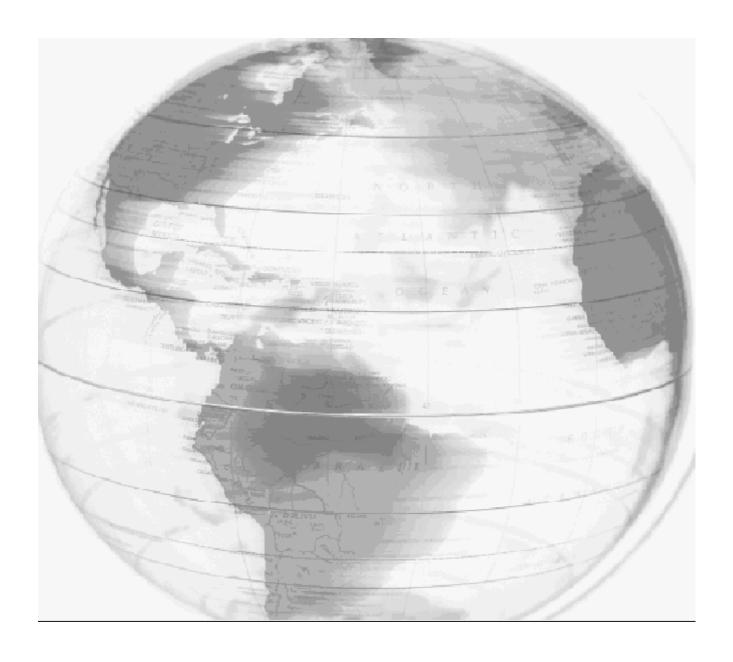
Multi-Asset ResearchGlobal

Economics

Global Investment Research

Stephen Roach, Chief Economist +1 (1)212 761 7153 Stephen.Roach@morganstanley.com July 2003

Global Rebalancing



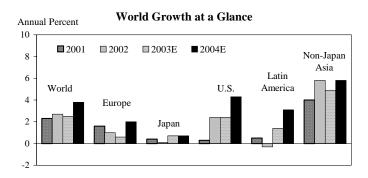
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Stephen S. Roach Jeffrey Matsu	Chief Economist	1-212-761-71 1-212-761-80
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Stephen Li Jen	Currency	44207-425-85
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Osamu Tanaka		813-5424-53
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Denise Yam Sharon Lam		852-2848-53 852-2848-89
Daniel Lian		65-834-67
Anita Chung		65-834-67
Chetan Ahya	India	91-22-220979
Anil Agarwal		91-22-220970

Note: Daily updates of Morgan Stanley's Global Economic Forum — a compilation of dispatches filed by the firm's economists around the world —can be found on the World Wide Web of the Internet, at the following address: http://www.morganstanley.com.

Global Investment Research – July 2003

Overview: The Perils of a Dysfunctional World

- The global economy remains in a weakened state. In late 2002, industrial world growth slowed to roughly a 1% pace and has remained on that sluggish path ever since. Europe continues to weaken and the US shows only tentative signs of recovery, at best. Meanwhile, Asia is still feeling the pressures of SARS-related shortfalls, although China seems to be rebounding smartly. All in all, our current baseline forecast calls for 2.5% growth in world GDP in 2003 about one percentage point below trend and a pace that leaves the global economy on the brink of recession for the second time in the past three years.
- Two macro forces are bearing down on the global economy the imbalances of a US-centric world and the post-bubble shakeout of the US economy. Since 1995, the United States has accounted for about 60% of the cumulative increase in world GDP double its share in the global economy. This has resulted in a massive US current-account deficit (5.1% of GDP in 1Q03) that seems likely to widen further as America's budget deficits expand in the years ahead. Mean-while the United States, the unquestioned engine of the global economy, is now in the midst of a post-bubble shakeout. Real GDP growth has averaged just 1.7% since early 2000, less that half the 4.3% average pace that prevailed during the 17 quarters of the bubble (1Q96 to 1Q00). This sluggishness reflects the lingering post-bubble headwinds of record private sector indebtedness, subpar national saving, and a massive current account deficit.
- **Deflation is the main risk in this dysfunctional global economy.** Three key forces are at work all of which have contributed to a significant gap between aggregate supply and demand: First, there are cyclical deflationary pressures stemming from the recession of 2001 and the subsequent subpar recovery. Moreover, with a US-centric world having entered this cyclical downturn at an exceedingly low inflation rate 2.3% in the case of the US a cyclical whiff of deflation is all the more likely. A second factor is the bubble, itself. It led to excess capacity on the supply side of the equation and has been followed by a post-bubble compression of aggregate demand. Third, globalization has resulted in marked increases in aggregate supply not just in tradable goods but also in once non-tradable services; this latter phenomenon reflects the globalization of deregulation, the M&A-induced expansion of multinational service providers, and the Internet, which has led to a surge of IT-enabled outsourcing from countries such as India. Traditional reflationary policies may fail to achieve traction in this climate.
- Global rebalancing is the only way out. The world needs to begin functioning as a global economy. A significant depreciation of the US dollar is likely to facilitate such a transition. After having risen 47% from its record low in the spring of 1995, the broad dollar index is off about 10% from its early 2002 highs. Based on current account adjustments of the past, the dollar may have completed only 25-33% of its eventual decline. Not only will a weaker dollar help arrest deflationary pressures in the US, but it will force a shift in the mix of US growth away from the excesses of domestic demand toward externally-led growth. The opposite can be expected elsewhere in the world but only if structural reforms commence in Europe and Japan. An anti-reform backlash is possible, driven by political and social concerns and fuelled by competitive currency devaluations. That would short-circuit global rebalancing and lead to a far more treacherous end-game for the global economy and world financial markets.

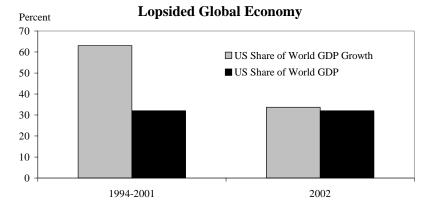


E = Morgan Stanley Research Estimate

Source: Morgan Stanley Research

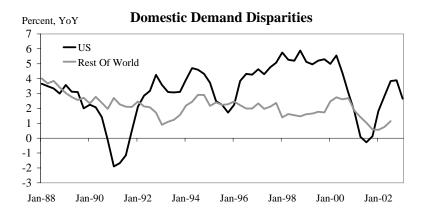
A US-Centric World

Never before has the modern-day global economy been more dependent on the US as its sole engine of growth.



Source: IMF

Since the mid-1990s, domestic demand in America has been growing at twice the clip evident elsewhere in the world.



Source: Bureau of Economic Analysis, IMF, Morgan Stanley Research

Mix of Global Growth

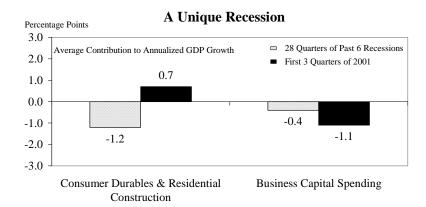
	Average							
GDP Growth	1985-90	1996-2000	2001-02					
US	3.4%	4.0%	1.4%					
Japan	4.8	1.5	0.3					
Europe	3.0	2.6	1.3					
Non-Japan Asia	8.1	6.1	4.9					
Latin America	2.9	3.1	0.1					

Source: Morgan Stanley Research

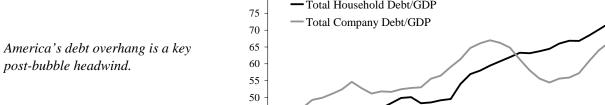
The days of balanced global growth are long gone.

Post-Bubble US Economy

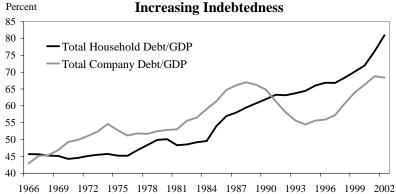
The most recent recession broke the mold of the typical business cycle.



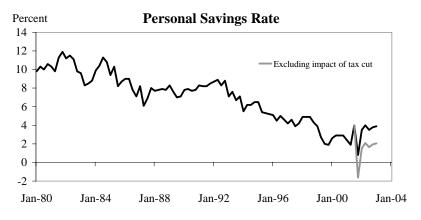
Source: Bureau of Economic Analysis, Morgan Stanley Research



Source: Bureau of Economic Analysis, Federal Reserve Board



A shortfall in personal saving is another headwind that could restrain consumer demand.



Source: Bureau of Economic Analysis, Morgan Stanley Research

Millions

16

15

Policy Traction?

There is no pent-up demand evident in two of the US economy's most policy-sensitive sectors ...

1900 14 1700 1500 11 1300 10 1100 Housing Starts (left) 900 - Motor Vehicle Sales (right) 700 Jan-95 Jan-01 Jan-04 Jan-80 Jan-83 Jan-86 Jan-89 Jan-92 Jan-98

Where's the Pent Up Demand?

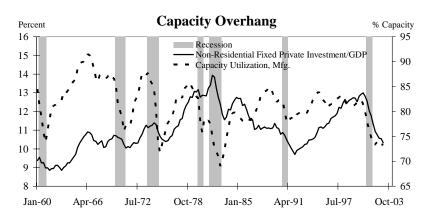
Source: Bureau of Economic Analysis, Census Bureau

Thousands

3-month moving avg.

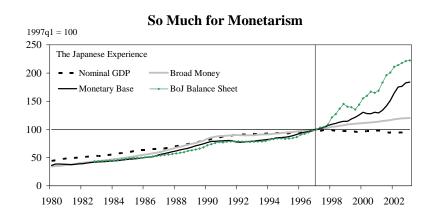
2100

...Nor is "capex" likely to spring to life.



Source: Bureau of Economic Analysis, NBER

A key lesson from the Japanese experience is that monetarism may not work in a post-bubble climate.



Source: Bank of Japan, Cabinet Office

Post-Bubble 2000Q2-2003Q1

Subpar US Prognosis

A post-bubble shakeout in the US economy is well under way and could continue for some time.

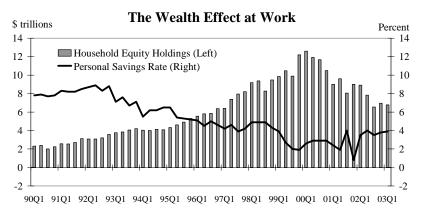
Saving-short US consumers may face the toughest adjustments to post-bubble realities.

The recent earnings bounce has been small when compared with the record profits carnage over the 1999 to 2001 period.

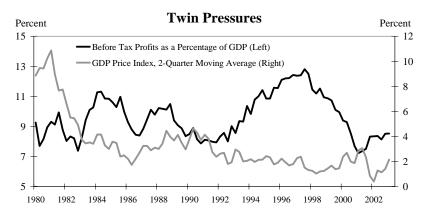
America's Post-Bubble Hangover Percent growth 14 11.0% ■ GDP 12 10 ■ Consumption 8 ■ Capital Spending 4.3% 6 4.4% 2.7% 4 1.7% 2 0 -2 -4 -3.1% -6

Source: Bureau of Economic Analysis

Bubble 1996Q1-2000Q1



Source: Bureau of Economic Analysis, Federal Reserve, Morgan Stanley Research



Source: Bureau of Economic Analysis

Euro-Shock

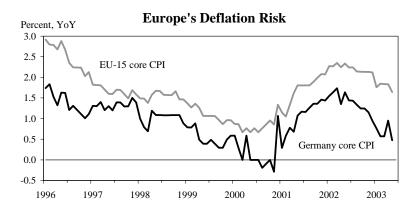
Lacking in domestic demand, a stronger euro raises big risks to the European growth outlook.

1.20 US\$/Euro 1.15 1.10 1.05 1.00 0.95 0.90 0.85 0.80 Jan-00 Jul-00 Jan-01 Jul-01 Jul-02 Jan-03 Jul-03 Jan-02

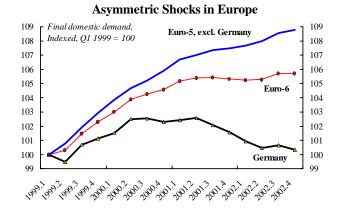
Euro-shock

Source: Federal Reserve Bank of New York

Europe has been hit by an asymmetrical shock from its largest member, Germany.



Source: Eurostat

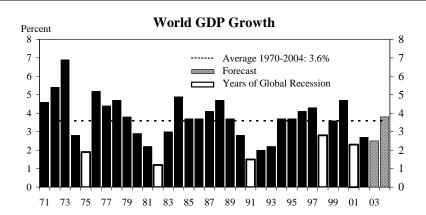


Source: Eurostat, Morgan Stanley Research

Germany is closest to the brink of outright deflation.

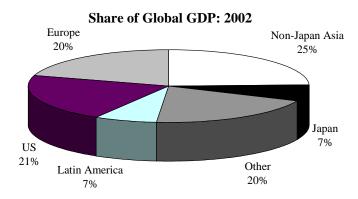
Subpar Global Prognosis

Our 2.5% estimate of global GDP growth in 2003 sees the world on the brink of its second recession in three years.

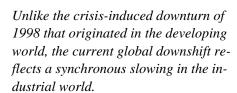


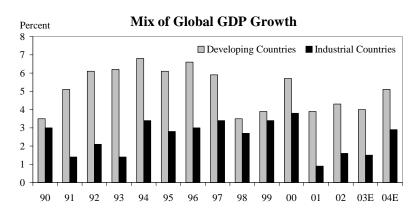
Source: IMF, Morgan Stanley Research

The mix of world GDP keeps growth risks skewed to the downside.



Source: IMF





Source: IMF, Morgan Stanley Research

Risk of Deflation

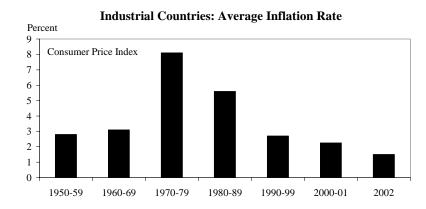
US inflation is currently running near a 50-year low, and there could be more to come on the downside.

Deflationary risks are increasingly evident throughout the industrial world.

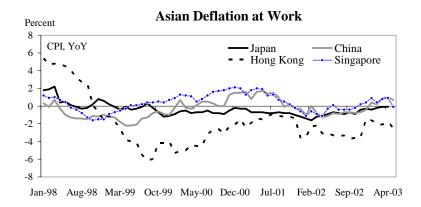
Falling prices in Asia, whose economies collectively account for about 30% of world GDP, are a key driver of global deflationary trends.

To Yo Y Percent Is America Heading Toward Deflation? US GDP Chain-Weighted Price 10 8 6 4 2 1051 1955 1959 1963 1967 1971 1975 1979 1983 1987 1991 1995 1999 2003

Source: Bureau of Economic Analysis



Source: IMF



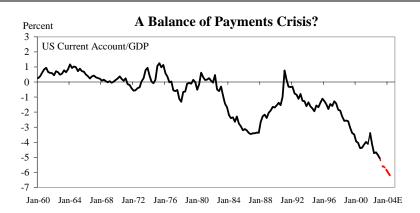
Source: Bloomberg

Global Imbalances

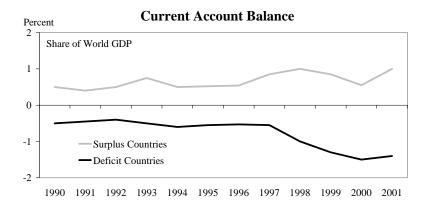
A saving-short US economy has little choice other than to import saving from abroad — and run ever-wider current-account deficits to attract the foreign capital.

Huge current-account disparities between deficit and surplus countries underscore the tension in currency markets.

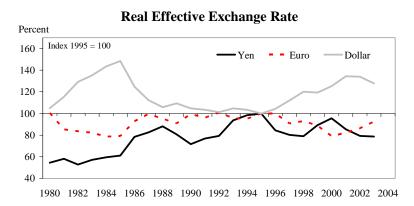
The dollar has corrected only a small portion of its over-valuation.



Source: Bureau of Economic Analysis, Morgan Stanley Research



Source: IMF



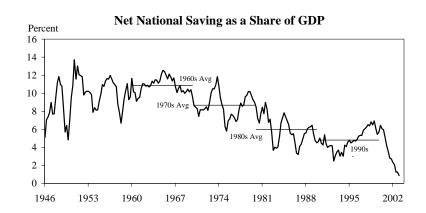
Source: IMF

US Saving Shortfall

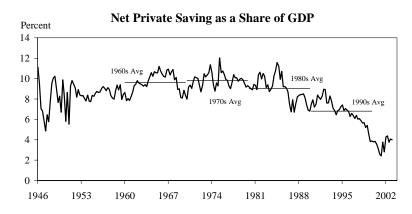
America's net national saving rate fell to an all-time low of 0.9% in the first quarter of 2003.

This reflects a bubble-induced plunge in private saving...

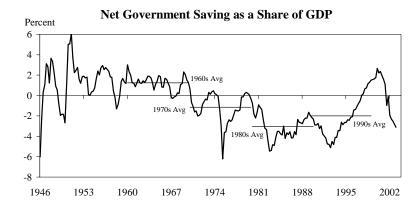
...And a sharp swing from government surplus to deficit that is about to take a serious turn for the worse.



Source: Bureau of Economic Analysis



Source: Bureau of Economic Analysis



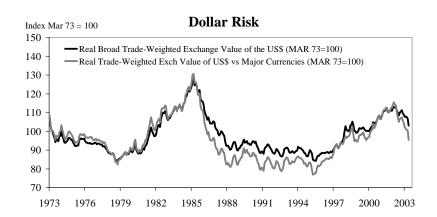
Source: Bureau of Economic Analysis

Rebalancing and the Dollar

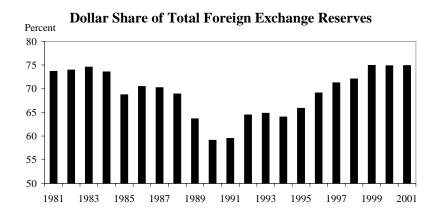
A further weakening of the dollar may ultimately be an unavoidable byproduct of America's external imbalance.

The composition of currency reserves remains heavily skewed toward dollar-denominated assets.

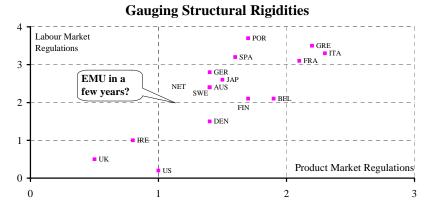
The heavy lifting of structural reform cannot be minimized — especially for Europe and Japan.



Source: Federal Reserve Board



Source: Bank for International Settlements, IMF



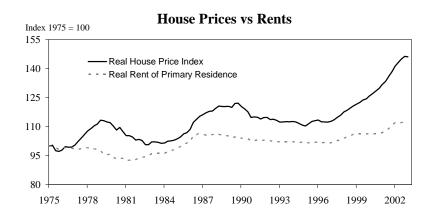
Source: OECD, Morgan Stanley Research

US Housing Bubble Alert

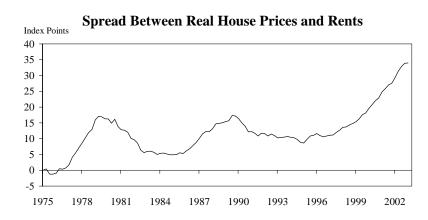
US housing prices have surged, while rental rates have moved up far more modestly.

The gap between housing prices and rental rates is now at its widest on record.

Affordable housing has fueled the demand for shelter and the associated surge in home prices.



Source: Office of Federal Housing Enterprise Oversight, Bureau of Labor Statistics



Source: Office of Federal Housing Enterprise Oversight, Bureau of Labor Statistics

Housing Affordability Index



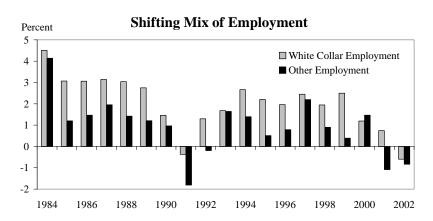
Source: National Association of Realtors

Pruning White-Collar Bloat

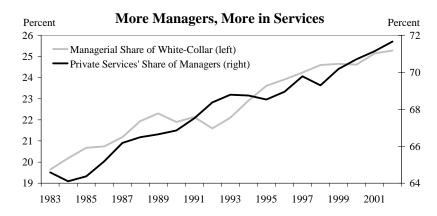
Over the past 20 years, white-collar employment growth has averaged 2.0%, double the 0.9% growth in other employment.

White-collar hiring has been increasingly skewed toward services and has become increasingly top-heavy with managers.

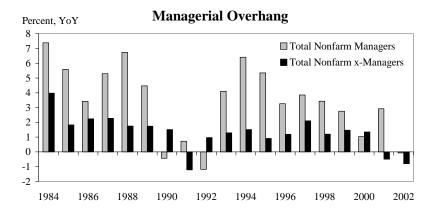
Businesses are only now beginning to rationalize the chronic condition of managerial bloat that materialized in the 1990s.



Source: Bureau of Labor Statistics, Morgan Stanley Research



Source: Bureau of Labor Statistics, Morgan Stanley Research



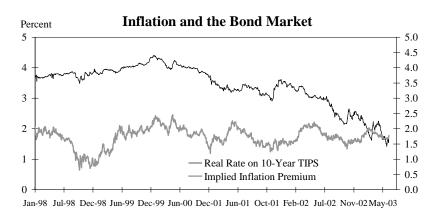
Source: Bureau of Labor Statistics, Morgan Stanley Research

Bond Market Risk

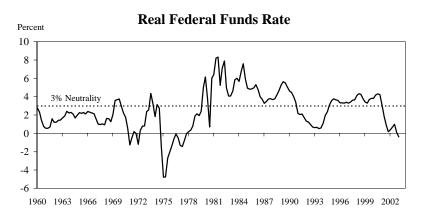
The recent rally in the bond market appears traceable mainly to a decline in real interest rates; a full-blown deflation scare is not in the price.

In a deflation-prone post-bubble world, the Fed could remain accommodating for longer than most think.

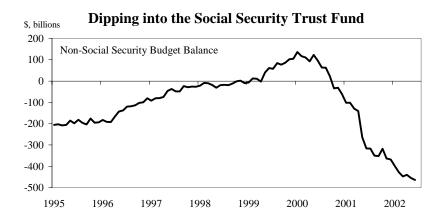
Courtesy of the Bush administration's tax cuts and a weak economy, the non-Social Security budget surplus has morphed into a massive deficit.



Source: Bloomberg



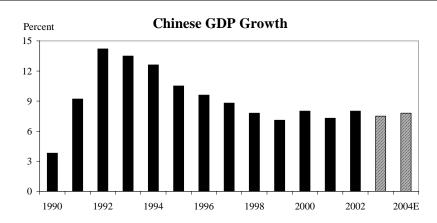
Source: Bureau of Economic Analysis, Federal Reserve



Source: Department of Treasury

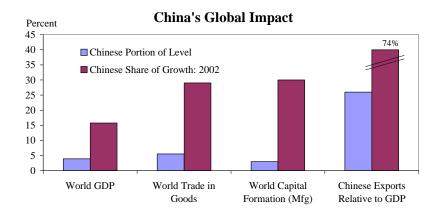
The China Factor

China remains the fastest-growing economy in the world.



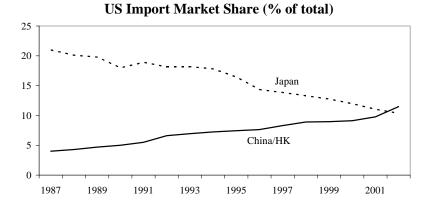
Source: IMF, Morgan Stanley Research

While China is still a small economy, its growth is having a major impact on the rest of the world.



Source: IMF, World Trade Organization, Morgan Stanley Research

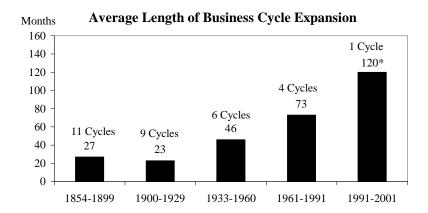
China now exports more to the US than Japan.



Source: Morgan Stanley Research

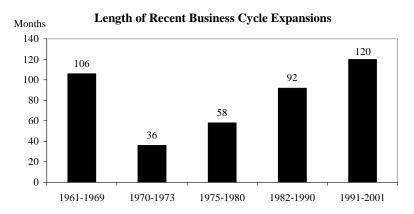
An Old Cycle?

There has been a dramatic lengthening of the business cycle over the past 140 years.



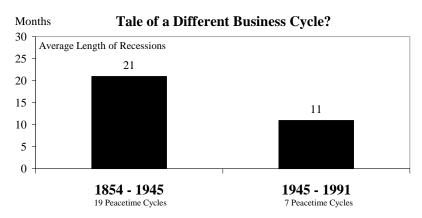
Source: Morgan Stanley Research

The just-ended economic expansion outlasted the long-cycle outcomes of the 1960s and 1980s.



Source: Morgan Stanley Research

The current bubble-distorted business cycle may bear a closer resemblance to those of a more distant past than to the modern-day cycles of the post-World War II era.



Source: Morgan Stanley Research

Global Investment Research – July 2003

^{*} Latest cyclical peak has been designated as March 2001 by the National Bureau of Economic Research. A cyclical trough has yet to be identified.

Global Economic Outlook: GDP and Inflation

		GNP/GDP Growth (%)					CPI Inflation (%)					
	2000	2001	2002	2003E	2004E	2000	2001	2002	2003E	2004E		
Global Economy	4.7	2.3	2.7	2.5	3.8	2.5	2.4	2.4	2.4	2.0		
Industrial World	3.8	0.9	1.6	1.5	2.9	2.3	2.2	1.5	1.8	1.4		
us	3.8	0.3	2.4	2.4	4.3	3.4	2.8	1.6	2.2	1.8		
Australia	2.8	2.7	3.6	2.5	3.0	3.0	3.0	3.0	2.9	2.3		
Canada	5.3	1.9	3.3	2.3	3.8	2.7	2.5	2.2	3.2	2.2		
New Zealand	3.5	2.1	4.0	2.5	2.5	2.6	2.7	2.6	2.1	2.3		
Europe	3.4	1.6	1.0	0.6	2.0	2.2	2.3	2.1	2.0	1.6		
EMU	3.5	1.5	0.8	0.4	1.9	2.1	2.3	2.2	1.9	1.4		
Austria	3.0	1.0	0.9	0.4	1.6	2.3	2.7	1.8	1.4	1.2		
Belgium	3.7	0.8	0.7	0.7	1.9	2.6	2.5	1.6	1.2	1.3		
Denmark	2.8	1.4	1.6	0.8	2.0	3.0	2.2	2.3	1.6	2.2		
Finland	5.5	0.6	1.6	1.1	2.9	3.0	2.7	2.0	1.2	1.1		
France	4.2	2.1	1.2	0.8	2.2	1.7	1.6	1.9	1.8	1.4		
Germany	2.9	0.6	0.2	0.0	1.7	1.5	2.0	1.4	0.9	0.7		
Greece	4.1	4.1	3.6	3.8	4.0	3.2	3.4	3.6	3.4	2.8		
Ireland	10.0	5.7	6.0	3.0	4.0	5.2	4.0	4.7	4.1	3.2		
Italy	3.3	1.7	0.4	0.4	1.6	2.5	2.8	2.5	2.5	2.2		
Netherlands	3.3	1.3	0.2	-0.5	1.4	2.4	4.2	3.4	2.3	1.8		
Norway	1.9	1.4	1.4	0.0	1.6	3.1	3.0	1.3	2.8	1.3		
Portugal	3.7	1.6	0.5	0.0	1.7	2.9	4.4	3.6	3.5	2.8		
Spain	4.3	2.7	2.0	1.7	2.7	3.5	3.6	3.5	2.9	2.4		
Sweden	3.6	1.5	1.9	1.4	2.2	1.4	2.8	2.6	2.3	1.2		
Switzerland	3.0	0.9	0.1	0.7	2.1	1.6	1.0	0.6	0.7	0.8		
UK	3.1	2.1	1.8	1.7	2.4	2.9	1.8	1.6	2.9	2.6		
Emerging Europe Czech Republic	6.3 3.3	1.6 3.5	3.6 2.0	3.6 2.2	4.3 2.8	20.9 3.9	20.1 4.7	16.0 1.8	11.6 0.8	8.9 3.0		
Hungary	5.2	3.7	3.3	2.7	3.3	9.8	9.2	5.3 5.7	4.3	4.1		
Israel	6.5	-1.0	-1.4	2.3	4.1	1.1	1.1		3.3	1.8		
Poland	4.0	1.0	1.3	2.5	4.0	10.1	5.5	2.0	1.2	2.2		
Russia	9.0	5.0	4.1	4.5	4.6	21.0	21.6	15.1	13.6	10.5		
Turkey	7.3	-7.5	6.5	4.2	5.8	56.4	53.5	47.2	26.9	19.2		
South Africa	3.4	2.2	3.0	2.1	3.0	5.3	5.7	10.1	7.2	4.5		
Japan	2.8	0.4	0.1	0.7	0.7	-0.3	-0.9	-0.8	-0.5	-0.7		
Asia Ex-Japan	7.3	4.0	5.8	4.9	5.8	1.5	2.2	1.3	1.7	1.9		
China	8.0	7.3	8.0	7.5	7.8	0.4	0.7	-0.8	0.1	0.1		
Hong Kong	10.2	0.5	2.3	1.8	3.5	-3.7	-1.6	-3.0	-2.2	-0.5		
India	5.1	4.1	4.7	4.9	5.6	4.2	3.8	4.3	4.3	4.4		
Indonesia	4.9	3.4	3.7	3.0	3.8	3.8	11.5	11.9	9.0	8.0		
Korea	9.3	3.0	6.3	3.0	4.9	2.3	4.1	2.8	2.5	3.1		
Malaysia	8.5	0.3	4.1	3.0	4.7	1.6	1.4	1.8	2.0	2.2		
Philippines	4.4	4.5	4.4	3.1	3.9	4.3	6.1	3.1	3.5	3.8		
Singapore	9.4	-2.4	2.2	1.0	4.3	1.3	1.0	-0.4	0.9	1.2		
Taiwan	5.9	-2.2	3.5	2.0	3.4	1.3	0.0	-0.2	0.0	0.8		
Thailand	4.6	1.9	5.2	3.5	4.3	1.6	1.7	0.6	1.7	1.5		
Latin America	4.1	0.5	-0.3	1.5	3.1	6.5	5.4	12.9	9.5	6.9		
Argentina	-0.8	-4.4	-10.9	5.8	4.3	-0.7	-1.5	41.0	7.0	7.9		
Brazil	4.4	1.4	1.5	2.0	3.0	6.0	7.7	12.5	12.0	8.0		
Chile	4.2	3.1	2.1	3.6	4.5	4.5	2.6	2.8	2.9	3.5		
Colombia	2.9	1.4	1.5	2.1	2.7	8.7	7.6	7.0	6.5	6.0		
Mexico	6.6	-0.3	0.9	1.9	2.6	9.0	4.4	5.7	3.8	4.0		
Peru	3.1	0.6	5.2	3.3	3.2	3.7	-0.1	1.5	2.2	2.5		
	3.2	2.8	-8.9	-15.0	3.0		12.3	31.2				

 $E = Morgan \ Stanley \ Research \ Estimates$

Global Investment Research – July 2003

Global Economic Outlook: Interest Rates, Bond Yields, and Currencies

	3-Month Euro Rates (%)				10-Year Bond Yields (%)				Exchange Rates			
	June 27	Sep03	Dec03	Mar04	June 27	Sep03	Dec03	Mar04	June 27	Sep03	Dec03	Mar04
G-3 Countries												
US	0.85	1.40	1.60	1.75	3.5	4.0	4.25	4.40				
Euro	2.1	1.7	1.6	1.7	3.8	3.5	3.7	3.9	1.18	1.21	1.17	1.14
Japan	0.08	0.06	0.06	0.03	0.7	0.7	0.6	0.4	120	116	113	110
Dollar Bloc												
Canada	3.2	3.3	3.3	3.4	4.5	5.2	5.3	5.5	1.35	1.29	1.32	1.32
Non-EMU Europe												
Denmark	2.2	2.2	2.0	2.0	4.0	3.8	4.0	4.2	7.42	7.46	7.46	7.46
Switzerland	0.3	0.2	0.2	0.2	2.5	2.4	2.4	2.4	1.55	1.53	1.50	1.50
Sweden	3.0	2.6	2.5	2.7	4.3	4.0	4.1	4.3	9.08	8.70	8.80	8.80
UK	3.6	3.5	3.7	4.0	4.2	4.0	4.2	4.7	0.70	0.74	0.70	0.68
								\$	/GBP 1.67	1.64	1.67	1.68

Note: Data are end-of-period values. European exchange rates are against the Euro except where noted. More detailed exchange rate forecasts are available in Morgan Stanley's FX Pulse weekly.

 $E = Morgan \ Stanley \ Research \ Estimates$

Global Stock Ratings Distribution

(as of May 31, 2003)

	Coverage Uni	verse	Investment Banking Clients (IBC)				
_	% of			% of	% of Rating		
Stock Rating Category	Count	Total	Count	Total IBC	Category		
Overweight	549	30%	223	37%	41%		
Equal-weight	858	47%	276	46%	32%		
Underweight	416	23%	107	18%	26%		
Total	1,823		606				

Data include common stock and ADRs currently assigned ratings. For disclosure purposes (in accordance with NASD and NYSE requirements), we note that Overweight, our most positive stock rating, most closely corresponds to a buy recommendation; Equalweight and Underweight most closely correspond to neutral and sell recommendations, respectively. However, Overweight, Equal-weight, and Underweight are not the equivalent of buy, neutral, and sell but represent recommended relative weightings (see definitions below). An investor's decision to buy or sell a stock should depend on individual circumstances (such as the investor's existing holdings) and other considerations. Investment Banking Clients are companies from whom Morgan Stanley or an affiliate received investment banking compensation in the last 12 months.

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Overweight (O). The stock's total return is expected to exceed the average total return of the analyst's industry (or industry team's) coverage universe, or the relevant country MSCI index, on a risk-adjusted basis over the next 12-18 months.

Equal-weight (E). The stock's total return is expected to be in line with the average total return of the analyst's industry (or industry team's) coverage universe, or the relevant country MSCI index, on a risk-adjusted basis over the next 12-18 months.

Underweight (U). The stock's total return is expected to be below the average total return of the analyst's industry (or industry team's) coverage universe, or the relevant country MSCI index, on a risk-adjusted basis over the next 12-18 months.

More volatile (V). We estimate that this stock has more than a 25% chance of a price move (up or down) of more than 25% in a month, based on a quantitative assessment of historical data, or in the analyst's view, it is likely to become materially more volatile over the next 1-12 months compared with the past three years. Stocks with less than one year of trading history are automatically rated as more volatile (unless otherwise noted). We note that securities that we do not currently consider "more volatile" can still perform in that manner.

 $Ratings\ prior\ to\ March\ 18,2002:\ SB=Strong\ Buy;\ OP=Outperform;\ N=Neutral;\ UP=Underperform.\ For\ definitions,\ please\ go\ to\ www.morganstanley.com/companycharts.$

ANALYST INDUSTRY VIEWS

Attractive (A). The analyst expects the performance of his or her industry coverage universe to be attractive vs. the relevant broad market benchmark over the next 12-18 months.

In-Line (I). The analyst expects the performance of his or her industry coverage universe to be in line with the relevant broad market benchmark over the next 12-18 months.

Cautious (C). The analyst views the performance of his or her industry coverage universe with caution vs. the relevant broad market benchmark over the next 12-18 months.

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