

Sand Spring Advisors LLC

**Imbalances That Persist
&
Equity Index Fibonacci Rhythms in Foreign Terms**

by,

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Greenspan has the price of money set too cheaply at a Federal Funds and 1-month LIBOR rate of just 1%. And while he knows this, he intends to do nothing about it.

So goes the perceived wisdom on Wall Street, and so I was told yesterday by a savvy former chief economist for one of the large U.S. investment banks. “I just attended a private briefing with Greenspan,” this person explained. “He knows what he has created -- he knows that the economy is super-levered and would react badly to even a mild rate hike. So he's just not going to do it. I would bet you any amount of money that Greenspan will not push rates up at any point in 2004. He is simply too worried about rebuilding his own legacy. Unfortunately, for the economy as a whole, he also has no particular endgame -- except perhaps to hope that the wealth effect of asset prices going up will bail him out over time. At a minimum, he knows that he has to get businesses spending and hiring people before the consumer rolls over and dies.”

In other words, Greenspan actually wants and needs another bubble in asset prices -- stocks, bonds, real estate -- to make people feel wealthy, healthy, and wise.

And if this perception of Greenspan is correct, the natural reaction of most investment managers is to buy real assets with cheapened money -- and preferably assets denominated in other currencies. Buy oil fields in Canada, buy gold mines in Russia, buy property and equities in Asia. As long as people can service their debt -- even if they have too much absolute debt to do so forever -- there will be no systematic economic shocks.

The U.S. economy may certainly be subject to (and somewhat addicted to) a declining dollar; real wealth may continuously flow behind the scenes from the U.S. to Asia; and too much consumer mortgage debt may populate bank coffers – but all of these imbalances can persist for far longer than anyone might expect.

According to many, the driving factor in such persistence is the fact that the Chinese “just need to do business” in order to accommodate a rural Chinese populous currently streaming into the urban Chinese workforce. The Chinese Central Bankers need to create jobs for all these people, because no jobs would likely result instead in a path toward something far less palatable -- revolution. So, if under the rules of the current global economic scheme, they must accept U.S. dollars and bonds that quite regularly decline in value, then so be it. This is simply another cost to doing business – the cost of perpetuating their own foreign trade.

And Chinese foreign trade with the U.S. was certainly as huge in 2003 as it has ever been. Per a recent article in the *New York Times*: “China exported \$125 billion worth of goods to the United States in the first 10 months of last year and imported just \$22 billion. The resulting trade surplus equaled an extraordinary 9 percent of China’s entire economic output during this period.” Yet China’s growing demand for imported goods (raw commodities, metals, oil etc.) – while smaller in absolute terms than the value of its exports – was also critical last year to global growth. Chinese demand specifically accounted for 66% of Japan’s total export growth, 56% of Germany’s, and approximately 21% of U.S. export growth. It is fair to say that the U.S. and China are now very much joined at the hip -- Should either country so much as sneeze, the other country (as well as the rest of the global economy) will be sure to notice.

Bush also, of course, wants to be reelected, and with his new proposed programs on Latino labor and NASA expansion, he appears quite willing to buy votes from different segments of the U.S. population -- even as the U.S. fiscal budget balloons. Combined with Greenspan’s desire to retire with a rebuilt image, and the Chinese aversion to anything that would impinge job growth (just discussed), it would seem a potential “Perfect Storm” of global economic nirvana.

Often thrown into the equation is that the ECB will be forced (particularly given undue euro strength) to finally lower European interest rates in 2004, and that this will further fuel the rush to own real assets. The world ends up with *asset* price inflation, even if there is very little *retail price* inflation (courtesy of hot global competition) in the cost of consumer goods.

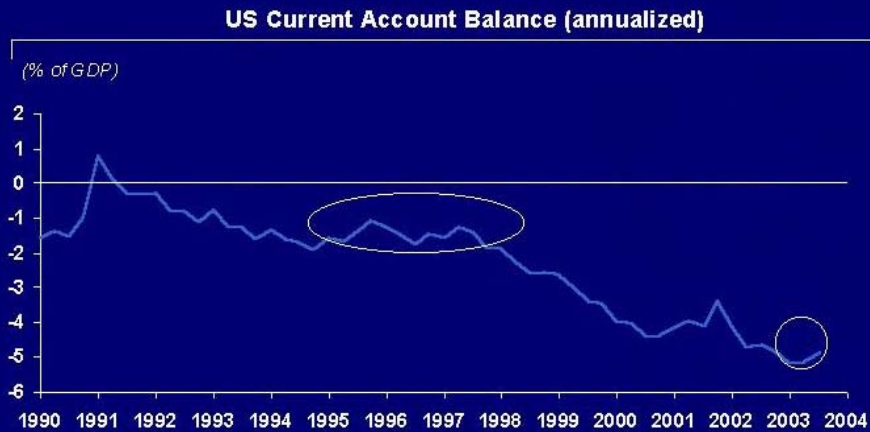
While even we can feel somewhat seduced by this scenario, the problem, of course, is that everyone currently believes in such a path – or something close to it. 12 straight up months for the Indian stock market shows this. A high current 67% bullish reading on Market Vane’s S&P Bullish Consensus shows this. Anecdotal discussion with even the smartest hedge fund managers shows this. No one expects any sort of 2004 “train wreck.”

Asset prices (specifically, equity and real estate) are also not priced compelling low to start with, so anyone playing these themes is playing with fire -- in effect depending upon Greenspan and Bush, within an already super-levered economy, to serve up a line of future “Greater Fools” to chase asset prices higher despite the inevitable washout when over-leverage eventually reaches servicing capacity.

Already within the United States last year there were more bankruptcy filings by two-wage earner families than there were divorce filings from within the same group. Already in 2003, the percentage of people not paying their credit card bills in full when due -- and thus carrying expensive credit card balances -- has swelled to new all time highs.

On a larger macro basis, and as shown in the charts below courtesy of Deutsche Bank, the U.S. has reached a trade deficit that equates to 5% of GDP (with a twin fiscal deficit of almost the same size). And to finance this trade deficit, the U.S. currently consumes a massive 71% of the world's savings -- yet does so while maintaining a relatively uncompetitive negative real yield on short-term dollar deposits.

The U.S. Current-Account Deficit Was Only 1% -2% of GDP During the Period of Relatively Strong Growth of the Mid- to Late-1990s



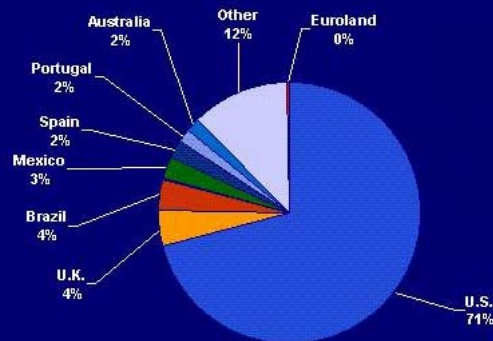
Source: Datastream

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The U.S. Absorbs 70% of World Net Foreign Savings

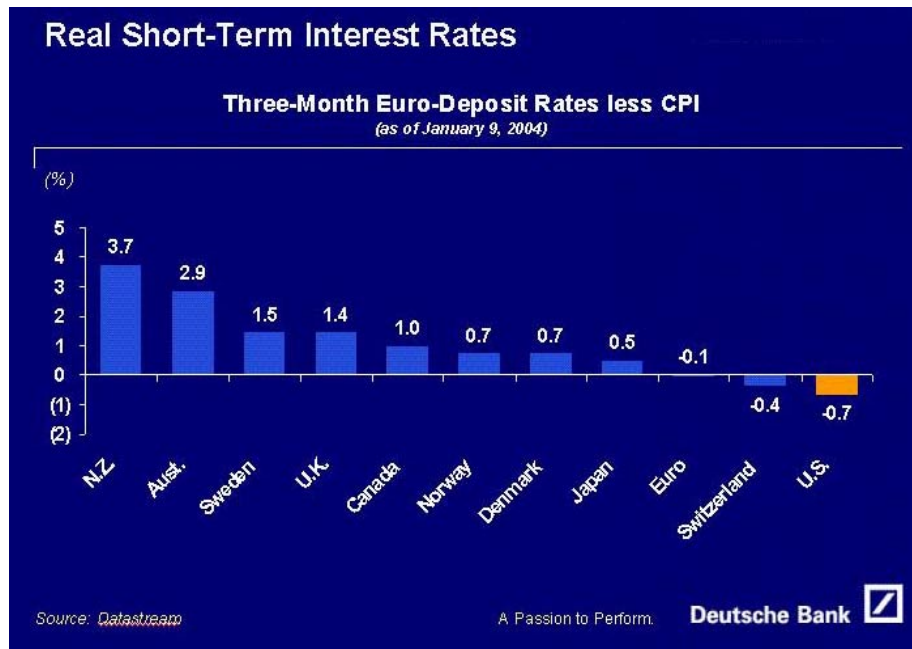
Percentage Shares of 2001 World Current-Account Deficit



Source: IMF Estimates

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The above pictures are likely not sustainable for long. At negative short-term real yields (and a five-year nominal rate of 3.25% that translates into a real rate of just 1.25%), the U.S. is ill advised to rely upon laissez-faire economic policies if it is to attract the capital that it needs to maintain high consumption levels, large fiscal deficits, and minimal savings. Already in 2003 new foreign direct investment into the U.S. advanced just marginally, even while US dollar bonds acquired through FX flows grew to nearly \$500 billion -- with 60% of this total acquired by Japan, China, Taiwan, and Hong Kong. These latter capital flows saved the day for now, but have started to result in Far East price inflation (China +3.2% CPI year on year) and imprudently large Asian Central Bank exposure to U.S. financial assets.

Per Deutsche's head of Foreign Exchange Research, Michael Rosenberg, "Once deficits reach a threshold level of around 5%, they tend to become a problem and therefore need to be corrected." They typically do so through some combination of five steps: currency depreciation; domestic demand slowing down; interest rates moving higher; investment in the U.S. weakening; and eventually, relative export growth picking up.

Step 1 – currency weakness – is clearly already upon the U.S. And if one looks at the performance of retail stocks so far in 2004 (many down 8%-10%), one might smell a developing whiff of disappointment over domestic consumer demand.

Yet foreign holders of U.S. paper – notably China, Japan, and Europe -- have yet to revolt by demanding higher U.S. interest rates or by reducing their substantive investments in the U.S. "They simply can't do so," Charles Clough, former Merrill Lynch Chief Investment Strategist, recently explained in a speech on 2004 themes that we attended. "China and Japan have other priorities, other agendas of their own. By definition, dollars simply must be recycled, and it is not in anyone's interest to haggle too much over the price at which this recycling gets done."

Overall therefore, most believe that the economy is in a "sweet spot" of recovery that will last at least through the November Presidential elections. Liquidity will be prevalent courtesy of Mr. Greenspan, and chase real asset prices higher globally. An excess of dollars here in the U.S. will end up rippling through the world and result in higher prices for Shanghai and Bombay real estate -- among other things. And perhaps this consensus conclusion will be correct.

But the trade/investment imbalances shown above are now far enough out of whack that this consensus conclusion needs to be closely monitored as the year progresses. There are elements in early 2004 somewhat akin to 1993 when the Fed maintained a steep yield curve for an extended period of time – but eventually caused havoc when they raised rates in February 1994. There are also elements in 2004 of early 1987 when metals markets were firm and the dollar continuously weak, eventually precipitating the unfortunate events of October that year. Similar to 1987, we even have a mouthpiece for disaster in the form of Fed Governor Bernanke regularly issuing dangerous comments in a fashion not dissimilar to the past 1987 bravado of former Secretary of Treasury James Baker.

So what then is Sand Spring's view for the year?


In similar fashion as Byron Wein at Morgan Stanley, here are a few of our broad-brush prognostications for 2004 – presented in no particular order. But whereas Wein usually puts out ten thoughts for the year, we have limited ourselves here to just seven.

1. Dollar weakness will be most pronounced against the yen, not the euro.

Borrowing from Deutsche Bank once again, the equilibrium valuation level for the USD/JPY relationship stands near 95.5 according to most academic models, thus well below current 106.50 market levels. Conversely, the fundamental equilibrium level for the euro (somewhere between 1.09-1.19) is far less compelling versus current market rates near 1.27. Most of the U.S trade deficit problem is with Asia and Japan -- not Europe. In addition, the ECB *does indeed* have room to lower European interest rates, whereas the BOJ does not (rates already being near 0). We believe over 2004 this fundamental situation will result in a steady trend lower in euro-yen.

Estimates of the Japanese Yen's Equilibrium Value		
Model	Key Explanatory Variables	Equilibrium Exchange Rate Estimates (Yen/US\$)
Model 1	Current-Account Differential, Relative Growth, Inflation Differential	90.87
Model 2	Current-Account Differential, Relative Growth, Traded/Non-traded Goods Productivity Differential	101.91
Model 3	Current-Account Differential, Relative Growth, Capital Goods Price Differential	92.53
Model 4	Current-Account Differential, Relative Growth, Inflation Differential, S&P500/Nikkei Ratio	91.94
Model 5	Relative Growth, Inflation Differential, Three-Month Yield Differential	109.72
Model 6	S&P 500/Nikkei Ratio, Three-Month U.S. Yield	86.07
Model 7	Labor-Productivity Differential, Inflation Differential, Monetary-Base Differential	96.92
Model 8	Current-Account Differential, Inflation Differential, S&P 500/Nikkei Ratio, Monetary-Base Differential	93.93
Median Estimate		95.50

Source: Datastream, DB Global Markets Research

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Selected Estimates of the Euro/Dollar Exchange Rate's Equilibrium Value

Study	Key Explanatory Variables/Model	Equilibrium Exchange Rate Estimates (US\$/€)
Wren-Lewis & Driver (1998)	FEER Model	1.19 – 1.45
Borowski and Couhards (2000)	FEER Model	1.23 – 1.31
Lorenzen and Thygesen (2000)	Net Foreign Assets, R&D Spending, Demographics, Ratio of Nontraded/Traded Goods Prices	1.19 – 1.28
Alberola et al. (1999)	Ratio of Nontraded/Traded Goods Prices	1.26
Deutsche Bank	PPP (Long-Run Average)	1.20
	Net Foreign Assets	
Chinn and Alquist (2000)	M1, GDP, Short-Term Interest Rates, CPI, Ratio of Nontraded/Traded Goods Prices	1.17
Stein (2001)	Natrex Model	1.17
IMF (2002)	Savings-Investment Approach	1.10-1.17+
Duval (2001)	Consumption, Multi-Factor Productivity, Real Long-Term Yield Spread, Ratio of Nontraded/Traded Goods Prices	1.15
Clostermann and Schnatz (2000)	Real Long-Term Yield Spread, Oil Price, Government Spending, Ratio of Nontraded/Traded Goods Prices	1.13
Teiletche (2000)	Productivity, Government Spending, Real Long-Term Yield Spread, M1, Industrial Production	1.09
OECD	GDP PPP	1.09
Via Aarle et al. (2000)	Monetary Model	1.07
Gern et al.	Short-Term Real Interest-Rate Differential	1.03
Median Estimate	9 of 13 Econometric Models	1.09-1.19

Source: OECD Working Paper Number 298, June 2001 (for other than Deutsche Bank)

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The 200-week moving average on euro-yen -- currently near 115.42 -- could easily be seen. The euro-yen uptrend line since 2001 has clearly already been broken.



2. The S&P in euro terms has a definite upside target approaching – but we don't appear to be there quite yet.

Given that we now have a global economic situation of some imbalance – not just a traditional domestic economy driven by domestic factors – it may be more useful going forward to chart the major U.S. indices in terms of euros and yen. Since few others do so, we believe that we may be

able to spy truly important Fibonacci resistance levels using this technique instead of just nominal ones subject to distortion by relative currency movements.

Within this context, the S&P in euro terms is currently at 907.50 (1141.55 S&P divided by 1.2579 euros). A definite Fibonacci rhythm exists on the chart below pointing toward an eventual upside target near 965.61 in S&P in euro terms, followed by a collapse toward 819.24.



But the problem with this analysis is that such targets can be achieved in a variety of ways. The S&P could continue its recent advance while the dollar stands still, or the dollar could rally while the S&P stands still – with infinite other possible combinations.

What would the various combinations be to reach this upside 965.61 target given that such could be achieved either through an S&P move and/or a dollar move? The table below shows this.

Combos to Reach: 965.61

S&P	Implied yen level
1290	1.3359
1280	1.3256
1270	1.3152
1260	1.3049
1250	1.2945
1240	1.2842
1230	1.2738
1220	1.2635
1210	1.2531
1200	1.2427
1190	1.2324
1180	1.2220
1170	1.2117
1150	1.1910
1140	1.1806
1130	1.1702
1120	1.1599
1110	1.1495
1100	1.1392
1090	1.1288
1080	1.1185
1070	1.1081
1060	1.0978
1050	1.0874
1040	1.0770
1030	1.0667
1020	1.0563
1010	1.0460
1000	1.0356
990	1.0253
980	1.0149
970	1.0045
960	0.9942
950	0.9838
940	0.9735

Thus, at one extreme, one could imagine a world where the U.S. consumer suddenly stops spending (perhaps tapped out with debt servicing), and the dollar starts to rally (as import demand suddenly shrinks -- a debt-level induced recession transpiring despite all of Greenspan's stimulation efforts), and resulting in a S&P price below 1060 and a euro price below 1.10. At the other extreme, one could also see the S&P reach 1270-1290 with a euro level in the 1.3152-1.3359 range -- clearly the combo fitting the consensus view described in the first few pages of this commentary. Obviously, a variety of other less extreme intermediate combinations to reach this target might occur.

The bad news, of course, is that once 965.61 is achieved in some fashion, Fibonacci rhythms also imply that 965.61 should then yield to a collapse back to 819.24. The wider range of combos of S&P and euro prices to reach such a target can be seen below:

Combos to Reach: 819.24

S&P	Implied euro level
1270	1.5502
1260	1.5380
1250	1.5258
1240	1.5136
1230	1.5014
1220	1.4892
1210	1.4770
1200	1.4648
1190	1.4526
1180	1.4404
1170	1.4282
1150	1.4037
1140	1.3915
1130	1.3793
1120	1.3671
1110	1.3549
1100	1.3427
1090	1.3305
1080	1.3183
1070	1.3061
1060	1.2939
1050	1.2817
1040	1.2695
1030	1.2573
1020	1.2451
1010	1.2328
1000	1.2206
990	1.2084
980	1.1962
970	1.1840
960	1.1718
950	1.1596
940	1.1474
930	1.1352
920	1.1230
910	1.1108
900	1.0986
890	1.0864
880	1.0742
870	1.0620
860	1.0498
850	1.0375
840	1.0253

The bottom line is that assets are assets. Companies and real estate are real things, and have a real worth – competitive currency devaluations notwithstanding. Thus, if the dollar falls, U.S. asset prices tend to adjust upwards, but if the dollar rises, U.S. asset prices tend to compensate by adjusting downwards. This is not what CNBC would have you believe, and while we will admit that this is an oversimplified vision of the world that many economists might contest, empirically this is how we currently see equity markets and the dollar behaving. Foreign investors are less concerned with the nominal dollar value of their existing assets in the U.S. than they are with the all-in adjusted “true value” of these assets. On the margin, if there is a weak dollar but asset prices keep appreciating in dollar terms within the U.S., foreign investors are not too disturbed. Conversely, someday over the rainbow, foreigners might react to a stronger dollar with a

willingness to sell U.S. assets at a lower domestic price level. Only a declining dollar with simultaneously declining U.S. asset prices represents the truly scary environment for the foreign investor.

Thus, using this analysis alone, we can make little overall prognostication for U.S. equities priced on a domestic dollar basis except to say that if Greenspan has his way (per the consensus) and continues to devalue the dollar, U.S. equity markets could appear ebullient for longer than one would expect in a false domestic "illusion of prosperity." But if and when the consumer hits a wall in spending habits, both a lower U.S. equity market and a higher dollar eventually beckon.

What might also be implied by this analysis is that basis our PEI pi-oriented cycle rhythms, April 13-14, 2004 (a minor PEI cycle date just in front of tax time -- with associated IRA equity market inflows) would be an idealized time to reach a euro-S&P price of 965.61, while December 30-31, 2004 would be the idealized time to reach our espoused downside target of 819.24.

3. Meanwhile, in yen adjusted terms, the short-term technical Fibonacci rhythm of the yen-denominated S&P price points toward a market peak a bit closer at hand, with a downside target by late 2004 near 91,700 yen.



If, per the Deutsche Bank equilibrium model value analysis, U.S. dollar/yen were to fall to a rate near 95, this would imply an S&P price near 965 late this year.

Combining such a perspective with our euro-denominated S&P forecast, **the implication that would help satisfy both perspectives in the easiest fashion would be an immediate drop in euro-yen -- consistent with our first separate prognostication for 2004.** Imagine indeed if euro-yen were to reach its 200-week moving average support near 115 later this year, perhaps with legs of yen 95 and euro 1.21. Then *bingo*: an S&P dollar price target of 965-995 pops out to satisfy *both* of our foreign-denominated S&P price forecasts. Euro-S&P could reach 819.64 with an S&P price of 991.76 and a eur-usd rate at 1.2100. And the S&P in yen terms could reach

91,700 yen at the same approximate time with USD/YEN at 95, implying an approximate level of 965.26 on the S&P.

If the above analysis is too difficult to follow, here is a possible path for the year in layman's terms:

- 1) Expect USD strength to develop over the 1st quarter of 2004 (particularly post mid-February – where I am aware that certain cycle analysts are calling for a definitive euro high – if such is not already in place). But this dollar strength should come *only vs. euro*, not against the yen, and will help drive the S&P priced in euros towards an upside 965.61 target. This would imply 1.1821 eur/usd if the S&P stands still. Other variations obviously exist.
- 2) Expect USD weakness to then subsequently set in *but primarily versus yen*, and send yen toward 95 later this year, with euro bouncing back toward 1.21.
- 3) While equities might exhibit a bit more strength (or a trading range) until the next PEI cycle window on April 13-14, 2004, expect weakness to develop from that date onward until a major low on or about the Dec 30-31, 2004 PEI cycle date. 965-995 on the S&P would be the specific downside target range in dollar terms.

Interestingly, after the yen downside target of 91,700 yen on the S&P is reached, the longer term picture as implied by the monthly Fibonacci rhythm of the S&P-yen ascent since 1978 **actually can be interpreted as very bullish**. We can specifically spy a strong longer-term target of around 178,100-178,400 yen for S&P-yen. In dollar terms, the S&P would likely need to be at new all-time highs to satisfy this rhythm. Thus, after a December 30-31, 2004 low, Feb. 23-24, 2007 (a PEI date 2.15 years beyond) could be a possible equity market high within an overall pattern of 17.2-years of broadly sideways equity trading stretching from 1998-2000 to 2015-2017.



In terms of longer PEI U.S. equity cycle rhythm, it is actually worth noting on the chart above how close the July 20, 1998 PEI cycle date came to being the all-time high (to date) in S&P-yen.

Even the equity mania of 1999-2000 left the S&P in yen terms just marginally surpassed in June 1999. By that time, emerging yen strength was mitigating U.S. equity strength. A currency-debasement driven illusion of prosperity was already at work. Indeed, using the chart above, here is the PEI rhythm that we now see:

July 20, 1998

– Momentum high in S&P-yen

Sep 12, 2000 (2.15 years later – a ¼ PEI cycle)

– Completion of triple top in S&P-yen

Nov 6-7, 2002 (2.15 years later – a ½ PEI cycle)

-- Momentum low in S&P-yen

Dec 30-31, 2004 (2.15 years later – a ¼ PEI cycle)

– Anticipated completion of S&P-yen bottom formation

Feb 23-24, 2007 (2.15 years later – full 8.6 years since July 1998 high)

– Another anticipated all-time high in S&P-yen.

The table below shows yen and S&P rates that could yield such a 178,100-178,400 S&P-yen target.

Combos to Reach: 178,389	
S&P	Implied yen level
1800	99.11
1790	99.66
1780	100.22
1770	100.78
1760	101.36
1750	101.94
1740	102.52
1730	103.12
1720	103.71
1710	104.32
1700	104.93
1690	105.56
1680	106.18
1670	106.82
1660	107.46
1650	108.11
1640	108.77
1630	109.44
1620	110.12
1610	110.80
1600	111.49
1590	112.19
1580	112.90
1570	113.62
1560	114.35
1550	115.09
1540	115.84
1530	116.59
1520	117.36
1510	118.14
1500	118.93
1490	119.72
1480	120.53
1470	121.35
1460	122.18
1450	123.03
1440	123.88
1430	124.75
1420	125.63
1410	126.52
1400	127.42
1390	128.34
1380	129.27
1370	130.21
1360	131.17
1350	132.14
1340	133.13
1330	134.13
1320	135.14
1310	136.17
1300	137.22
1290	138.29
1280	139.37
1270	140.46
1260	141.58
1250	142.71
1240	143.86
1230	145.03
1220	146.22
1210	147.43
1200	148.66
1190	149.91
1180	151.18
1170	152.47
1160	153.78
1150	155.12
1140	156.48
1130	157.87
1120	159.28

This longer-term view is obviously a more bullish one than we have previously espoused, but it does not abrogate our call for short-term sloppy 2004 (particularly post April 13-14) or our ultra-long term view (17.2 years) for a broadly range-bound equity market quite dissimilar to the 1982-2000 equity market ascent, and far more similar to the 1965-1982 equity market malaise.

One must simply realize that within this 17.2-year period of broadly sideways market traction, we will have many different 2.15-year swings that, as they occur, will seem quite significant. And since the U.S. is involved in competitive devaluation of its currency to help mitigate structural economic imbalances, one must regard all domestic equity swings from an international currency-adjusted perspective.

4. **But let us return to the short term. In theory, if the Bush administration is currently following imprudent budgetary policies while facing a huge and troubling trade deficit and a mountainous build-up in consumer debt, the U.S. bond market should be the ultimate discipliner of how the various S&P-dollar permutations play out.** Eventually, interest rates should back up because foreigners demand higher rates to hold U.S. investments, and when this happens, the U.S. economy slows, the dollar rallies, and stocks fall. A decline in bonds becomes the central catalyst to help economic imbalances adjust (with bonds, unlike real estate and equity, having no intrinsic value except the promise to pay a regular coupon plus a repayment of principal at some inflation-adjusted level of debasement).

But this is the exact process that Greenspan has tried to short-circuit, first scaring the bond market last May that the Fed could, if necessary, resort to extraordinary measures of buying longer-dated Treasury securities to help stem debt-deflationary pressures, and by keeping the short end of the yield curve priced below its proper equilibrium level. In terms of speculators, most people are currently too afraid to sell the back end of the U.S. yield curve because of the expensive carry and roll-down costs associated with such positions. Greenspan meanwhile is implicitly relying upon foreign central bank holders to continue buying bonds – even at competitively disadvantageous prices and despite a declining dollar – because they have little choice but to do so given the employment-oriented agenda of these foreign countries.

While such conditions are unlikely to change soon, this is not an inherently stable situation. Indeed, if we were to show a chart of U.S Treasury bonds denominated in yen, the damage experienced by the fixed income markets last July has hardly been recouped at all. The entire bond market rally since July has been offset by yen strength.

To complicate things, Fannie Mae of course stands in the middle of the U.S. fixed income market with its portfolio of huge negative mortgage convexity, and huge outstanding short-term indebtedness to global financial institutions, thus exacerbating the vulnerability of the U.S. fixed income market to sudden spurts of volatility. We saw such volatility in May and July 2003, as well as back in November 2001 and November 2002—periods where Fannie Mae, bank and hedge fund arbitrageurs, and trend followers (CTAs) all were moving in the same direction at the same time – stumbling over each other for market liquidity in classic “crowded trade” fashion.

All that it would take at present to cause real havoc within the fixed income markets would be one unfortunate piece of phraseology from Greenspan or Bernanke. It might even be some innocuous statement like: “The Fed is not in the business of manipulating longer term interest rate levels, and we believe at present that bond yield levels generally underestimate the long-term vibrancy of the U.S. economy.” They are unlikely to be so stupid as to make such a statement, but they certainly could.

Alternatively, a single foreign central bank might announce that it no longer intends to buy U.S. Treasuries (or accept dollars for oil) – going a step beyond the ECB’s announcement last year that it no longer considered U.S. agency paper as appropriate for member central banks to hold.

Either event would be sufficient to set off a C-wave down to the T-Bond picture below, albeit the timing of such a decline remains illusive. Overall, we find the fixed income market to be the potential key to everything (weakness within fixed income markets will likely to beget weakness elsewhere), but also potentially the most irritating market to trade and time.



5. And what in 2004 of those red hot metals like gold and silver? The consensus view is of course bullish, and these markets have irritated us in recent months with overly frothy Market Vane sentiment readings that kept us largely on the sidelines – even prematurely suggesting shorts when gold reached \$412. But of late, we are finally getting something of a retracement from the recent gold high near \$430. We currently see Fibonacci support on the long-term gold chart (shown below) near \$388-389, and would certainly examine the market carefully for potential long positions at that level. \$479 is a target level of big-time resistance in the sky.

Silver has also come back to life of late, and we can now make out a Fibonacci rhythm pointing towards \$8.60 with time. If Mr. Buffett is still long from 1995 and 1998, he may finally get a chance to exit.



6. Overall, the prospects for Bush having “easy sailing” to the November elections are not good. Bush may succeed in keeping things hanging together for awhile, but our bet is that post April, some real nastiness on the domestic economic front (as well as perhaps with Iraq) will have begun. If we are wrong and the economy keeps humming along through the summertime,

bonds prices will be backing up of their own accord by the fall. If bonds start dropping sooner, we could be setting ourselves up for a Sep-Oct surprise pre-election Crash similar to 1987.

Interestingly Arch Crawford, using completely different astro techniques, points towards a similar path. So too does market sentiment follower Woody Dorsey of Vermont-based *Market Semiotics*.

One of Dorsey's main tools involves slogan searches in the media to identify sentiment extremes. Dorsey, at a recent investment dinner I attended, stated "Just as the markets were overly bearish in March with a peak in media references to 'Iraq' coinciding with a market low, and just as slogan searches turned up an extreme number of references to 'deflation' in the media just prior to the bond market high last June, so too should a time come when references to 'economic recovery' will mark a high in equity prices. We're just not there quite yet. But by the latter part of this year, we could be. I would not be surprised to see an autumn crash, but likely from higher equity levels than exist at present."

Crawford meanwhile, interestingly points toward nastiness beginning in late April (just after our PEI cycle date) and intensifying into June. He expects a low in Gold on or about April 5-13, and more military attacks either by the U.S. or against the U.S. as of April 23-24 – a period "fraught with tension and danger, especially of chemical/biological attacks." Then moving into the May-July period, when Mars enters the USA sign of Cancer and the chart of President Bush, Crawford predicts that "George W. Bush's popularity will crumble along with World economies." Despite a potential relief rally in early August, Crawford then warns that the period of mid-Aug 2004 through March 2005 opens up a Mars/Uranus "Crash Cycle" window that notably did not exist at any time during 2003. Overall, Crawford sees the latter half of 2004 as an "energetic and exhaustive annual passage."

Even Christopher Carolyn of Carolyn Cycle Research has warned for many years of a major low in the latter half of 2004 – specifically towards October 2004.

In general, therefore, we would regard the first quarter of 2004 likely to act as a "false calm" set-up to a very wild year.

On a political basis, we would also look for regime stability troubles to continue to brew in Saudi Arabia over 2004, with the Al Qaeda stronghold in northwest Pakistan also continuing to be a lingering irritant. This latter problem could eventually lead to a U.S. incursion into that country – but this will be something that Bush will be loath to try before the election. He may thus easily be perceived as being on the defensive if mid-year troubles do arrive per Crawford's predictions.

When the dust settles, in our opinion, President Bush will likely not still be in office beyond January 20, 2005.

7. The Lindsay 36-year and 40-year cycles, and odd weather patterns to increase agricultural crop volatility.

Many people have heard of famous 1960's market prognosticator George Lindsay and his prescient aptitude for pattern recognition and technical analysis. For those who haven't, a review of our article "Three Peaks and a Domed House - Revisited" originally posted at www.Sandspring.com in early 2000 may be of interest.

A few – like us – may also have read Lindsay's book *The Other History* where he espouses a long-term cycle rhythm of 36-40 years in the natural progression of the world. 36 years prior to 2004 was of course the height of the Vietnam War and the formation of a major equity high

between 1965-1969. 40 years ago was the heart of the Johnson Administration where the “Great Society” of big government deficit spending ruled.

Lindsay’s basic theory within *The Other History* is that when a trend first emerges (occupying Vietnam for example, or having the government deemed responsible for the social well-being of the individual citizen), the new trend is initially deemed radical enough to be rejected. 36-40 years later the same trend then re-emerges, and is more fully embraced. So it is that the era of big government is now back upon us and the average person on the street is now more willing to accept America’s occupation of Iraq than was the case in 1968 with Vietnam. Neither concept is exactly new to us, but belief in the necessity of both has now become more mainstream.

Lindsay also made some speeches in the 1960’s where he predicted a general pattern toward global warming in the latter part of the 20th century – but also predicted that this longer-term trend would be interrupted in the early part of the 21st century by a mini-ice age. As I type this, it is 10 degrees in New Jersey and has been consistently this cold for the better part of a month. Somehow, I have been thinking of George Lindsay almost every day this winter.

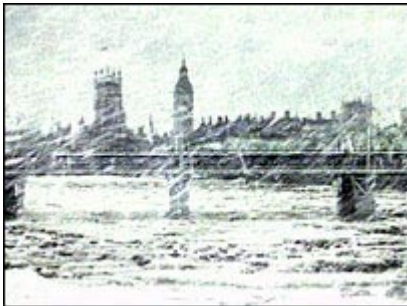
And the persistence of odd weather patterns is likely to continue. As icebergs melt in the North Atlantic and pieces of the Antarctic ice shelf fall off, the temperature and water salinity of the adjacent oceans will change. Overly hot recent summers in Europe may with time yield to extremely frigid European winters -- as recently detailed by the BBC in the article reproduced below. Don’t laugh, but I already know one gentleman who is in the process of selling his Cornwall real estate because of the Northern European phenomenon described below.

Warming could bring colder UK winters

By Penny Palmer

BBC Horizon

Britain could be heading for a "big freeze" if global warming switches off an important ocean current in the Atlantic, some scientists say.



Britain is kept relatively mild in the winter by the warm air blanket brought to us from the tropics by a branch of the Gulf Stream.

But if global warming continues to melt major ice sheets, that supply of warm air could come to an abrupt end, according to a number of experts.

The Gulf Stream relies on a sensitive "conveyor belt" action, which could be "switched off" - quite suddenly - if it becomes diluted by fresh water from the melting ice-sheets, they claim.

Dr Terry Joyce, an oceanographer from Woods Hole Oceanographic Institute, US, believes there is a 50% chance of a sudden climate change happening in the next 100 years.

"It will be quick," he says. "Suddenly one decade we're warm, and the next decade we're in the coldest winter we've experienced in the last 100 years, but we're in it for a 100 years."

The possibility of much harsher winters in the UK is reported in the Horizon programme on BBC Two.

Ice melt

It is the Gulf Stream that allows us to live the way we do. But now scientists have found evidence that the current that carries the protective Gulf Stream is slowing down - and may even stop.

Dr Bill Turrell, from the Marine Laboratory, Aberdeen, has measured a drop in the salinity, the first warning sign that the current might collapse.

"These changes are fundamental. They are substantial. They are going to impact our climate and the climate our children have to live in," he tells Horizon.

The US space agency (Nasa) has measured big increases in the speed of some of Greenland's largest glaciers, and melt water on the Greenland ice sheet in 2001 was twice that recorded 10 years ago. Scientists also predict that with an increase in global temperatures will come an increase in rain at northern latitudes.

Huge Siberian rivers are discharging more water into the North Atlantic than ever before, and are predicted to increase their discharge by up to 50% in the next 100 years.

These factors combined could lead to a large amount of fresh water making its way into the North Atlantic.

Climate switch

This particular geographical region of the North Atlantic is vital because it is the point at which the Gulf Stream current sinks and overturns to join the Atlantic Conveyer, a vast rotating belt that takes cold water back to the tropics on the floor of the ocean.



Sinking - the process vital for powering the conveyer - relies on a change in the density of water. As sea-ice forms at high northern latitudes, it leads to an increase in the salinity of the cold, dense salty water underneath, which sinks down into the depths.

The one thing that can stop the sinking is fresh water.

Fresh water effectively dilutes the salty seawater to the point at which it cannot sink - and the conveyer shuts down. With no conveyer, there is no Gulf Stream, and our benign winters come to an end.

Most ocean scientists believe the conveyer has a crucial freshwater threshold level, at which it will shut off - like a light bulb.

The trouble is no one really knows where that threshold level is.

Past precedent

Dr Joyce says: "The likelihood of having an abrupt change is increasing - global warming is moving us closer and closer to the brink.

"We don't know where it is, but we know one thing: we're moving closer to the edge."
And once the light bulb is turned off, no one is sure how to turn it back on.

The conveyer remained switched off for over 1,000 years during the Younger Dryas period, the most significant shutdown since the last ice age.

Professor Richard Alley, a climate scientist from Pennsylvania State University, tells Horizon: "I don't think that an abrupt, sudden trip and fall down the stairs is the most likely outcome. But I think that the probability of that is high enough that we should really think about it."

-13 Nov 2003: BBC

Meanwhile China has a rather different problem: a declining water table as detailed below by the Earth Policy Institute (www.Earth-policy.org). The combined effect of this latter phenomenon and the above mini-ice age phenomenon in Northern Europe should only result in increased agricultural crop dislocations and volatility.

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Wakeup Call on the Food Front

Lester R. Brown

While Chinese Premier Wen Jiabao and President Bush discussed Taiwan, currency rates and North Korea on December 9, a more important and far-reaching development in U.S.-China relations was going on far from the White House.

Under the North China Plain, which produces half of China's wheat and a third of its corn, water tables are falling by 3 to 10 feet per year. Along with rising temperatures and the loss of cropland to non-farm uses, this trend is shrinking the Chinese grain harvest, which has fallen in four of the past five years. To get an idea of the magnitude, the harvest dropped by 66 million tons during that period, an amount that exceeds the total annual grain harvest of Canada, one of the world's leading grain exporters.

Thus far China has covered its growing grain shortfall by drawing down its once-massive stocks. It can do this for perhaps one more year before those stocks are depleted. Then it will have to turn to the world market for major purchases. The odds are that within the next few years the United States will be loading two or three ships per day with grain destined for China. This long line of ships stretching across the Pacific will function like a huge umbilical cord between the two countries.

This isn't only a question of U.S.-China relations, but also one of the relationship between the Earth's 6.3 billion people and its natural resources, especially water. Food production is a water-intensive process. Producing a ton of grain requires a thousand tons of water, which helps explain why 70 percent of all water diverted from rivers or pumped from underground goes for irrigation.

The tripling of world water demand over the past half-century, combined with the advent of diesel and electrically driven pumps, has led to extensive overpumping of aquifers. As a result, more than half the world's people now live in countries where water tables are falling and wells are going dry. Among these countries are the three that account for half of the world grain harvest: China, India and the United States. In India, water tables are falling in most states, including the Punjab, that nation's

breadbasket. In the United States, aquifers are being depleted under the southern Great Plains and throughout the Southwest, including California.

If the world is facing a future of water shortages, then it is also facing a future of food shortages.

To be sure, it is difficult to trace long-term trends in food production, which fluctuates with weather, prices and the spread of farm technology to developing countries. In one of the major economic achievements of the last half-century, China raised its grain output from 90 million tons in 1950 to 392 million tons in 1998. Since then, though, China's production appears to have peaked, dropping by 66 million tons, or 17 percent.

As a result, it seems likely that China will ultimately need to buy 30, 40 or 50 million tons of grain a year, and then it will have to turn to the United States, which accounts for nearly half of the world's grain exports. Imports on this unprecedented scale will create a fascinating geopolitical situation: China, with 1.3 billion consumers and foreign exchange reserves of \$384 billion--enough to buy the entire U.S. grain harvest eight times over--will suddenly be competing with American consumers for U.S. grain, in all likelihood driving up food prices.

For the first time in their history, the Chinese will be dependent on the outside world for food supplies. And U.S. consumers will realize that, like it or not, they will be sharing their food with Chinese consumers.

Managing the flow of grain to satisfy the needs of both countries simultaneously will not be easy because it could come amid a shift from a world of chronic food surpluses to one of food scarcity. Exporters will be tempted to restrict the flow of grain in order to maintain price stability at home, as the United States did 30 years ago when world grain stocks were at record lows and wheat and rice prices doubled. But today the United States has a major stake in a stable China because China is a major trading partner whose large economy is the locomotive of Asia.

The pressure on world food markets may alter the relationship between exporting and importing countries, changing the focus of international trade negotiations from greater access to markets for exporting countries such as the United States to assured access to food supplies for China and the 100 or so countries that already import grain.

The prospect of food and water scarcity emerges against a backdrop of concern about global warming. New research by crop ecologists at the International Rice Research Institute in the Philippines and at the U.S. Department of Agriculture indicates that a 1-degree-Celsius rise in temperature (1.8 degrees Fahrenheit) above the optimum during the growing season leads to a 10 percent decline in yields of rice, wheat and corn. With four of the past six years being the warmest on record, grain harvests are suffering. High temperatures lowered harvests last year in India and the United States and scorched crops this year from France to Ukraine.

The new combination of falling water tables and rising temperatures, along with trends such as soil erosion, has led to four consecutive shortfalls in the world grain harvest. This year production fell short of consumption by a record 92 million tons. These shortages have reduced world grain stocks to their lowest levels in 30 years.

If we have a shortfall in 2004 that is even half the size of this year's, food prices will be rising worldwide by this time next year. You won't have to read about it in the commodity pages. It will be evident at the supermarket checkout counter. During the fall of 2003, wheat and rice prices rose 10 percent to 30 percent in world markets, and even more in some parts of China. These rises may only be the warning tremors before the earthquake.

We can, however, take measures to improve world food security. We could recognize that population growth and environmental trends threaten economic progress and political stability just as terrorism does. Since the overwhelming majority of the nearly 3 billion people expected to be born during this half-century will be in countries where water tables are already falling and wells are running dry,

filling the family planning gap and creating a social environment to foster smaller families is urgent.

The situation with water today is new, but similar to that with land a half-century ago. Coming out of World War II, we looked toward the end of the century and saw enormous projected growth in population but little new land to plow. The result was a concentrated international effort to raise land productivity; boosting the world grain yields from just over one ton per hectare in 1950 to nearly three tons today. We now need a similar global full-court press to raise water productivity, by shifting to more water-efficient crops, improving irrigation and recycling urban water supplies.

As it becomes apparent that higher temperatures are shrinking harvests and raising food prices, a powerful new consumer lobby could emerge in support of cutting carbon emissions by moving to a hydrogen-based economy. It is a commentary on the complexity of our time that decisions made in ministries of energy may have a greater effect on future food security than those made in ministries of agriculture.

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Many commodity markets including soybeans, wheat, corn, and cotton are already in the midst of violent upside rallies, and we do not want to get involved forecasting specific targets for these markets at this time. Maybe we will do so in a subsequent monthly letter.

But in terms of buy-and-hold themes, we can only think that agriculturally oriented companies such as Bunge (BG), Agco (AG), or Delta Pine & Land (DLP) might make fine long-term investments. So please take these three stocks as our thematic long-equity picks for the year.

Somehow this letter has made it from euro-yen, to foreign currency denominated S&P patterns, to global weather patterns. When we start writing this letter, we often do not know exactly where we will end up, but hopefully we have provided some useful insights along the way. We have also made many different predictions, and surely some of these may end up missing the mark. Please use your own judgment when investing, and treat our analysis only as a set of broad guideposts provided with best intentions, but still surely subject to some mistakes.

We will certainly endeavor to update our analysis on a timely basis as the year progresses – particularly when significant shifts in market behavior so demand.

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Send us your comments at information@Sandspring.com.

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