

Sand Spring Advisors LLC

The Cycle of War & The Agony of Debt

by,

Barclay T. Leib

October 20, 2001

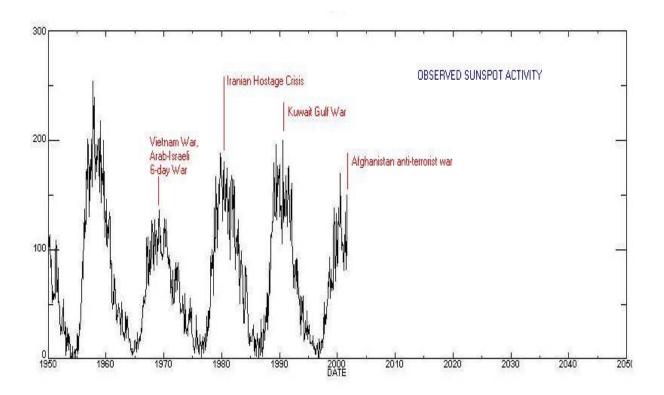
Readers of Sand Spring Advisors work know that cyclically we believe in a rhythm to the world that equals 2 * pi * 1000 days, or 6282 days, or 17.2 years (see "Measuring Financial Time: The Magic of Pi," February 2001). Within this longer-term rhythm, a half-cycle equates to 8.6 years, and each 8.6-year cycle is divided into twelve 8.6-month cycles.

We have also suggested that there are likely more than one such cycle overlapping each other. The Princeton Economic Institute may have stumbled onto the 8.6-year cycle that caught significant periods of panic or reversal in the global capital flows. Yet another 8.6-year cycle may exist that marks periods of revival. But is there an 8.6-year cycle that marks periods of war?

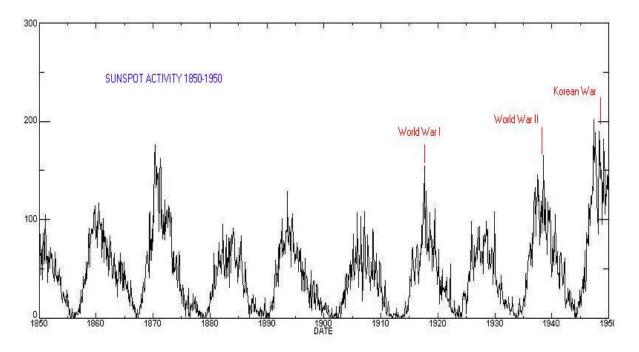
Perhaps, or perhaps not. As strange as it might initially seem, the September 11, 2001 World Trade Center attack happened to occur approximately 8.6 years after the first World Trade Center attack transpired in early February, 1993. The span is not precise to the day, but it is surprisingly close. Notwithstanding, we do not see the rhythm of warfare to truly fit "the magic of pi." Pi is like a positive harmonic – the AC-DC current that marks life's rhythm. War is more of a sudden disruption – an angry flare of human intensity that ripples through history with a somewhat different pattern.

Specifically, we think that war may somehow be cyclically tied to solar sunspot activity that peaks approximately every 11-12 years. Once again, the day counts aren't precise, but just think about it. Eleven years prior to this year's World Trade Center disaster, we were in the midst of the Gulf War in late 1990. 11 years prior to that we were enduring the Iranian Hostage Crisis in late 1979. 11+ years prior to that saw the height of he Vietnam War in 1968, as well as the Arab-Israeli 6-Day War.

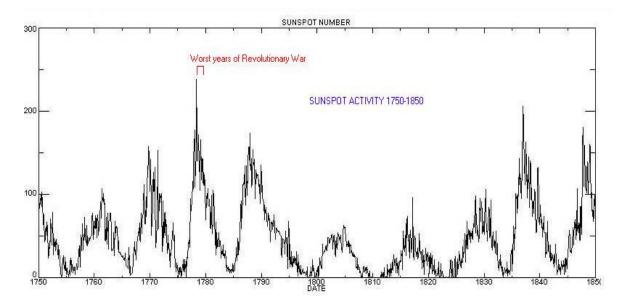
Now compare this rhythm to that of sunspots pictured below. Current high sunspot activity started in 2000 and is expected to continue into early 2002.



Carrying our 11-year cycle further back in time, one might initially anticipate something of a problem – 11-12 years prior to 1968 being of course 1956-57 (a period that marked the second Arab-Israeli War but little else globally), and 11-12 years before that being 1945-46: the end of World War II, not the beginning. But look at the chart below and notice how sometime in the late 1940s and early 1950's, there was a gentle shift in the sunspot cycle, leaving 1945 as a low, not a high. Instead we saw highs in sunspot activity in 1939 (WW II's true onset), 1950-51 (smack in the middle of the Korean War), as well as another hump of sunspot activity back during the World War I years between 1914-1918.



And just look at the spike in sunspot activity during years of 1778 and 1779 as the Revolutionary War raged, and in the Winter of 1779 General Washington's troops were suffering a horrific winter in the Jockey Hollow area of New Jersey – just up the road from our offices. Sunspot activity was running well above 150 per day for that century's maximum readings.



Now any reasonable person examining the above charts is likely to admit that the activity of an angry sun is somehow reeking more than just chance havoc with our human psyche. And for whatever reason, the general intensity of sunspot activity seems to be picking up. Sunspots have spiked above an average of 150 per day on 7 separate discernable bursts in the 20th century vis a vis just 3 discernable bursts apiece in the 19th and 18th centuries. Maybe this is indicative of a world getting more violent and out of control over time. Curiously, although the current sunspot cycle is supposed to have already peaked in the current cycle, the number of sunspots visible as we write on October 19, 2001 is a very high 219 – just in time perhaps for the Afghanistan ground offensive.

War Begets Inflation; Inflation Begets Higher Rates; and Higher Rates Beget Lower Real Estate --But It All Takes Time to Play Out

On a more fundamental basis, we also know that war tends to bring inflation. With time, inflation then brings higher interest rates, and higher interest rates eventually bring a cyclical turn lower in real estate. Is it any coincidence that we had inflationary peaks back in 1980 just after the Iranian crisis of 1979? Previously, Vietnam hostilities may have peaked in 1969-71, but inflation lingered a powerful force until 1973-4, when finally, both the stock market and real estate markets fell apart. Just think of 1989-91. First we had the Gulf War. Then we had a pick-up of inflation and interest rates. Then we eventually had an economic and real estate sag that cost George Bush senior the election.

We don't think this time around will be any different. As before, it will simply take a bit of time to play out. As long as war reigns in Afghanistan, the Fed will err on the accommodative side. Assuming Bin Laden puts up a good fight but eventually craters sometime early next year, markets will finally have cause to celebrate. All of the Fed's current easing will then eventually migrate back into the markets and a strong February-November equity rally could ensue. Ironically, and despite lessening global political tensions at that time, gold sector stocks might easily be in the lead of this move as a typical late cycle inflation play. But eventually the Fed will need to end this latter party or else risk losing complete control of U.S. monetary policy. To squelch clear emerging inflationary pressures, the Fed will eventually be forced to start tightening (in our mind post November 2002), thereby causing real estate investments to finally come undone at that time.

Every war is a bit different of course, and no one is saying that the current war will cause anything near the industrial buildup of World War II. But spending is spending. In a recent Bloomberg article penned by Caroline Baum, Jim Bianco of Bianco Research challenged: "You show me a country that has had a war that was deflationary: The Gulf War, the Cold War, the Vietnam War, World War I and II – [all of these] wars caused an increase in inflation." Wars cause government spending and borrowing (net deficit spending), certain shortages, and misallocation of resources – all in support of the necessary new cause.

Northern Trust economist Paul Kasriel agreed in the same article, stating categorically that, "It may not be fashionable [to say], but with war, inflation is going to be higher than it would be otherwise."

Pulling Out All the Stops

Even before the WTC disaster, there was strong evidence of a dwindling government budget surplus, and post the WTC disaster, Congress is passing emergency funding bills at a swift pace. The U.S. government surplus that we heard so much about in recent years is clearly soon to be something of the past.

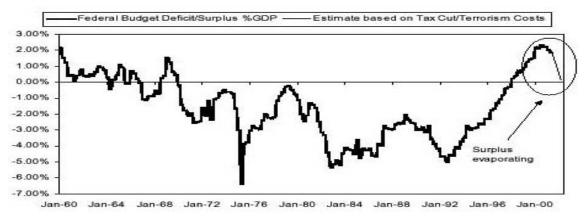
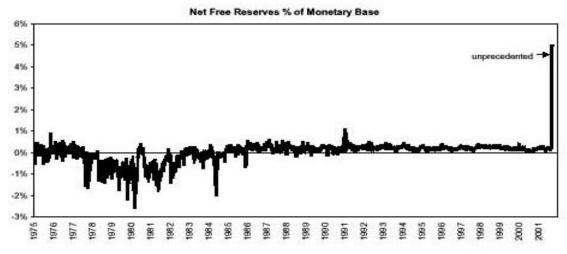


Chart courtesy of Bridgewater Associates

The Fed has also recently expanded the money supply at a rate unprecedented in U.S. history. While the \$166 billion (10+%) increase in the broad monetary aggregate M2 in the week of September 17th was clearly "technical" to ensure the proper functioning of our bank settlements system, the Fed only drained \$67 billion from M2 the following week. M3 actually increased \$8.3 billion in that latter week. Net net, for September, the Fed has clearly put the pedal to the metal in a way it has never done before --- as shown in the chart below of the net free reserves as a percentage of the total monetary base.





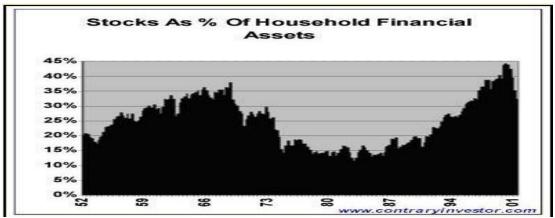
Indeed, the Fed has recently lowered short-term rates so far that we now have the steepest yield curve in modern American financial history. This is shown in the chart below where the 3-month T-bill yield is divided by the long bond yield.



Chart courtesy of Bridgewater Associates

At no prior time in modern American history have short-term rates been as low relative to longterm rates. The Fed of course controls the front end of the yield curve, while the market controls the back end. The Fed is desperately "pushing on a string" to prop up an ailing consumer, while the market is thumbing its nose at the Fed and effectively saying current tactics won't work longer term. As measured by the T-Bond yield itself relative to current inflation, the market clearly sees inflation as a problem, and is demanding high real rates for longer-dated paper. The market of course often has an uncanny ability to properly discount the future.

And yet, as Carolyn Baum herself points out, it has become truly "unfashionable now to even talk about inflation." It is the drop in consumer spending that everyone is focused on, and the negative impact that the resulting lower sales will have on America's average over-indebted corporate balance sheet. Having just finished some 21 years of deflationary times, people can only imagine more of the same. They see Dell engaging in ruinous price wars versus Compaq and Gateway, Intel going toe-to-toe against AMD, and Mattel dueling with Hasbro for a greater share of the diminished Christmas-time retail sales, etc. People extrapolate out from these events and empirically conclude that it is deflation we must be most concerned about, not inflation. Now suddenly nervous to be still holding a great portion of their financial net worth in stocks (see below – these holdings now dwindling in value daily), people increasingly buy straight "risk free" treasury securities, when if anything, they should be buying TIPS (Treasury Inflation Protected Securities) that have a lower nominal yield, but a far better chance not to be ravaged by undue governmental spending and inflation over time.

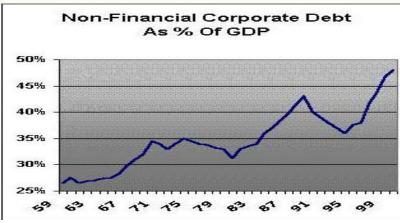


Source: ContraryInvestor.com

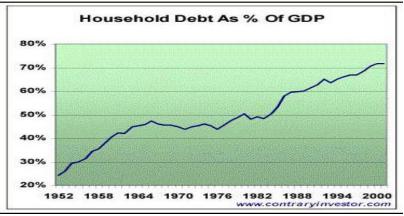
Let's call this phenomenon "the neophyte double-dip" path to losing all of your wealth in the shortest amount of time. First you lose part of your wealth by investing in companies with products that we don't really need (from the unpteenth Las Vegas casino, to the unpteenth new website, to the unpteenth new telecom venture that is ultimately laying unneeded and redundant fiber optic cable). Then, after losing half one's money as these equities crater, the neophyte buys Treasury Bonds, temporarily breathes a sigh of relief that some degree of wealth has been salvaged, and then promptly loses the second half of the nest egg by buying bonds with 10 to 30 year maturities because these bonds are the only ones with a seemingly "attractive yield." If the neophyte is particularly greedy still, he or she may buy corporate bonds at current large spreads over treasuries.

Debt, Debt, and More Debt

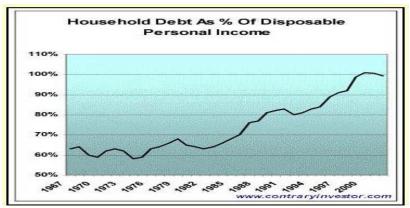
But the market is pricing these securities this way for a reason. All in all there is too much debt within the system, and there is a legitimate question how any of it will be serviced, let alone ever paid off – particularly as the economy currently falls off a cliff. Smart people know this. The neophyte investor does not. Everyone should stare long and hard at the debt-laden pictures below, provided to us by ContraryInvestor.com. This is a long-term true mess just waiting to happen, and already serving to hammer stocks like Providian and Americredit in recent weeks.



Source: ContraryInvestor.com

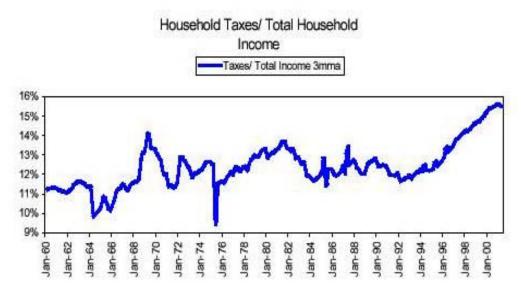


Source: ContraryInvestor.com



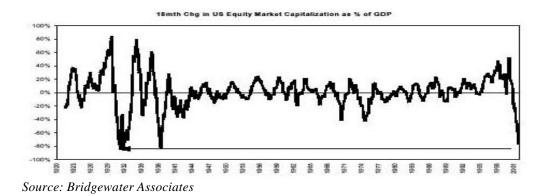
Source: ContraryInvestor.com

Household taxes are also now so high as a percentage of total household income, that the ability to bear the cost of the above growing debt load is headed in only one direction: a clear collision course with bankruptcy court for many individuals.



Source: Bridgewater Associates

And don't let anyone tell you that the recent collapse in the stock market only undoes previous excess paper gains. The destruction of wealth that has occurred since March 2000 is as great in percent of GDP terms as what occurred back in 1929. This is not a mild recession we are talking about. It is a "debt crunch" payoff day for all those overly leveraged, who now watch the assets that they are invested in melt.

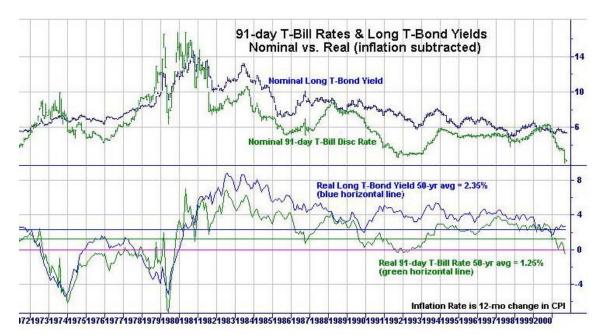


Avoiding a Liquidity Trap like Japan

But all this leads to our ultimate point: The government may not be able to prevent debt-laden basket cases like Polaroid and Xerox die, but can the Fed let that transpire to the entire American corporate world and populous? The government might let Palm, or Ask Jeeves, or Aether Systems declare bankruptcy someday, but will it let a plethora of debt-heavy companies such as HP, EDS, Lucent, ATT, Motorola, Ford, and Nortel do so? We don't think so. Nor at some point will the Fed stand meekly by and watch personal bankruptcies continue to soar at unprecedented rates in the U.S. That would simply bring too much pain to stockholders, bondholders, and citizens alike. America has watched Japan's Liquidty Trap unfold over the past 11 years, and we will be smarter and faster to avoid their debt-burdened deflationary outcome.

Instead, we will resort to outright monetization of our debt problems far faster than Japan has, likely with a very different result for our long-term bond market in the process, particularly when compared to the continuous strength (to date) of Japanese Government Bonds. The only way out of the upcoming conundrum will be to cheapen the cost of all the past debt burdens that are now coming home to roost -- to inflate away the very value of this debt. Despite any mild tightening that the Fed may feel obligated to engage in by late 2002, ultimately the government will end up handing America less valuable money to pay off past borrowings, and allow companies to print greater revenues albeit in cheapened nominal money as well. Our view is that this will be particularly the case from early 2005 onward. Stagflation-city.

And how does one make money cheap? The answer is of course to push the real cost of money (nominal short-term rates minus the inflation rate) to below 0%. And as the chart below shows, that process has already started. For only the third period in the past three decades, T-bill yields measured in real inflation-adjusted terms have now fallen below 0, and in those prior two instances (1973-1980, and then again in late 1992 through early 1993), it was not long before gold became an investment vehicle of some popularity and success.



So how to take advantage of this cycle of war and ongoing negative real rates likely to be associated with it? Security and defense stocks have been the obvious first recipients of market attention. Many of course have already vaulted higher, and while there will of course be further winners here, we would not advise chasing stocks like Lockheed-Martin, General Dynamics, Raytheon, or Northrop Grumman. Better long-term investments will likely be found in the small-cap high-tech area of voice, face, and fingerprint recognition. But those stocks are up quite a bit post the WTC events, so it will likely pay to be patient and wait there as well. Remember: sunspot activity is due to wane in the second half of 2002, so war-like behavior will likely recede then as well.

Another category that should be thriving – at least through the transition that will exist to more outright inflationary times beyond 2005 -- is in the bankruptcy consulting business. Many bankruptcy attorneys and advisors are of course privately held enterprises, but we are currently researching a few that are public and will revert with specific suggestions here. If subscribers have particular ideas for us to look at in this space, we will most certainly do so.

Third, we will continue to espouse our previous friendliness toward oil exploration companies Anadarko Petroleum Corporation and Apache Energy. At very modest multiples to their current earnings, both of these stocks should be poised to see new highs with time. Any disruption of oil supplies (should Iraq, for example, become targeted next for anti-terrorist activities) will only hasten this process. Even before the World Trade Center Disaster, President Bush knew he had to fashion a better domestic oil and gas exploration business environment so as to help mitigate foreign energy dependency and tight energy supply situations as witnessed in California last summer. Post the WTC disaster, that policy should move more quickly into place.

Lastly, there is of course gold – that asset that is the bane of most who have ever touted it, and the asset that most every Central Banker now loves to dismiss as a barbaric relic of our financial past. But gold has been out of disfavor for so long, and its price has stagnating so close to actual production costs for so many years, that it is -- by definition -- becoming more interesting by the day.

Mostly behind us now are the constant Central Bank gold dis-hoardings of the 1990's. Canada, Belgium, Spain, Portugal, Germany, Australia, the Netherlands, and now Britain have all already engaged and are now finished (or soon to finish) this process. Only Switzerland really remains as a large overhanging supply. Russia has gone from a net seller of gold on world markets to having their Central Bank now as a buyer of gold as they try to replenish some of their previously dissipated reserves. Indonesia is another large producer of gold, but is hardly a stable political environment with its 250 million strong citizenship filled with a large Muslim population – a population now increasingly protesting the U.S. actions against the Taliban. Indeed, in a recent television interview, Richard Medley, the wellrenowned head of global intelligence firm Medley Global Advisors, speculated that there is a far greater potential problem brewing in Indonesia than even with the Muslim population in Pakistan.

South Africa remains of course the world's largest producer, but that country offers a geo-political environment that is hardly stable either, and 10% of the South African mining population is currently infected with HIV and/or AIDS. Working in these mines – sometimes 2-3 miles underground -- is truly one step removed from hell. Trust me, I've been down one or two deep South African mining shafts in my day. If trading gold has been full of agony, making an ounce of it is even worse.

Elsewhere, there are gold mines all over Chile, Guyana, the U.S. and Canada, but for every mine that is still open, it is easy to find at least one other that has already been put into mothballs. Globally, a low cost mine is considered one where the actual cost of producing an ounce of gold falls near \$170 an ounce. Add to that number all the sales, depreciation, and general administration expenses, and all-in costs often approach \$250-\$270 an ounce. That's not much profit margin compared to today's \$280 spot price, and many previously executed forward hedges that have protected miners from the ever-falling gold price in recent years are quickly expiring -- rolling off the books. While some mining companies may reestablish new hedges for future production, we believe that locking in current price levels is so unattractive, that many companies will increasingly use only long put option strategies instead of forward sales. Such a strategy helps ensure outright company survivability, while not locking oneself into bad forward prices that potentially entail margin calls etc. if these hedges become under water (remember Ashanti). As an offshoot, it also puts less downward pressure on the immediate price of gold.

Given such, picking the long-term winners from the companies that won't survive in the short term is always tricky, but surely companies such as Anglogold will make it. So too should Newmont Mining, although we worry a bit about its overall debt load. In addition, when the turn in psychology finally leads the market back into these stocks, there may be so few of these stocks left -- with such a

modest total capitalization -- that it might well be like yelling FIRE in a crowded theater. After all, the combined market capitalization of Anglogold and Newmont taken together currently stands at just 6.8% of the total capitalization of a stock like Coca-Cola. For the price of buying Coke, one could likely buy the entire gold mining industry. This market is truly tiny compared to the potential cash flows that could someday be thrown at it. That day may not finally come until beyond 2005, but it will come. Gold is undoubtedly cheap – nominally at the same price it stood at 25 years ago (name three other assets anywhere you can say that about), being well lower in inflation-adjusted terms, and truly representing exceptional value when one adds in the fact that gold is quoted in the U.S. dollar, and the dollar has also significantly declined in value over the past three decades (notwithstanding it's small blip of positive performance against many currencies since 1995).

One is reminded a bit of the famous supertanker trade of the early 1970's. Supertankers were a dime a dozen, and some too big and expensive to actually operate profitably at the oil prices that prevailed circa 1970. But a few savvy individuals including Armand Hammer of Occidental Petroleum fame bought supertankers dirt cheap in receivership, immediately mothballed them, and then waited. By the late 1970's that investment had paid for itself hundreds of times over. That's the type of strategy that someone with sufficient resources and staying power should execute now in the gold mining industry.

Looking back at his tory, it is also noteworthy that one of the methods used by Franklin Roosevelt to combat 1929-33 fast plunge in asset values as a percentage of GDP was to systematically nudge up the gold price (that he began setting over breakfast each morning) by over 30% from its previous fixed value. In current times, when lower interest rates fail to elicit the intended stimulative response, maybe the Fed and Bank of Japan should now start doing the same – actually buying gold against pumping money into the economy to pay for it. Why do Central Bankers always monetize by just buying in bonds?

Snore Investing vs. Sudden Death

Buying gold related assets may not be exactly exciting of course, but at least one would be buying some degree of intrinsic value as compared to the huge loss of wealth that many neophyte investors suffered in recent weeks at the hands of low-end credit card stocks such as Providian and Americredit.

How could people have been so blind and so naïve not to see at least the first part of these impending moves?

Of course, we did see it coming, but then advised subscribers to take profits on short sales too early. That's just a small disadvantage of our active and yet conservative trading style. When we reach our first Fibonacci target, we say "thank you" and move on to other situations. Sometimes that target gets blown through, as happened in this instance. But at least we had a clue in advance that this was going to be a big problem. And when stocks priced for perfection hit big problems, the resulting decline is always twice as fast as the slower trudge up. As one market sage once said to me: "Traditional long investors take a huge amount of risk for holding stocks over a long period of time in order to reap slow steady gains. When markets turn, short sellers can typically make a large amount of money with defined stop-loss risk in a far shorter period of time. Which is a better strategy?"

What lurks for Providian and Americredit from here? We honestly have little short-term idea. Both stocks look pretty oversold for now, with rhythms that could be construed as completed 5-wave Elliott wave counts. But would we try to bottom pick them? No way. Only for those truly bold at heart would PVN maybe represent a potential short-term flip from an extrapolated low near \$3.36-\$3.37. If you want to play for a reaction rally from there, be my guest. I'll likely not be paying close attention to this stock for awhile.

What we might start doing is to pay closer attention to smaller regional banks. Behind the scenes many of them may already be replicating Providian's increasing credit card delinquencies. One banking expert recently told me that if I thought Providian's lending practices were flawed, I should take a look at some of the practices of small regional banks across the country. Further short-selling opportunities may still reside there. The only problem with this thought, of course, is that many of these banks could quickly become fodder for disgruntled investor proxy fights, takeover, and consolidation. Shorting such banks is



thus fraught with danger. Once again, we need to do more work in this area before making any specific recommendations.



The Sun and the Moon Too

We have rambled quite extensively from our initial discussion of the Cycle of War into the world of increasing inflation and debt defaults. But as a final aside, and at the risk of sounding like a true "lunatic," let me ask the question: If the Sun can impact the human psyche, can the Moon do so as well?

I am not as astro-analyst by any stretch of the imagination, but I do know that my wife gave birth to all three of our children on a full moon. Her body certainly seems to have been sensitive to its pull. Ask any somewhat observant waitress at any bar about tipping patterns during full moons, or any police dispatcher about crime patterns during full moons, and you will be told of definite rhythms of extreme behavior.

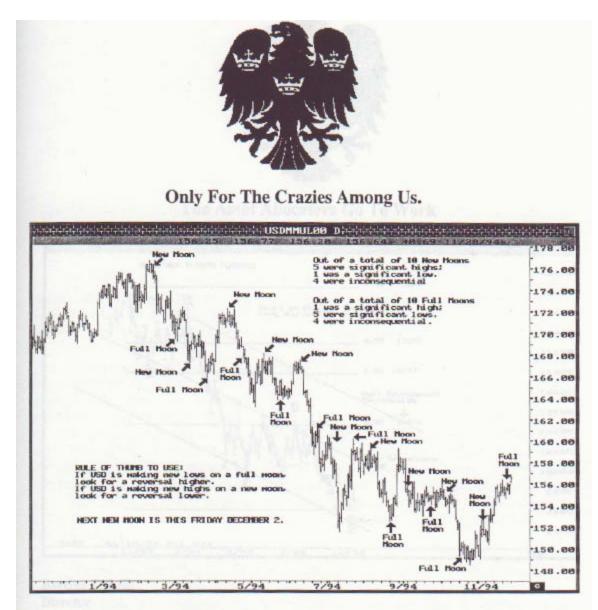
But does this trickle over into the financial markets as well?

A true story from my archive of trading experiences is that a "local" trader on the floor of the New York Commodity Exchange once told me to "watch out for full moons on long holiday weekends: big moves tend to happen on the other side of them." I thought this fellow was nuts at first, until I soon found out for myself that a large number of breakaway moves – particularly in emotional markets such as the precious metals – did indeed tend to happen upon the few chance occasions per year when a full moon coincides with a long holiday weekend. My only explanation for this is that people tend to "square up" their positions going into the long weekend, and then courtesy of the Moon's added pull, a totally new trend or tone to the market emerges coming out of such a weekend. Don't laugh, but as the head of JP Morgan's bullion and foreign exchange options trading in the mid-1980's, I was able to make a great deal of money simply being sensitive to this expected behavior.

As another example of full Moons and market behavior, just look at the chart below that I sent out to clients of Barclays Bank on November 28, 1994. It shows the behavior of the dollar versus the Deutsche mark during a steady downtrend, with full moons and new moons depicted around the rhythm. Out of 10 new Moons and 10 full Moons during the 1993-94 period shown, six of each occurred on significant price extremes. Although far from a lay-up, new Moons tended to mark dollar highs, while full Moons tended to mark dollar lows.

This obviously has nothing to do with long weekends, but I find the rhythm fascinating both then and now. I was told at the time by the otherwise fundamental hedge fund of Tiger Management (who received a copy of this chart), that "This was the single most interesting and useful piece of research that we have received over our fax in a long while."

That obviously does not say much for the plethora of other traditional Wall Street analysis their fax machine regularly produced.



Although the cause clearly may or may not be correlated to the lunar cycle, it is certainly interesting to note the definite rhythm of the chart above.

Barclay T. Leib				
Director				
Barclays New York				
(212) 412-6950				
November 28, 1994				and the local division of the
1211 Clobal Manage Madage and English Rachange	Dominus Dork DI C	Mambar of D/DO	MambaroffEA	Telephone 64 71 606

BZW Global Money Markets and Foreign Exchange - Barclays Bank PLC - Member of IMRO - Member of SFA Telephone 44 71 696 2380. Reuters BBOP; NYC Telephone (212) 412-6950, Reuters BOBO or BBNX; Tokyo Telephone 81-35-255-0078, Reuters BBOQ or BBSO. Foreign Currency Options Market Commentary.

Although the information contained in this document has been compiled or arrived at from sources believed to be reliable, no representation is made as to their accuracy or completeness. Any reliance you may place on the accuracy of this information or the validity of our opinion is at your own risk. All opinions and estimates included in this document constitute our judgement as of this date and are subject to change without notice. Barclays Bank and/or its affiliated companies may be a tearket maker or otherwise hold a position as a principal in an instrument discussed in this document. Accordingly we may at any time have a long or short position or may trade in such instrument(s) or options on any such instrument(s). No liability whatsoever is accepted for any direct or consequential loss arising from the use of this document. Additional information regarding this document will be furnished upon request. No part of this document may be reproduced in any maner without the prior written permission of the issuing company.

Moving ourselves into real time, so far this year we have had only one full moon/long weekend combination: September 2, 2001, this past Labor Day weekend. Post that period of time, a stronger and more violent trend certainly emerged in U.S. equities. Maybe this is just coincidence, but maybe not. My personal experience strongly suggests: not.



The next full moon/ long weekend combination won't transpire until December 30^{th} (New Year's weekend), and for the rest of 2002 it only occurs once again on Memorial Day weekend when the moon turns full May 26^{th} , 2002. This leaves us on a very preliminary basis for 2002 looking forward in time to potential market turn dates on four occasions:

December 30, 2001 (Full moon, long weekend) February 19, 2002 (PEI 4.3-month cycle turn) May 26, 2002 (Full moon, long weekend) Nov. 7, 2002 (PEI 4.3-year cycle post July 1998 high, and 8.6 months from Feb 19th cycle date)

Mark those dates in your calendar ahead of time as psychological turning points – directions yet to be defined -- in global capital flows next year.

Perhaps some physicist will one day prove how the forces of the moon's magnetism and the sun's solar energy influence the human brain. Maybe that same physicist will be able to show why the fractal world of Fibonacci rules the amplitude of market swings, while pi rules the rhythm of markets across time.

For now, I'm happy to believe from anecdotal experience that for some reason the old Sumarian-Egyptian saying "As above, so below" actually is an important factor underlying human and market behavior.

All contents are Copyright © 2001 by Sand Spring Advisors, LLC, Morristown, NJ

Send us your comments at <u>information@Sandspring.com</u>.

AN IMPORTANT DISCLOSURE

Sand Spring Advisors provides information and analysis from sources and using methods it believes reliable, but cannot accept responsibility for any trading losses that may be incurred as a result of our analysis. Our advice should be deemed our personal opinion and not a recommendation to invest. Individuals should consult with their broker and personal financial advisors before engaging in any trading activities, and should always trade at a position size level well within their financial condition. Principals of Sand Spring Advisors may carry positions in securities or futures discussed, but as a matter of policy we will always so disclose this fact if it is indeed the case. We will also specifically not trade in any described security or futures for a period 5 business days prior to or subsequent to a commentary being released on a given security or futures contract.