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Inside:

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The Cost of Fighting

In a recent Wall Street Journal Op-Ed piece, Vice Chairman of Goldman Sachs (International) Robert D. Hormats discussed the fiscal challenges facing the US as the country confronts growing military needs. Below is an updated version of that piece

As we approach the new year, the US is faced with tough military choices about whether and when to prosecute a war against Iraq. The war on terror is still in full stride. And concerns regarding North Korea's nuclear capabilities are mounting. The US government must make tough economic choices about how to fund significantly increasing security costs. It has yet to do so.

During World War II and the Korean War, the President and Congress together cut resources for lower priority domestic programs and raised taxes. America's current military challenges are different, and probably less costly. But Washington policymakers still must confront hard economic facts: prior spending and tax agendas cannot go unchanged in light of the increased, long-term costs of protecting America's security.

In January 2001 Americans were told that cumulative budget surpluses from 2002 through 2011 would total \$5.6 trillion. Based on this fiscal mirage, a large tax cut was passed. In March this year, the \$5.6 trillion estimate was dropped to \$1.7 trillion. In August we were told, sorry, it will be only \$100 billion. Even that looks highly optimistic. A substantial deficit over this period is far more likely—for several reasons.

Defense and homeland security costs will climb substantially. Domestic spending increases are already built into the budget basline, even without such new initiatives as Medicare prescription benefits. Government revenues are likely to remain weak; a sharp drop in capital gains, options and bonuses already has caused the largest year-to-year drop in federal revenues in the last half century. State and local governments, on the front lines of homeland defense, also have seen their revenues collapse and might need more federal help. Yet Washington has neither set new budget priorities nor established a process to restore budget discipline.

Past wartime leaders have jettisoned domestic programs to ensure that military needs were met in a fiscally responsible way. In 1941, President Franklin Roosevelt called on Americans "to make the sacrifices that the emergency demands." He and Congress cut non-war spending by more than 20% and raised taxes. To underscore his commitment to shared sacrifice, he eliminated several New Deal programs he previously had championed. During the Korean War, President Truman and Congress raised taxes, and slashed non-defense spending by nearly 28%.

In contrast, during the Vietnam War, political leaders avoided confronting the country or themselves with the need to make hard economic choices. Defense and civilian spending both increased, and so did government deficits, inflation and interest rates.

Current increases in security costs are being financed on a Vietnam-like model, with neither shared economic sacrifice nor war-focused prioritizing. So far, the increase is manageable. Defense costs have risen from 3% of GDP in FY 2001 to 3.4% in FY 2002, much less than in the last decade of the Cold War. But the cost of fighting terrorism in coming years, plus a likely war in Iraq followed by a long military presence, not to mention deployments elsewhere, could push the figure a lot higher. In the Gulf War foreign governments paid well over half of the cost—nearly \$50 billion. That will not happen now. And Iraq's oil revenues will be more than consumed by its reconstruction costs.

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Aging and Economic Development: Shifting the Balance of Global Spending

Two major forces will shape the global consumer spending outlook over the decades ahead. The first is the aging of the population in developed economies. The second, which may ultimately prove more profound, is the gradual shift in spending power towards developing economies, and the change in their spending as they move up the income ladder

As investors pore over the signs of the holiday retailing, we take a step back from the intense focus on the few months ahead, looking instead to consumer spending over the much longer term. After all, over 80% of the value generated by the world's major equity markets will come from earnings delivered more than 10 years away.

Specifically, we look at how consumer spending patterns may change in response to two major forces that will shape the outlook over the decades ahead. The first is the aging of the population in developed economies. The second, which may ultimately prove more profound, is the gradual shift in spending power away towards the main developing economies, and the change in their spending patterns as they move up the income ladder.

The Rich Are Getting Older

The main dynamics of the current demographic projections for advanced economies are:

- A significant increase in the proportion of over-65s in Japan and Europe and a slowing in their population growth rates.
- A much less pronounced aging in the US and more rapid population growth that will see the US share of the OECD population rise sharply.
- Continued increase in developing country populations that will see a further shift in the population away from the advanced economies.

Aging Will Affect Spending Patterns

From household surveys, we have gathered detailed information on spending broken down by age group and by major product category. Assuming growth rates for overall nominal consumer spending in these areas based on our long-run views on growth, we can estimate spending growth in the advanced economies for different kinds of spending and compare them to our estimate of overall spending growth.

The detailed results are presented below. Trends in spending patterns for the advanced economies as a whole reflect the combined impact of two shifts.

The first is the changing spending patterns within countries as the population ages. The second is the changing relative sizes of the main economic areas themselves. This turns out to be an important dynamic, because as the US is set to become a larger share of the developed country group, its tastes tend to dominate the aggregates to a growing extent. Our estimates imply that US consumers move from being around 48% of total spending in the main advanced economies to 58% by 2030.

Key Themes

Healthcare is an obvious winner. The share of spending on healthcare across the advanced economies is set to rise from 4% in 2000 to nearly 5% by 2030. This implies spending growth of around 5.2% annually to 2030, relative to growth of only 4.4% in total spending.

Both household goods and household services are slated for above average growth rates.

Private transport is a global winner too, but for surprising reasons. The share of private transportation (autos) is projected to rise by significantly more than overall spending. On the surface, this seems surprising, since older households might be thought to spend less on new vehicles. This actually turns out to be true. In every country grouping, the share of spending falls as the population ages. As the high auto-using US becomes a larger share of overall spending, however, the overall share of OECD spending allocated to autos is likely to rise.

Food and personal services are the main losers. Older consumers generally allocate a lower proportion of their incomes to leisure, personal services and communication. On average these are projected to grow at only 4% to 2030.

How an Aging Population Will Affect Consumer Spending in the Major Economies

%	Share of Spending				Change from 2000			Implied Growth 2000-2030
	2000	2010	2020	2030	2010	2020	2030	
Food, Beverages and Tobacco	19.1	18.8	18.6	18.4	(0.3)	(0.5)	(0.7)	4.2
Housing	26.6	26.9	27.1	27.3	0.2	0.4	0.7	4.5
Shelter	17.2	17.1	17.2	17.3	(0.1)	(0.1)	0.1	4.4
Household Services and Operations	3.9	4.0	4.1	4.2	0.1	0.2	0.4	4.7
Household Furnishings and Equipment	5.6	5.7	5.8	5.8	0.1	0.2	0.2	4.5
Utilities	3.9	3.9	3.9	4.0	0.0	0.1	0.1	4.5
Clothing and Footwear	5.0	5.0	4.9	4.8	(0.1)	(0.2)	(0.2)	4.2
Transportation	19.5	20.0	20.4	20.6	0.5	(0.9)	1.1	4.6
private	17.4	18.0	18.5	18.8	0.6	1.1	1.4	4.6
public	2.1	2.0	1.9	1.8	(0.1)	(0.2)	(0.3)	3.9
Leisure Goods and Services	9.8	9.3	9.1	8.7	(0.4)	(0.7)	(1.0)	4.0
Health Care	4.0	4.3	4.6	4.9	0.3	0.6	(1.0)	5.2
Personal Goods and Services	2.4	2.3	2.3	2.2	(0.1)	(0.2)	(0.2)	4.1
Communication	2.8	2.7	2.6	2.6	(0.1)	(0.2)	(0.2)	4.1
Other	6.7	6.5	6.2	6.0	(0.2)	(0.5)	(0.7)	4.0
Total	100.0	100.0	100.0	100.0	0.0	0.0	0.0	4.4

Aging and Economic Development: Shifting the Balance of Global Spending

More Dramatic Shifts May Occur Outside the OECD

Shifting global spending patterns are likely to owe as much to the changing weights of different economies as to shifts in spending behaviour within any given economy.

High income economies currently represent around 80% of the world economy. Partly because of their aging economies, partly because they are already close to the technological frontier, their growth rates are likely to run well below those of the major developing economies over the decades ahead—provided that these economies can pursue successful growth strategies.

The share of the advanced economies could easily fall to around 70% by 2030 and to around 60% by 2050, while the share of the economies such as China, India, Russia and Brazil could rise from around 8% currently to over 16% by 2030 and close to 25% in 2050.

There are two reasons why this shift is likely to be important for global consumer spending patterns. The first reason is simply that the overall relative spending power is set to increase. As a result, the OECD will be a shrinking part of the world economy over time.

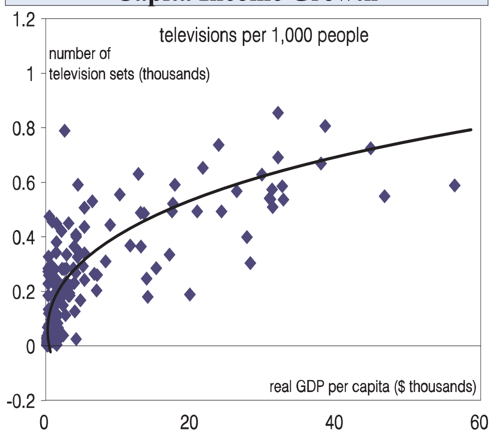
The second reason is that shifts in spending patterns as incomes rise are arguably much more profound than the kinds of shifts within developed countries as the population 'ages'. Together, the impact of these two dynamics will almost certainly be a more dramatic influence on global spending than population aging.

As Countries Develop, Spending Patterns Change

Although detailed breakdowns are patchier for emerging markets, we have information on spending by broad category for Russia, India and rural and urban China. While this group varies greatly in their levels of development, US dollar income per capita in each is currently well under 10% of those in the high-income economies.

The pattern of spending is very different for lower income economics than for those with higher income. The differences are sharp. Food and drink account for roughly half of overall consumer spending in these developing economies but only 19% in the developed economies.

Durables' Spending Rises With Per Capita Income Growth



What this means is that as these economies converge on more advanced economy income levels, and the share of spending on basic items falls, growth in 'discretionary' spending may be significantly more rapid than overall spending growth. For these categories, spending growth is thus likely to be more rapid than in the advanced economies *not only* because overall growth is higher but also because the share of overall spending going to these areas is rising sharply.

We illustrate the potential for growth in some key consumer products in the chart above, using the example of televisions. Similar relationships can be seen for products such as radios, autos and mobile phones. Unremarkably, there is a general tendency for consumer durables to rise with higher incomes.

What is much more interesting, however, is that there appears to be a 'sweet spot' between income per capita levels of around US$3000-10,000, over which penetration of these durable products rises very sharply. This critical stage of development corresponds to the point where a large middle class develops and where significant numbers of consumers free themselves from the focus on providing only the basic necessities.

It is not impossible that a number of the large developing economies (China, in particular) may move firmly into this stage over the next ten or twenty years. If that is the case, markets for many of these goods may grow rapidly.

As with the demographic projections, any projections on the basis of development need to be qualified. The lesson of the last century is that there are many ways to fail to develop and fewer paths to success. The period also offers some spectacular examples of success, which have already shifted the balance of global economic power significantly.

Choosing Markets May Be Critical For Growth

To understand the shifts in spending patterns as the weight of the world's populations and economies shift, it is important to take a broad view.

Spending shifts from the aging and slowing of some of the advanced economies may be important constraints for firms who remain focused on local markets. The wider implication, however, is that being involved in the right markets—and particularly the right emerging markets—may be an increasingly important strategic choice for many firms in determining the growth opportunities available to them. ■

We would like to wish our readers a happy holiday season and all the best for the new year.

Further information on the topics in this report is available on the GS Financial Workbench℠. For access, please go to www.gs.com/ceoconfidential

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Bear Markets Are Far From Homogeneous			
Pre-Bear	**Cyclical**	**Event**	**Structural**
Rising Rates	Yes	Maybe	Yes
Exogenous Shock	Maybe	Yes	Maybe
Speculative Rise in Equity Prices	No	No	Yes
Economic Imbalances	No	No	Yes
Rising Productivity	Maybe	--	Yes
Unusual Strength in Economy	No	No	Yes
New Era' Belief	No	No	Yes
Post-Peak			
Economic Recession/Downturn	Usually	Maybe	Usually
Profits Collapse	Yes	Maybe	Yes
Interest Rates Fall, Triggering Rise in Equity Prices/Fall in Bonds	Yes	Usually	No
Price Shock	No	No	Yes

The Characteristics of Different Bear Markets						
				months to recover to previous level		months back to trend
	Duration (months)	% decline	% from trend	Nominal	Real	
Cyclical	23	-30	-26	53	116	55
Structural	61	-54	-55	120	117	108
Event Driven	8	-29	87	22	37	4

Structural Bears Are More Volatile					
%	volatility		annualized market return during recovery		
	peak to trough	trough to peak	Nominal	Real	Trend
Cyclical	14	14	17	11	16
Structural	27	19	14	15	15
Event Driven	25	16	29	22	26

Interest Rate Cut Reactions				
%	stock market annual return after first interest rate cut			interest rate cut, as a % of starting level
		6 months	1 year	
US Cyclical	(7)	3	16	31
US Structural	(19)	(15)	(7)	53

Source: Global Financial Data Inc.; Goldman Sachs.

Anatomy of Bear Markets

Market participants tend to over-generalize about bear markets and the timing and profile of recovery. In reality, bear markets come in many shapes and sizes. Taking history from the US and Europe from 1750, we find that bear markets can be split into three categories according to their causes:

- *Cyclical bear markets* typically relate to the economic cycle. Cyclical bear markets tend to be triggered by periods of monetary tightening and to end as a result of monetary easing. On average, they last around two years and recoup their loses within five years.

- *Event-driven bear markets* are triggered by an exogenous shock. Event-driven bear markets are the shortest of the bear markets, lasting an average of eight months.

- *Structural bear markets* are rooted in acute overvaluation and structural breaks in activity. Most structural bear markets are preceded by financial bubbles. Recovery is dictated by the unwinding of imbalances rather than simple monetary easing. Structural bears are much deeper and sharper than cyclical bears, and typically take around a decade to recover fully. Structural bear markets tend to be associated with some kind of inflationary or deflationary price shock. More often than not, it is deflationary.

Each type of bear markets is defined by different characteristics before, during and after the trough. Cyclical and event-driven bear markets average falls of around 30%. In structural bear markets, falls average around 50%. Structural and cyclical bear markets have tended to be followed by nominal and real annualized returns of around 15%. Both cyclical and structural bear markets tend to see prices fall below trend, while event-driven bear markets do not.

Event-driven bears have tended to be followed by slightly stronger recoveries. But, while the pace of recovery is similar, structural bear markets tend to be much more volatile both in the period of market decline and in the recovery. Volatility is defined here as annualized standard deviation of monthly returns.

Monetary Policy Is Key

While event-driven bears are usually not related to rate cuts (although there are exceptions, such as 1987 and 1998), cyclical and structural bear markets are nearly always associated with an easing of monetary policy.

The difference is in the response to the falls in interest rates in each case. Cyclical bear markets are typically associated with interest rates falling by one-third, while structural bear markets are associated with interest rates falling by half. Cyclical bear markets typically start rising 3-6 months after the first rate cuts. Structural ones are still falling after a year of rate cuts on average.

Are We In a Structural Bear?

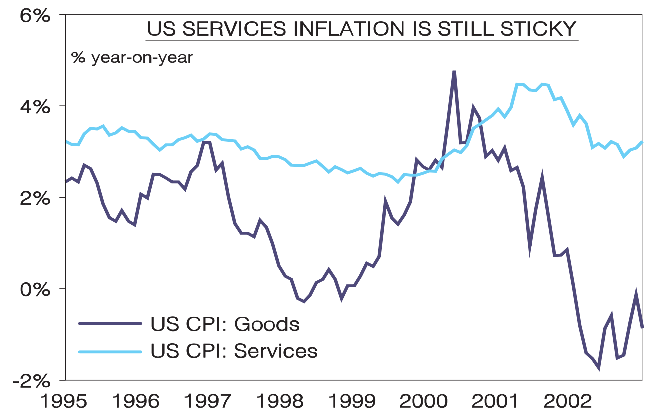
Many of the characteristics of the current bear market and the preceding bull period match the characteristics of a structural bear market.

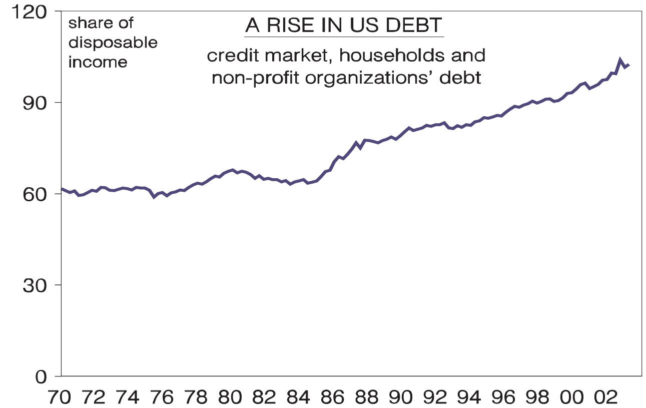
- The preceding bull market was extraordinarily strong. 1999 was the best year for any stock market index in US history, when the NASDAQ rose 85%, later followed by a decline not seen since the 1930s.
- Profit growth was unusually strong. Real annualized profit growth for the S&P averaged 12% between 1992 and the end of 1999. This growth rate was last seen in the post-war boom of the 1950s. The subsequent collapse in profits (reported from peak to trough) of over 50% was the worst since the 1930s.
- Growth expectations rose in a dramatic way. In early 2000 the bottom-up consensus for long-term European earnings growth was 16% per annum, against 11% per annum prior to 1999. Most economists raised their long-term US growth forecasts to between 3.5% and 4%.
- Inflation was low virtually everywhere, facilitating lower interest rates. As with some previous structural bear markets, there is a risk of deflation, but in our view, this should not be overstated. In general, most economies are facing deflation on traded goods but inflation in services.
- Rising equity prices allowed households and companies to increase their leverage. From 1983 to mid-2002 the ratio of the total credit market debt of households and non-profit organizations to disposable income in the US rose from 64% to 103%.
- The US economy, in particular, has significant imbalances. The current-account deficit has reached 5% of GDP and the amount of debt has risen sharply.
- As with other structural bear markets, stock volatility has been particularly high. This implies a rise in the required equity risk premium, so undermining equity valuations.
- The narrowness of the equity market boom in 1999 meant that a large part of the valuation problem resided in the technology sector. Such concentration in the market is a common feature of a structural bear.

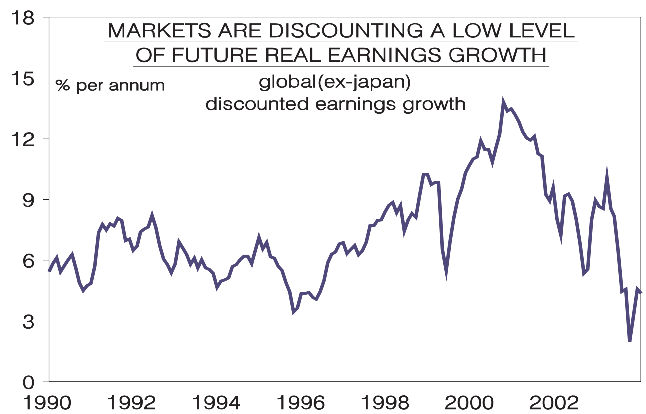
Despite these similarities between the recent bear market and structural bear markets in the past, three important characteristics are absent: a banking failure, a disruption to world trade and a price shock (usually deflation). Short term, geopolitical issues and a further period of economic weakness could result in one last dip in prices. But we think the lows have now been reached and that a modest recovery in stock prices is likely through 2003. Two important factors suggest equity prices are likely to stage only a modest recovery: valuations and weak economic activity.

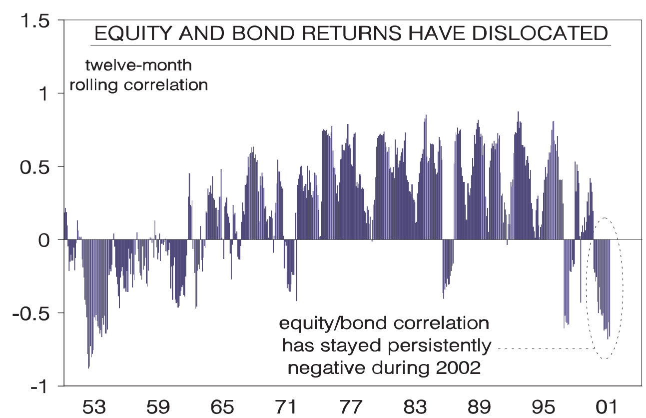
Equity market valuations had reached bubble proportions not just in technology stocks but also more broadly by the end of 1999. However, the valuation adjustment does now seem to have occurred.

The good news for equity markets is that, while economic activity is likely to remain weak and inflation low, this environment is not inconsistent with modest equity returns, given that valuations are so low. Our expectation is for equity markets in aggregate to rise modestly over the next 12 months, and at times there could be sharp rallies and setbacks as geopolitical and economic events develop. ■









Source: Datastream; Federal Reserve Board; Ibbotson Associates; Goldman Sachs.

A FESTIVE UPDATE ON THE GLOBAL ECONOMY: HOW THINGS COULD GO RIGHT

	Outlook	Key Issues
United States	Key upside risks to our forecasts of sluggish growth in 2003 are that the capex cycle picks up more and earlier than we think and consumer spending decelerates less. Cash flow has improved and the corporate financing gap has basically closed. Risk aversion has also subsided. With inventories lean, a positive surprise on final demand could boost incomes, inducing multiplier effects on spending.	On policy, the appointment of a new economics team for the Bush Administration has raised hope of a more aggressive fiscal stimulus. However, stimulus will need to be very timely if it is to have a substantial impact on the 2003 growth outlook, given that it is likely to be offset by fiscal tightening at the state and local levels. We can envisage scenarios where the stimulus is larger and timelier than we currently expect, so there is scope for a positive surprise.
Japan	Japan has provided its share of upside surprises this year. Not only was the export pick-up in the first half of the year stronger than expected, but consumers have also remained resilient in the face of declining incomes. There has also been some evidence that the pace of deflation may have eased. The domestic Wholesale Price Index is now running at (only!) –0.3%, well above its peak declines of –1.5%.	We see two main upside risks to our views on Japan. The first is that the trend decline in savings continues, keeping consumer spending firmer than expected. If that happens, the easing in deflation that we have already seen may continue. The second is that Japan's exports to China and the rest of Asia remain stronger, continuing the boost to the external sector from that source.
Europe	Ongoing economic weakness, particularly in Germany, has been one of the disappointments of 2002. Structural problems have clearly been significant, but there has also been cyclical issues. Higher oil prices and the euro changeover may have crimped domestic demand. If these effects reverse, growth could look better than we expect. A sustained shift to expansionary policy would also improve the outlook.	Although the UK consumer boom is looking dangerously familiar to the boom of the late 1980s (which ended in bust), we think some of the fear may be overdone. Real interest rates and consumer price inflation are much lower than late-1980s levels, while the savings ratio has been stable since 1998. Consumer spending growth will slow next year as taxes rise, but a bust looks unlikely anytime soon.
Non-Japan Asia	Asian exports, particularly Chinese exports, have held up much better than might have been expected given sluggish final demand in the core economies. If that dynamic remains more powerful than our forecasts assume, the region could once again outperform expectations. In particular, we may be underestimating the positive impact of Chinese growth on demand in other regional economies.	An end to China's domestic and export price deflation would also be encouraging. Pressure on China to adopt more reflationary policies continues to build. A significantly more expansionary policy response out of China (either through domestic reflation or a revaluation of the currency) would be another important positive surprise.
Latin America	Economic growth has remained sluggish this year on the back of the financial crisis in Argentina, political uncertainty in Brazil and problems in Venezuela. By contrast, countries such as Chile and Mexico have weathered the shocks reasonably well. Prospects for the region are heavily dependent on the sustainability of the global economic recovery.	In Brazil, the reconciliation of several policy objectives requires the use of more policy instruments than what is currently being used. The government could reduce inflation and stabilize the debt dynamics if Lula appoints a strong economic team to implement a strong fiscal adjustment and a structural reform shock to bolster confidence.
Transition Economies	Russia looks likely to have a solid but unspectacular year in 2003. Turkey will be highly exposed if an attack on Iraq occurs, but should benefit from the recent improvement in fundamentals, driven by a resumption in confidence. Central Europe will be boosted by the EU enlargement process, but remains substantially influenced by the pace of the European recovery.	Central European equity markets have been one of the world's bright spots this year, driven by better growth and productivity, further real appreciation of the region's exchange rates, and competitive valuations. We expect further outperformance in the run-up to EU entry in May 2004. We see little risk to the EU enlargement process, and asset prices should converge even closer to EU levels.

KEY FORECASTS

	GDP (%)	Consumer Prices (%)	3M Rate Forecasts* (%)	Bond Yields** (%)	Exchange Rate Forecasts	Equity Market Index	Equity Market Current***	Equity Market 12m Target
US	2002: 2.4 2003: 2.1	2002: 1.6 2003: 1.8	3m: 1.3 12m: 1.9	Current: 4.1 12m: 4.7	-- --	S&P 500	891	1150
Japan	2002: (0.3) 2003: (0.2)	2002: (1.0) 2003: (0.5)	3m: 0.1 12m: 0.1	Current: 1.0 12m: 1.3	3m $/Yen: 122 12m $/Yen: 115	Topix	816	800-1100
Euroland	2002: 0.7 2003: 1.4	2002: 2.2 2003: 1.5	3m: 2.8 12m: 3.0	Current: 4.3 12m: 4.8	3m EUR/$: 1.03 12m EUR/$: 1.12	Dax CAC40	3023 3077	-- --
UK	2002: 1.6 2003: 2.6	2002: 2.2 2003: 2.5	3m: 4.0 12m: 4.6	Current: 4.5 12m: 4.8	3m GBP/$: 1.61 12m GBP/$: 1.58	FTSE 100	3835	--
Non-Japan Asia	2002: 6.3 2003: 6.0	2002: 0.9 2003: 1.7	3m: 4.5 12m: 4.3	Current: 7.4	3m $/KRW: 1260 12m $/KRW: 1150	KOSPI	709	830
Latin America	2002: (0.5) 2003: 2.1	2002: 9.9 2003: 11.0	3m: 8.5 12m: 9.1	Current: 9.9 12m: 10.1	3m $/MXN: 10.40 12m $/MXN: 11.00	Mexico IPC BOVESPA	6090 10984	8000 14000
Central and Eastern Europe	2002: 2.6 2003: 3.8	2002: 6.4 2003: 5.6	3m: 6.2 12m: 6.1	Current: 5.7 12m: 5.5	3m EUR/PLN: 3.97 12m EUR/PLN: 4.26	-- --	-- --	-- --

* 3-Month Rates: Euroland: average of Germany and France; Non-Japan Asia: Korea; Latin America: Mexico; Emerging Central Europe: Poland.
** Bond Yields: US: 10-year Treasury note; Japan: 10-year JGB; Euroland: average of Germany 10-year Bund and France 10-year OAT; UK: 10-year Gilt; Non-Japan Asia: Korea 5-year sovereign; Latin America: Mexico 5-year sovereign; Emerging Central Europe: Poland 5-year sovereign.
*** Equity-market close as of 18 December 2002.

The Cost of Fighting

Continued from page 1

This fiscal year's deficit is likely to be far larger than most observers predict—between $250-$300 billion. But it alone is not the problem. A struggling economy makes that deficit appropriate and necessary. It also makes tax increases this year inappropriate; indeed, if the economy weakens further, income tax cuts scheduled for 2004 might have to be moved up to 2003 and other cuts may be needed. The real risk is the looming prospect of large, chronic deficits of $200 billion plus for years to come. Assuming the economy regains strength in coming years, such deficits, resulting from recent and prospective spending and tax legislation, would sharply raise interest rates, crowd out private investment and increase the future difficulty of funding Social Security and Medicare.

How do we pay for growing military and homeland security needs? Can we do so while also addressing such other bipartisan goals as improving education, providing prescription drug benefits and improving Social Security? We need a robust national debate on this now—not later, when large deficits have limited the options.

Instead, we have ducked the issue. Previous budget restraints that forced Congress to set priorities have been discarded. The Budget Act of 1974, a response to Vietnam profligacy, mandated a Joint Congressional Budget Resolution to limit spending. The Budget Act of 1990 capped discretionary spending and imposed a Pay-As-You-Go rule—requiring that bills containing programs to raise spending or cut revenues in one area include offsetting program cuts or revenue increases in another. Both acts have been abandoned.

Bills passed this year will raise non-security spending during the remainder of the decade by tens of billions of dollars, with scant effort to set budget priorities.

So far the US has been able to pay higher defense costs and provide budget stimulus to pull the country out of recession without higher interest rates. This was largely due to big surpluses accrued in the late 1990s. Restoring them later in this decade would give future policymakers the same flexibility.

As Federal Reserve Chairman Alan Greenspan recently testified, we need to return to a Pay-As-You-Go system. Its credibility will depend on barring loopholes, such as fictitious 'emergencies' to justify added spending, or unrealistically optimistic revenue forecasts.

A more straightforward act of political leadership is also needed—bipartisan agreement that business-as-usual budget policy will not suffice in view of expanding US security requirements. That means making tough wartime economic choices—cutting back, or postponing, some spending and tax benefits scheduled for future years. Patriotism, candor and sound economics demand no less. ■

The Corporate Paradox of Thrift Still Poses a Big Growth Risk

One factor impeding US growth is slow growth itself—specifically, the fact that nominal GDP is rising much more slowly than in most past recoveries. This sounds tautological, but it is not. Today's slower-than-normal nominal growth is rooted in disinflation and structural changes in the business cycle that have made the US economy less cyclical

The US corporate sector could experience the corporate paradox of thrift—a situation where expense-reducing efforts to shore up cash flow and profits prove self-defeating because those very efforts are pervasive enough to induce a slowdown in aggregate growth.

Slow growth in corporate revenue has been a hallmark of the fledgling recovery that appears to have begun in early 2002. In the first three quarters of 2002, nominal GDP rose 4.4% at an annual rate, just two-fifths the average gain in recoveries from the 1950s through the 1980s.

Is there more to this than a tautological observation that slow recoveries are slow? Yes, because there are structural changes that help explain why nominal growth would be slower during the early stages of recovery than in the past.

Housing activity is less cyclical. Financial deregulation and innovations in the mortgage market have reduced the sensitivity of housing activity to changes in interest rates.

This loss of cyclical power has been dramatic. Before the 1991-1992 upturn, housing and durable goods in combination almost always added at least 1½ percentage points to real GDP growth during the first three quarters of recovery. Frequently, this boost was more than 3 points. By contrast, housing and durable goods helped only slightly in the initial stages of the 1991-1992 upturn, adding only about ¼ point to GDP growth through the end of 1991. The contribution thus far in the current recovery has been only about ½ point.

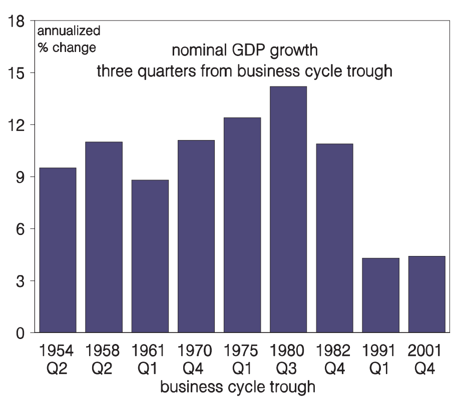
Companies control inventories more tightly. In theory, tighter controls on inventories should reduce the cyclical swings from liquidation to accumulation, which have usually added between ¾ and 2 percentage points to real GDP growth during the first three quarters of the recovery. Before the 1990s, the six-quarter contribution was never less than 2 points for expansions that lasted that long.

The current cycle is shaping up to be quite similar to the 1991-1992 episode. Although inventory liquidation at year-end 2001 was the deepest relative to real GDP in more than fifty years, the contribution of restocking to growth through the first three quarters of 2002 was in the low end of the historical range.

Inflation is low. Disinflation has obviously cut nominal GDP growth. Lower price inflation puts a squeeze on business firms because it is not immediately matched by a decline in the inflation for hourly compensation.

The effect of lower inflation on total output may be more muted to the extent that consumers see and react positively to the implied stronger trend in real wages. But in the context of a weak labor market this effect is apt to be temporary.

Another Recovery With Slow Revenue Growth



How Companies Have Been Coping

Looking at the potential for stress on corporate costs and profits from slower nominal GDP growth, two points stand out, neither of which is surprising:

Profits have usually taken a disproportionate share of revenue gains in early recoveries, as companies seek to restore higher margins. On average, slightly more than one-fifth of the first-year increase in nominal nonfinancial corporate GDP fell to the bottom line in the eight business expansions from 1954 through 1982. This share was quite stable, and about triple the average after-tax profit margin for that period.

Labor costs have usually taken less than their share of incremental revenue gains, except in the 1991-1992 recovery. Like the profit share, this figure was fairly stable. Predictably, it was also consistently under labor's average share for the entire period (about 65%). However, in the 1991 recovery, labor's share of the incremental revenue gains jumped to 85%, and profit growth suffered.

Unfortunately, assessments for the current recovery are more speculative given that complete data for the nonfinancial sector are only available through the second quarter of 2002. At that point, labor costs had absorbed only 54% of the GDP gains in this sector, a figure in line with earlier norms.

Data through the third quarter suggest that hourly compensation will claim a large share of total labor costs in this recovery, although perhaps not to the extent that occurred in 1991-1992. For the first three quarters of 2002, we reckon that about 70% of the increases in nominal nonfinancial GDP was needed to fund increases in hourly compensation—far more than in recoveries before the early 1990s.

As in the 1991-1992 episode, US firms have trimmed headcount in an effort to contain labor cost increases. From December 2001 through October 2002, private-sector payrolls have shrunk 190,000, or about 0.2%. In earlier cycles, payrolls routinely rose 2%-3% in similar periods.

As the economy continues to grow at a snail's pace, we expect profits to remain squeezed. The 2% increase we forecast for 2003 is low by historical standards, and the risk of a corporate paradox of thrift, with profits continuing to decline, remains alive and well. ■