Section 1A: Market History and the Long View

In Search of History and a Word Processor That Works

April 23, 1985

Last week, I said I would write this week about the crucial allocation between stocks and bonds that is on everybody's mind. After spending three hours or so writing on this subject on Sunday, the ultimate word processor nightmare occurred, and, on the print command, my entire text was erased. It's too late to attempt to rewrite this week what was lost so, instead, let me summarize some conclusions.

In making asset allocation decisions, I use both mathematical tools and subjective judgment. Nunzio Tartaglia's Analytical Systems Group has developed a variety of quantitative models for comparing stocks, bonds, and short-term investments, and I use a Present Value Model and the Ford Dividend Discount Model. In addition, straight risk/reward analysis of stocks, bonds, and bills is helpful. Next week, I will report on the status of each of these systems, all of which, incidentally, say that bonds are more attractive than stocks right now.

However, I place more emphasis on judgment considerations, because valuation models are just snapshots of the present's relative value relationships. These models have no predictive powers. Yet, financial asset prices have a lot of the future in them; in other words, they incorporate discounting mechanisms. Valuation models are like X-rays; they do not in and of themselves evaluate a patient's future health, but they help the doctor to do so.

It may sound corny, but I believe the investor should heed the lessons of history, because the past replays, and one ignores its lessons at one's peril. The present always seems different from the past, but human nature doesn't change, and the patterns of fear and greed repeat. The cycles of economic history, particularly the ebb and flow of inflation, and the pattern of the relative performance of asset categories recurs. I am convinced that the past really is the key to the future.

We have done a great deal of work in collecting and ordering statistics. We found that it is very difficult to determine the exact year (much less the quarter) in which a particular era began or ended, and it is often difficult to fairly represent the performance of different assets. Messing around in the yellowing, dry pages of old manuals trying to reconstruct the past into an orderly framework is a good way to learn that even economic history is extremely complicated.

I think our work indicates that you want to be in bonds and commercial paper in deflationary times and in stocks in periods of price stability, disinflation, and moderate inflation. In times of rapid or accelerating inflation, real estate, precious metals, and equities provide positive real returns. But generalizations must be viewed with caution because performance varies considerably relative to the initial valuation of the asset in question. In other words, if the asset entered the period overvalued, its relative performance suffered. A recent example is equities in the latest inflationary era. After a long bull market, stocks were overpriced by all historical and psychological benchmarks as inflation began to accelerate; thus they failed as an inflation hedge. Knowing the record of history is not enough. The investor must be able to determine the present valuation of each asset relative to other assets and to its own valuation cycle.

Kondratieff and the Long Cycle

June 25, 1985

I believe that although knowledge increases, the world progresses, and technology advances, human behavior unfortunately remains the same. This is certainly true in the cycles of emotion in the stock market, and it has always seemed to me that it also should be valid in economic patterns. Thus I have been intrigued with the idea of a long cycle in human events that in general terms recurs. History does not have to repeat itself, but because people don't change, it does.

Economics is really mostly about cycles. Economists like Wesley Mitchell, Simon Kuznets, and Joseph Schumpeter have written about both the conventional business cycle and longer, 10- or even 20-year Juglar cycles. I have been fascinated for years, however, with the supercycles described by a Russian government economist named Nikolai Kondratieff, who created the first five-year plan for Russian agriculture in 1920. In 1922, Kondratieff published "The Long Waves in Economic Life," which describes a recurring 50- to 60-year economic cycle driven by the ebb and flow of innovation and capital investment, and that had social implications. In many ways, Kondratieff's writings are an explanation of history.

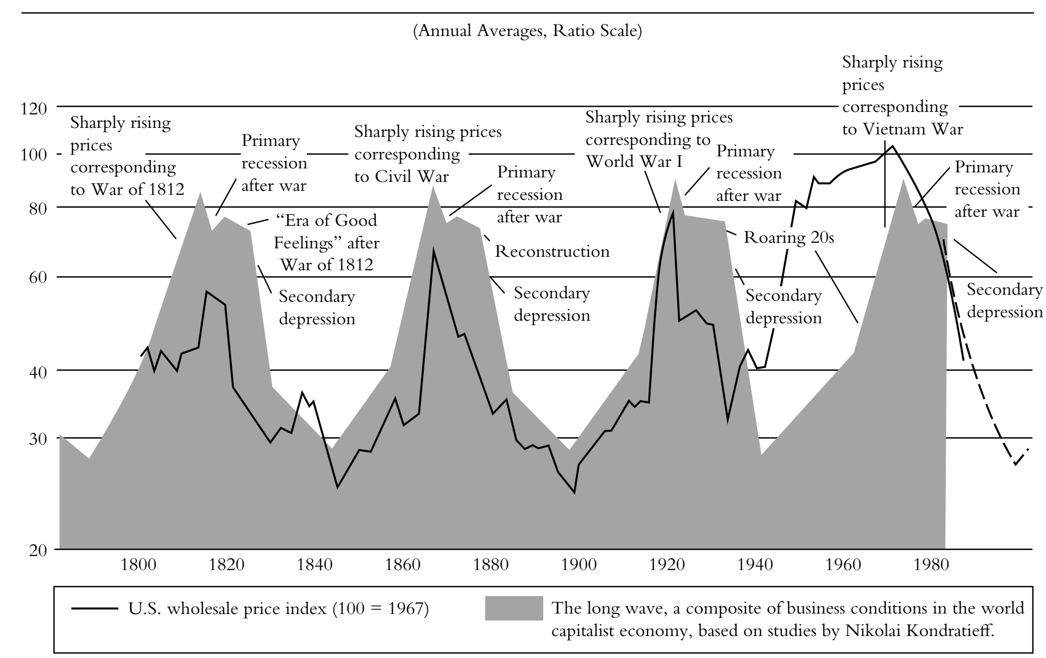
The commissars were not amused, however, when they realized that their agricultural economist's theory argued that the downturns in capitalist economies were not attributable to inherent defects within the system but were self-correcting. He was put on trial and sentenced to Siberia, where he spent the rest of his life breaking big stones into little ones. It is believed he died in the 1930s. His papers were generally ignored until the last decade or so, when the work of Professor Jay Forrester of the Sloane School at MIT attracted attention.

The idea of long cycles in human economic history goes back to biblical times. The Old Testament tells of 50-year jubilees, in which slaves were freed and debts were forgiven. Gibbon's *Decline and Fall of the Roman Empire* gives evidence of a 50-year cycle of war and inflation, and a 54-year cycle can be found in the history of agricultural prices going as far back as the Mayans in Central America in 1260. Even primitive economies seemed to become overextended in a regular, more or less half-century cycle. Wealth in terms of land, slaves, and debt would become concentrated, and a purge to revitalize was almost part of the order of nature.

Each cycle, as the accompanying chart shows, is characterized by four distinct phases. First there is a long growth era (27 years on average) culminating in an inflationary peak. Then comes a 1- or 2-year primary depression, which is followed by a plateau of 5 to 10 years. The last phase is a secondary depression and 15 or more years of stagnation. The precise timing of each cycle is different, but the broad outline is eerily similar.

Kondratieff identified three 54-year cycles: 1790 to 1843, 1843 to 1896, and 1896 to the early 1940s. His charts and papers, which relate to England, the United States, and France, analyze commodity prices, interest rates, and wages. Actually, Kondratieff identified rather than analyzed. Professor Forrester and his Systems Dynamics Group believe the waves can be explained by capital investment. During growth phases, demand is imposed on the capital goods industries by both the consumer goods area

Kondratieff's Long Wave



SOURCE: Richardson & Snyder, Publisher, NY/Paragraphics.

and the capital goods sector itself. At the peak, a labor shortage drives wages up and encourages capital-intensive production, which puts even greater stress on the capital goods area. During the plateau phase, the capacity created during the growth period is not exploited, while a relative fall in labor costs encourages a shift back to greater use of labor, which further diminishes the need for new capital equipment. The stagnant phase is marked by a secondary depression and a rapid collapse of the capital goods sector. Accumulating physical depreciation then sets the stage for the next growth phase. In effect, as Forrester says, a major depression rebalances the economy, liquidates debt, and clears away accumulated excesses.

Anyone who wants to get really immersed in the theory should contact Professor Forrester or, for the lighter version, buy *The Long Wave Cycle* by Julian Snyder, published by Richardson & Snyder, 25 Broad Street, New York. Another excellent article on the social and historical aspects of the Kondratieff cycle, including trough wars and peak wars, by Ronald Kaiser was published in the May–June 1979 issue of *The Financial Analysts Journal*. I think Forrester puts too much emphasis on innovation and capital investment and not enough on the human factor. Kaiser is more eclectic and even points out that every U.S. war has occurred either at the peak or the trough of a growth phase.

In any case, whichever way you look at it, the "primary depression" was either in 1974 or in 1980 when, just as in 1920, the prices of commodities, land, and real assets reached incredible peaks. We are now in the plateau phase where the world, thinking the worst is past, enjoys a false, Indian-summer prosperity. Economic growth is slow. Deflationary pressures in commodity prices and real assets offset inflationary monetary and fiscal policies. Stock prices rise, speculation surges, and a financial panic and stock market bust usually terminate the phase.

I am very struck by the similarities between the plateau stages of the past, and particularly the 1920s, with conditions today. For example, previous plateaus always began with major political scandal (the demise of the Federalist Party, the attempt to impeach President Andrew Johnson, the Teapot Dome–Harding scandal, and, this time, Watergate). Invariably, real estate and, particularly, land prices peak early in the plateau and then begin to decline (1820, 1875, and 1925). This time, farmland prices peaked right on schedule in 1980. Women's rights movements are strong (Susan B. Anthony's suffragette movement in 1890–1900, women's suffrage in the 1920s, and the attempt to ratify the ERA today). Other characteristics include a political shift to the right and more stable, traditional behavior by the younger generation after a surge of political and social liberalism in the last decade of the growth phase.

Financially, plateaus tend to be characterized by protectionism, usually in the form of tariffs (the 1816 tariffs, the Smoot-Hawley tariffs), a massive debt overhang (Germany's war debt then and the LDC debt today), and increasing use of leverage and margin for speculation in financial asset bull markets. The very low margin requirements of the 1920s were certainly a factor in the Crash of 1929. I think the growing acceptance of options and even the Fed's talk of eliminating margin requirements are very ominous signs, because plateaus often end with financial panics that precede the secondary depression and stagnation.

Most economists deride the "long wave" theory as being in a league with astrology and argue that advances in economic theory, the much greater role of government in the economy, and international cooperation in the past half-century make the economic cycle much more controllable today. I devoutly hope they are right, but the similarities between past cycles and the present bother me a lot. I worry that we really are in a period comparable to the mid-1920s—maybe even as late as 1926 or 1927. We investors will see one more powerful bull market characterized by massive speculation that will end badly (the panic of 1819, the panic and bear market of 1873–1879, the Crash of 1929). Most cycles in the past were not as severe as that of the 1930s, but they were depressions nevertheless. Some of the social and political aspects were not pleasant, including a trend toward witch-hunting, prejudice, and authoritarian government in other countries.

The similarities of the Kondratieff cycle to the present may just be fascinating coincidences, but the historical record is compelling, and, as I said at the beginning, human nature doesn't change much. Don't become obsessed with the precise timing, but as events unfold over the next few years, be open-minded, and keep Dr. Kondratieff's long-wave pattern in mind.

The Phony War

January 2, 1991

The present stalemate in the equity markets around the world reminds me of the time 50 years ago called the "phony war." After the blitzkrieg in the spring and summer of 1939, when Hitler and his Panzers overran Eastern Europe, the Germans stopped and consolidated on the Western front. From September 1939 until May 1940, there were skirmishes at sea and in Scandinavia, but nothing much happened. A false calm, a tranquility, lulled many people into thinking that it was just one more border war in Europe, that it wasn't different this time. They knew something threatening and savage, a product of past evils, was ranging loose in the world, but they still felt that, somehow, things would work out, that a world war could be avoided and that their lives wouldn't change. W. H. Auden caught the mood best in his great poem, "September 1, 1939."

Today, it is not so much physical death (although that could happen in the Gulf), but a lingering financial death that offends our night. To me there are, for the United States in particular, no credible reflationary levers left to reignite growth. The markets with their jaundiced, skeptical eye can't be fooled by the old stimulative tricks of the Fed and the Treasury. Debt rather than savings has financed growth, and now the United States is at record levels of public and private debt relative to GNP. The piper must be paid. The movie of the 1980s must be run backwards. But I find people still think we are in just another cyclical correction in the economy, real estate, the banking system, the art market, and the financial services industry.

One of the ancient and iron rules of forecasting is that events always take much longer to develop than expected, but once they begin, they occur much faster and go much farther than anticipated. So it was in the spring and summer of 1940, as Winston Churchill wrote in *Their Finest Hour*:

> Now at last, the slowly gathered, long pent-up fury of the storm broke upon us. Within a week the front in France, behind which we had been accustomed to dwell through the long years of the former war and the opening phase of this, was to be irretrievably broken. Within three weeks the long-famed French Army was to collapse in rout and ruin, and the British Army to be hurled into the sea with all its equipment lost. Within six weeks we were to find ourselves alone, almost disarmed with triumphant Germany and Italy at our throats, with the whole of Europe in Hitler's power, and Japan glowering on the other side of the globe.

I pray to God nothing like that happens to us, but, to me, the world, the markets now seem somewhat as they were then. It's not just the deadline in the Gulf. It's the banking system, real estate, and the Soviet Union, too. I can't prove it, but I feel it's the end of a supercycle of growth induced by debt, leverage, and asset inflation. At the same time, for years now, balance sheet liquidity has been declining. *The Bank Credit Analyst* expressed it well in its year-end review, which is well worth reading but which won't make you sleep any better: "The ultimate implication of the supercycle is a decline in living standards. It can occur in an orderly or disorderly way, through deflation or inflation."

House prices, art, salaries, bonuses, stocks can't keep going up forever. The average price of a home in California has risen from $24,680 in 1970 to $99,760 in 1980 and to $196,521 by the end of 1989. Charles Biderman, writing in *Barron's*, points out that the mortgage payment required to pay debt service on the usual California new home amounts to 80 percent of the average income of a California family. As he puts it, all Californians believe they have inherited a divine right to make a killing in California real estate and are leveraged up to do it. The only trouble is that even home prices don't go up forever. In the United Kingdom, for example, home prices peaked after the Napoleonic War in 1815 and then fell for a hundred years. Even in the United States in this century, they declined in real terms for 30 years in one stretch.

Speaking of real estate and its condition, the best, most dispassionate analysis I have seen is Salomon's December 1990 "Real Estate Market Review." The writers anticipate that the Russell-NCREIF Index will report total returns of 2 percent in 1990 and minus 2 percent in 1991. After 1991, they believe returns will be dismal for a while because they assume that writedowns will be spread over "at least the next several years." They expect that before this cycle is over, the capitalization rate for commodity real estate will trade through mortgage rates and that rates for trophy/franchise real estate will increase from 5–7 percent to 7–9 percent. They argue that there is a secular imbalance in the office, retail, and hotel sectors that will be exacerbated by the current recession and estimate that the United States has a 10-year visible supply of office space. Hotel occupancy rates, they say, will fall again in 1991. The industrial and apartment sectors will do relatively better because they are overbuilt only on a cyclical basis. The institutions that have lent billions in mortgages and home equity loans collateralized by high percentages of the current market value of residential real estate may be in for a financial blitzkrieg if job layoffs and falling house prices result in homeowners walking.

As you might have guessed by now, I think stocks are still in a bear market. My asset allocation remains 20 percent cash, 40 percent equities, and 40 percent bonds. It's not the end of the world. The good guys won 50 years ago, and they will win again. It just may take a while.

Ancient History

August 12, 1996

The hedge fund guys are the elite, the Green Berets of the investment business. To mix a metaphor and engage in the hyperbole that is a staple of our trade, the guys who run the big successful ones have the glamour of professional sports superstars but have a lot more money. Even Joe Montana and Michael Jordan don't have their own G-3s.

Hedge funds should be the perfect investment vehicles for all seasons. Because they can pay big money, the smartest talent flocks to them, their trading volume gets them the first and best call, and the managers' own money is usually in the pool with the clients', which minimizes conflicts of interest. There is no other job in the business where you can accumulate serious wealth faster than being a successful hedge fund manager. And then there is the psychic satisfaction of making central bank chairmen whimper.

Success breeds imitation. A large number of smart young people want to be hedge fund managers, and most think they can, that they have the touch for macro, if only they could get some money to run. New funds sprout like weeds, and it seems everyone's no-good brother-in-law who got laid off and then failed at venture capital is starting one. It's frightening! Van Hedge Fund Advisors of Nashville, Tennessee, says there are 4,700 hedge funds, up from 1,400 in 1988. This same source, which does research with the Owen Graduate School of Management at Vanderbilt University, reports that actively managed hedge funds worldwide now have $300 billion of assets, which is a lot of high-powered money. It's hard to tell what the underlying equity investment is, but Van says the 2,000 funds in their performance database (which presumably are the principal ones) have equity of about $100 billion.

In theory, hedge funds have the weapons to protect their capital in a bear market and even make money. It hasn't worked that way. I recently was sent a page from the May 1971 *Fortune* about what happened to hedge funds in the 1970 bear market. It was just one page, but it brought back very bad memories of cold sweats and sleepless nights.

The first hedge fund, A. W. Jones & Company, was started in the mid-1950s by Alfred W. Jones, a Time Inc. journalist who never ran money himself but had the idea of using leverage while maximizing stock selection by hedging some portion of the long position with shorts. A. W. Jones & Co. put up big numbers, and by the mid-60s its offspring were proliferating, with many newcomers, including yours truly, posting spectacular returns by using leverage and buying the speculative highfliers of the time. New money poured in. As usual, a bull market was confused with genius, and euphoria reigned.

Unfortunately, in December 1968 the Dow peaked at 985, and by the end of May 1970 had fallen 36 percent. By then, the hot stocks (a motley crew but probably no worse than the current crop) had been destroyed. For example, Itek fell from 172 to 17, Leasco from 57 to 7, National Student Marketing from 143 to 3, Litton from 104 to 15, LTV from 135 to 4, and University Computing from 186 to 13, to name just a few. This was when I learned that in a secular bear market, junk gravitates toward 3.

By September 30, 1970, when *Fortune* (using SEC figures) made its calculations, the Dow had rallied 8 percent from the May low, but the surviving hedge funds had recovered even more. For example, our hedge fund, Fairfield Partners, after falling 40 percent in the fiscal year ending May 30, 1970, was up 29 percent by September 30. Nevertheless, as the table (excerpted from *Fortune*) shows, the devastation from portfolio losses and limited partner withdrawals was immense despite the recovery.

	Total Assets ($ millions)		**Percent Change**
	12/31/68	**9/30/70**	**(decline)**
A. W. Jones & Co.	$220.2	$30.7	(86%)
City Associates	106.6	18.2	(78%)
Fleschner Becker Associates	75.1	15.0	(80%)
Fairfield Partners	63.1	27.6	(56%)
Cerberus Associates	50.5	23.0	(55%)
Steinhardt Fine Berkowitz & Co.	47.3	49.7	5%
Strand & Co.	37.4	12.5	(67%)
Lincoln Partners	33.5	33.1	(1%)
Hawthorn Partners	29.4	8.0	(73%)
Boxwood Associates	26.7	12.4	(54%)
Whitehall Associates	26.0	5.9	(77%)
Woodpark Associates	23.9	—	(100%)
Guarente Harrington Associates	19.8	5.3	(73%)
Scruggs & Co.	19.4	6.7	(66%)
Broad Street Partners	18.2	6.5	(64%)
Berger Kent Associates	17.4	1.0	(94%)
Tamarack Associates	14.7	1.0	(93%)
Hartwell & Associates	13.3	1.7	(87%)
Buttonwood & Associates	12.5	—	(100%)

SOURCE: *Fortune*.

Although some hedge funds like ours and A.W. Jones had June fiscal years and had already felt the full impact of withdrawals by September 30, others didn't and suffered further withdrawals at the end of 1970. Buffett is not on the list, because he wisely closed his hedge fund at the end of 1969. Soros was small and offshore and did not have to report to the SEC.

The psychological impact of these ravages on the superstars of the time was considerable, especially since many had considerably enhanced their lifestyle. One well-known hedge-fund manager, who had bought a big stone house in Greenwich and was famous for his jolly disposition, in the midst of the carnage went to bed and simply stayed there. His wife begged him to get up, his associates warned him of the effect on his limited partners, but to no avail. Finally, his wife sold everything for him including the house, closed the fund, and they moved to Wyoming and presumably lived unhappily ever after.

Bear in mind that this was just the first stage of the secular bear market. The Dow rallied 66 percent from the May 1970 bottom to its high on January 11, 1973, and then fell 45 percent to the bear market low of 577 on December 6, 1974. This was when the Nifty-Fifty got crushed, and the hedge funds did relatively better because they were generally short these stocks. Nevertheless, by 1975 most of the hedge funds listed in the table were out of business, with their principals so demoralized they virtually disappeared. Steinhardt Fine & Berkowitz went on to fame and fortune, as did Bill Berger, Ron LeBow, Carl Jones, and John Hartwell. As far as I know, none of the funds on the list survive today now that Michael Steinhardt has retired.

The fury of the second half of the bear was felt by U.S. Trust, Bankers Trust, and Morgan Guaranty, the institutional stars of that era. All three were into the so-called one-decision growth stocks, and their commingled equity funds for employee benefit accounts each lost around 50 percent of their value in 1973 and 1974. This was child's play compared to what happened to the hot mutual funds. The No. 1 performing fund in 1968 was the Mates Investment Fund, which ended the year with an NAV per share of $15.51. At the end of 1974, its NAV was $1.12. The Neuwirth Fund, the No. 2 1968 finisher, did better, only losing 59 percent, but the NAV of No. 5, Pennsylvania Mutual, collapsed from $11.92 to $1.09.

Hedge funds didn't do worse than the aggressive mutual funds or the top institutional managers. But they didn't preserve capital or make money the way they were supposed to. Are things different now? Will hedge funds as a class make money in the next bear market? I don't know, but I doubt it. So far, the results don't seem very encouraging.

Everyone struggled in 1994, a difficult year, but many hedge funds ended with losses, some with big losses. In other words, even with their ability to do macro and short index futures, they couldn't deal with a bad environment. July 1996 was also tough, and a fellow who invests big money in a portfolio of hedge funds showed me his list. Out of 53 funds, 7 were unchanged or up 1 percent or less, and the rest were down. The average decline was around 7 percent, but there were eight that lost over 10 percent.

My friend who studies hedge funds and their techniques closely doesn't think even the best can preserve capital in steep, violent declines. He suspects that they probably could deal with a long-drawn-out bear market. The problem, he says, is that they tend to be momentum players and their bias is to be long and leveraged. I agree, but it's the limited partners who are so performance-oriented that push the managers to take risk.

The other difficulty is that markets are not accommodating. The 1973–1974 decline was not a panic bear market that had a waterfall decline, but it was relentless. It was very difficult to get an uptick, and it sounds silly, but the Nifty-Fifty stocks we were short (and which basically were great companies that were just drastically overpriced) declined so rapidly that everyone made the mistake of covering them way too soon.

Some of the statistics in this piece come from Marc Faber's new report *The Beginning of the End*. I think Marc is too bearish, but his essay, as always, is well worth reading.

History, Market Deaths, and the Cult of the Equity

April 21, 1997

Despite all the volatility in markets, I think we are still on track for an important move up in U.S. bond prices, a simultaneous reflex rally in U.S. stocks (particularly the interest-sensitive ones and the New Nifty Fifty) up toward and maybe through the old highs. I also expect a rally in technology and continuation of the outperformance of emerging markets. My read is that the U.S. economy is slowing a little; pricing power is weak, which eventually will result in disappointing profits; commodity prices are flat; the economic news from Europe and Asia is still mixed; and it looks as though the dollar still needs to go higher. Japan's economy and equities remain enigmas to me, but its bond market does not. It's outrageously overpriced.

Going from the short term to the cosmic, Britt Harris of GTE Investment Management recently sent me a fascinating unpublished article by two professors[1] about long-term returns from equities in different markets around the world. It's relevant because deep in the American psyche, along with motherhood, apple pie, and the flag, is the belief that stocks are fabulous investments and that if you hold them long enough you can't lose. Surveys show that 75 percent of mutual fund owners expect the future to be as rewarding as the past five years—that is, a nominal annual return of over 15 percent, a real return of over 12 percent, no correction of more than 10 percent.

Although I would argue that stocks in most parts of the world are currently very expensive, it's hard to argue with these strategies based on the performance of U.S.

[1]"A Century of Global Stock Markets," by William N. Goetzmann, Yale School of Management, and Philippe Jorion, University of California at Irvine.

equities over the long run and since the Second World War. However, to me the issue is whether the happy American experience of progress and political stability over the last 200 years is sustainable, and whether it is the model of what will happen in the rest of the world. If so, then the world indeed is moving onto "a broad, sunlit upland," and the exalted current valuation of equities is justified.

The study focuses on the 21 countries for which the professors could find good stock market and inflation data back to 1921. Of these, only six (the U.S., Canada, the U.K., New Zealand, Sweden, and Switzerland) experienced no interruption in trading in that 75-year period. Eight experienced a break in trading that lasted at least six months, and seven suffered a long-term closure lasting years related to war, invasion, or revolution. In three-quarters of a century, there were 11 occurrences of permanent breaks, or what the authors call "a death," in which the stock market in question never restarted in its existing form. The German stock market has actually been shut down twice: The first time from July 1931 to April 1932, because of a credit crisis; the second for five years beginning in August 1944. Argentina was closed for 10 years in its time of trouble.

The history of this century has been that stock markets do get closed from time to time because of external events, with devastating effects on both liquidity and wealth, as shown in the accompanying table. This reckoning doesn't take into account what happened to the Russian stock market in 1916.

Well, you say, no wonder. The first half of this century was one of war and revolution. But that has been the history of the world, and the past 50 years are the exception rather than the norm. Maybe the human race has progressed and changed for the better, and there will be no more evil empires or dictators, no expropriations, no pogroms, just unbridled happy capitalism. Today's record-high stock market valuations suggest investors believe that this is the case. The refugee mentality of the dispossessed from the first half of the century has virtually disappeared.

The other interesting part of the paper is the return calculations. The compound annual real (inflation-adjusted) price return for the United States over that 75-year period was 4.73 percent before dividends. Remember that U.S. stocks in 1921 had just fallen 46 percent in 18 months and were about to begin an incredible run, which is why their number is higher than the one based on our own data, which begin in 1910. In any case, the United States was the best market by a considerable margin.

The median compound real price return for the 14 countries with long histories back to the 1920s was 2.13 percent, and the median return for all 39 countries was 1.5 percent. A major flaw in this paper is that apparently reinvesting dividends was an impossible calculation, so there are no total return numbers. The authors use the MSCI 1970–1995 yield calculations and assume that the average dividend yield for the 39 countries over the period was around 4.25 percent, which would bring the real total return to over 6 percent for the 14 countries with long histories and to 5.75 percent for all countries. The U.S. dividend return is assumed to be 4.14 percent, implying a total real return of almost 9 percent, which seems high to me even coming off the low base of 1921.

Stock Market Breaks and Deaths

Country	Break Date	Previous Year Return*	Series Restart Date	Comment
Hungary	7/31	–22.2%	9/32	Financial crisis, country in default
Germany	7/31	–31.6	4/32	Credit crisis
Greece	10/31	–09.9	12/32	Financial crisis, drought
Spain	7/36	–11.3	3/40	Civil War starts
Austria	4/38	–17.9	12/46	Annexation by Germany
Czechoslovakia	10/38	–20.5	1/40	Cession of land to Germany
Poland	7/39	–16.9		Invaded by Germany (Sep 1)
Finland	12/39	–19.2	3/40	Invaded by Soviets (Nov 30)
China	12/39	N/A		Invaded by Japan
Denmark	4/40	–32.8	6/40	Invaded by Germany (Apr 9)
Norway	4/40	–27.4	6/40	Invaded by Germany (Apr 11)
Netherlands	5/40	–23.1	9/40	Invaded by Germany (May 10)
Belgium	5/40	–26.7	12/40	Invaded by Germany (May 10)
Switzerland	5/40	–19.3	7/40	Mobilization
France	6/40	–12.2	4/41	Invaded by Germany (Jun 14)
Greece	10/40	–24.9		Invaded by Germany (Oct 28)
Romania	7/41	–39.6		Enters war
Hong Kong	12/41	N/A		Occupation by Japan
Singapore	12/41	N/A		Occupation by Japan
Philippines	1/42	N/A		Invaded by Japan
Czechoslovakia**	7/43	–14.1		War ending
Japan**	6/44	–21.1		War ending
Hungary**	7/44	–49.1		War turmoil?
Belgium**	8/44	–16.1	6/45	War turmoil?
Germany**	8/44	–01.3		Invaded by Allies (Sep 15)
Egypt	10/62	–12.6		Arab socialism
Argentina	8/65	–69.2	7/75	Widespread unrest
Chile	4/71	–54.3		State takes control of economy
Portugal	4/74	–11.2	3/77	Takeover by junta (Apr 27)

For Portugal, the index was observed right after the break, but does not continue thereafter.
*Deflated by WPI.
**Equities were effectively subject to price controls.
SOURCE: "A Century of Global Stock Markets"; Morgan Stanley Research.

This raises an interesting issue. In most markets, around two-thirds of the return came from dividends, although in the United States it was only about half. With the yield on the MSCI World Equity Index at 2 percent currently, or less than half of the normal yield, can we realistically expect the same kind of total returns in the next decade? I say no, but the markets say yes.

The other point is that the price return ex-dividends for the 39 countries is a thin 1.5 percent. If you were a wealthy Argentine or German, assuming you could be a buy-and-hold investor, would you have done better to have your wealth in real estate, in business, or in equities? There is no way of knowing. A diversified portfolio of equities obviously would be less risky.

These calculations do not take into account the years when equity markets were closed. For example, for Germany from 1924 to 1944 the annual real return was 1.65 percent. During World War II, dealing in shares in Germany and the occupied countries was subject to strict controls by the Nazis, ranging from taxes on capital gains to the rationing of purchases. No German could sell shares without first offering them to the Reichsbank, which had the option of buying them at December 1941 prices, in exchange for bonds that remained in the bank's possession. Then, from 1944 to 1950 there was no German stock market whatsoever. Hershey bars, Lucky Strikes, and lumps of coal were the favored medium of exchange. Then in 1950 to 1995 German shares compounded at a nominal annual rate of 8.27 percent and real rate of 5.74 percent. For the 67-year period the market was open, it compounded at a real rate of 4.46 percent, but for the entire 72 years it compounded at 4.15 percent.

The authors calculated the price effect of market interruptions and arbitrarily assigned a charge of 50 percent of the value of equities to a permanent series interruption. They also point out that there is a company survivorship bias in all the indexes, particularly in countries that experienced wrenching change. It would be interesting to know how well the 10 biggest stocks in Germany in 1921 did over the next 75 years, if one could have held them all that time.

The paper shows, not surprisingly, that the returns from 1950 to 1995 are much higher than those from 1921 to 1950. Communism, the Third Reich, and the Second World War wreaked havoc. Japan is another example. The real return from 1921 to 1944 was a negative 0.34 percent per annum, but the real return since 1950 has been 5.8 percent before dividends. Italy, Spain, and Belgium have been the worst, with real total returns around 2 percent.

There were two surprises in this paper for me. The first was that so many stock markets were shut down, either for years or months. It shows how chaotic the world of equity investing has been and how lucky we have been in the United States. Second, I am astounded at how high the real total returns from equities around the world have been across this span of years, particularly since the value effect of interruptions and market deaths was very severe. It is incredible that the real returns from German equities have been somewhere in excess of 8 percent per annum over a period that includes Hitler, war, two hyperinflations, and the total devastation of the economy. Germany and Japan both had higher real returns for the entire period than most of the countries that had continuous markets. This suggests either that you should invest in aggressive, warlike countries or that it pays to lose a war to the United States.

So history supports the cult of the equity, providing you can hang on through the air pockets. They really do generate the real returns, but not the double-digit ones some people now anticipate. I still believe in reversion to the mean.