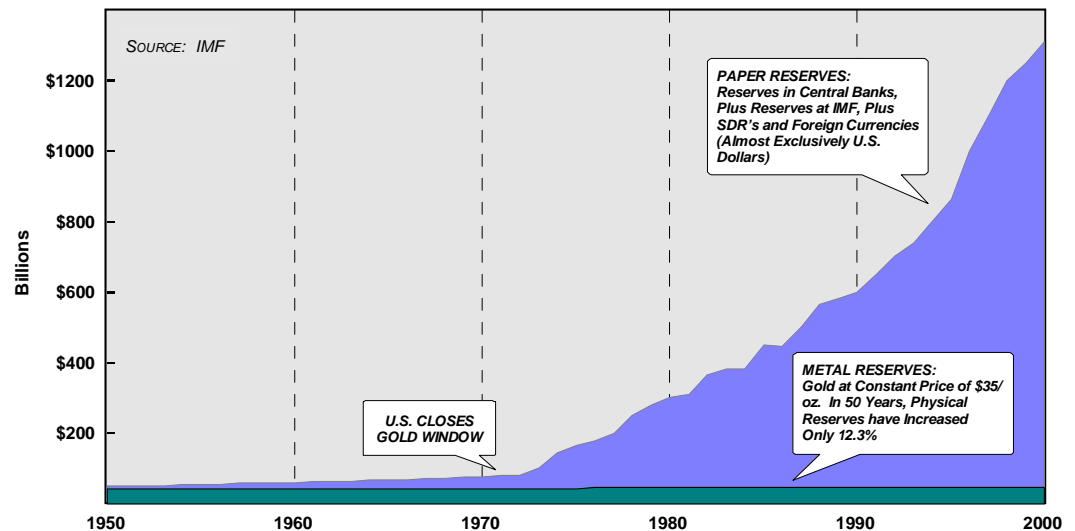


*The signs of impending monetary breakdown include increasing direct interventions in commodity and currency markets, bouts of extreme volatility in stocks, currencies and gold, and the emergence of the US Dollar as the dominant official reserve asset.*

*With no anchor to windward, currencies have blown hither and yon since the collapse of Bretton Woods.*



Gold and US Dollar Reserves of Foreign Central Banks



*The buildup of US Dollar reserves corresponds to the decline in gold reserves among central banks.*



# PROJECTION

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Our message is really pretty simple. The broad investment and financial picture in late 2000 parallels quite closely the previous super bull market tops of 1929 and 1966. All our analytic studies show, and all our anecdotal evidence supports, the proposition that the world is on the cusp of a similarly huge investment inflection point today. We don't claim clairvoyance. We cannot yet tell precisely when or how quickly the Dow/Gold ratio will collapse to more normal levels. But we are convinced that it will, and that five years from now a Dow/Gold ratio chart is quite likely to look something like this:

## Dow/Gold Ratio: 1915 - 2005

