

THE NEW ECONOMY

AND ITS IMPLICATIONS TO INVESTORS

Prepared by Elizabeth Misco
April 2004

“Land was wealth 300 years ago. So the person who owned the land owned the wealth. Then, it was factories and production, and America rose to dominance. The industrialist owned the wealth. Today, it is information. And the person who has the most timely information owns the wealth. The problem is information flies all over the world at the speed of light. The new wealth cannot be contained by boundaries and borders as land and factories were. The changes will be faster and more dramatic. There will be a dramatic increase in the number of new multimillionaires. There will also be those who are left behind.”

Rich Dad, Poor Dad by Robert Kiyosaki.



In the early post-World War years, there was a general sense among government and business leaders that the American economy – though hardly immune to trouble – could be made to expand smoothly and continuously with the proper mix of fiscal policy. Fiscal policy can be defined as the decisions that the federal government makes about the amount of money it spends and collects in taxes in order to achieve a full employment and non-inflationary economy. (6) The assumption was that economic prosperity could be assured through the adroit manipulation of taxes and federal spending. (4)

This prescription was largely based on the writings of British economist John Maynard Keynes. Keynes insisted that with little interference, the market would correct itself by reallocation to full employment. (1) In the mid 1960's, during Lyndon B. Johnson's administration, fiscal policy and the post-war euphoria created a false confidence in policy-making circles, (even among prominent economists who should have known better,) that the United States economy was on a certain trend towards unlimited and perpetual prosperity. Johnson and his administration, following in Kennedy's footsteps, enacted the "Great Society" social reforms. Along with subsequent tax cuts, these actions would lead the nation into spiraling inflation, wrenching downswings in

economic activity, periodic double-digit unemployment reminiscent of the 1930's, and deficits in both the federal budget as well as in foreign trade. (4) In this paper, I will examine the new economy. I will show how technology played a role in the development of the new economy. As well, I will show how the roles of some of the major decision-makers played out in its development. I will then discuss financial innovations as they came into play in the new economy and the implications of these innovations to investors.

In April 1974, Intel Communications introduced the 8080 chip. It was considered the brains of the personal computer. At 2Mhz, the chip could access 64kb of memory: not very impressive by today's standards. However, this was a humble, yet significant, step in the direction of the new global economy. Then, in January 1975, Micro Instrumentation and Telementary Systems introduced the first personal computer, the Altair 8800. It was featured in the January issue of *Popular Mechanics*. On November 12th of that same year, Microsoft was founded and a few months later, on May 1, 1976, Apple Computers was founded in the bedroom of Steve Jobs, not in his garage, as popularly thought. (4)

Another earlier pre-PC development was the Arpanet. The United States government, as a response to the Sputnik surprise sprung on them by the USSR, created the Advanced Research Projects Agency. The Arpanet was created by the ARPA in 1964 and allowed computer scientists from some twenty universities and a few military sites to exchange research information. Up to this point, the development of leading edge computer technology had occurred under the auspices of the United States government's Department of Defense. As a result, there was quite a stir in the agencies responsible for government security when the August 1977 issue of *Scientific American* published the

findings of three scientists from the MIT Laboratory for Computer Sciences. The three had been trying to figure out how to send digital documents without having to worry about them being intercepted and read. Both the developments of the first personal computer and the ability to send encrypted digital documents would lead to the growth of the modern day Internet. (4)

In November 1976, Jimmy Carter was elected into the presidential office. In the midst of an energy crisis and double digit inflation, Carter sought to find a way out of the nation's economic crisis. On July 15, 1979, Carter addressed the nation on the subject of energy for the fifth time. Carter lectured at length of his plans to solve the problem. Before discussing the energy crisis, Carter spoke to the American people regarding another problem, a deeper one, he felt, and one that required a greater national effort to solve. He called the state of the economy at the time a "national malaise." However, there was hope on the horizon. (1,4)

Prior to this time, little attention was paid to monetary policy or what was happening to the money supply, which is under the regulation of the Federal Reserve Board. Monetary policy is a central bank's actions to influence the availability and cost of money and credit, as a means of helping to promote national economic goals. Tools of monetary policy include open market operations, discount policy and the manipulation of the reserve requirements of banks. (1,4,6)

During the Carter administration there was a shift to the monetaristic approach to economic management. The hope, at the time unfounded, was that the monetarist approach would lead to economic prosperity, turning the economic events of the past into distant,

unpleasant memories. The chief advocate of the approach to monetarism was Nobel-laureate economist Milton Friedman from the University of Chicago. (1,4)

Carter, in fear of not being reelected due to the state of the economy sought to replace then chairman of the Federal Reserve Board G.W. Miller with someone who he considered a “champion of price stability.” Carter offered the chairmanship to Paul Volcker. Volcker was well known for his monetaristic views. He had long argued that a contractionary monetary policy along with a significant increase in the Federal funds rate could be used to manage the current inflationary state of the economy. (1,4)

On August 6, 1979, Paul Volcker was elected as the Chairman of the Federal Reserve Board. Just two months later, Chairman Volcker begins to target monetary aggregates as an attempt to rein in the soaring inflation. Chairman Volcker used a restrictive policy of significantly lower money supply growth, which resulted in a dramatic increase in the Federal Funds rate. Though the inflation rate was significantly reduced, the resulting ascension in interest rates damaged any chances for Carter’s reelection. (1,4)

In another effort to manage the inflation situation and the energy crisis, Carter sought to establish Alfred Kahn, a Cornell University professor, to take the position as head of the Civil Aeronautics Board. Carter wanted Kahn to initiate the deregulation of the airline industry. At first declining, Kahn later saw how deregulation of the airline industry could give the economy a boost. Further looking into the matter, Kahn realized that airline regulation, contrary to its initial intentions, was only hurting the consumer. (4)

As a result, Kahn grabbed the deregulation bull by the horns. In the wake of this, Pan Am and Eastern Airlines both collapsed. However, the resulting success was to the

benefit of the consumer, decreasing air fares by a third and increasing the numbers of fliers from 275 million in 1978 to 614 million just twenty years later.(4) This was just another step in the direction of the emergence of the new global economy as travel and transportation costs declined.

On November 4, 1980 Ronald Reagan was elected into the presidential office. This was just in time to see Congress intervene in an attempted bailout of the failing savings and loans'. Since the Savings and Loan Insurance Commission guaranteed savers' deposits, the unscrupulous managers of the S&L's were tempted to engage in riskier investments. As a result, by the end of 1982, over half of the S&L's in the United States maintained a negative net worth.(1,4)

For a time, monetarism stumbled to the wayside due to so-called supply-side economics, prodded on by Arthur Laffer. Laffer had managed to convince Ronald Reagan, as well as others that the path to sustained economic prosperity was through what he called the Laffer curve. The publication of this parabola was first conveyed to a journalist on a cocktail napkin in a Washington D.C. bar. The essence of supply-side economics was that tax rates were too high and discouraged productivity and savings. (1,4)

As well, Laffer held that tax rate reductions would create a burst of economic activity and as a result, the federal budget would actually strengthen rather than sink more deeply into the red abyss, all on account of diminished tax revenues. In 1981, Congress and President Reagan agreed to the Economic Recovery Act, which would significantly reduce income tax rates. Contrary to Laffer's position, however, the budget did sink into even deeper deficit after the enactment of the supply-side tax cuts early in the Reagan

administration. At the same time, productivity continued to stagnate in most businesses and savings and income reached their lowest readings since the Great Depression. (1,4)

The president wasn't the only one who sought to stabilize the economy. Corporations, as a response to the stagnation of the economy assumed that they could continue to grow, as had always been the answer, and by sheer force of will could propel the economy forward. This was attempted through a trend of corporate growth; one could label the 1980's as the age of mergers and acquisitions.(4)

The American economy again fell prey to a depression in the late 1980's. On October 19, 1987, which is now known as 'Black Monday,' the Dow Jones Industrial Average dropped 508 points, a fall reminiscent of the market crash which fueled the Great Depression, though on a much larger scale. What we need to note here is that a recession, which had begun in July of 1981, had just ended in November of 1982. In other words the market was on its way up again, the psychological state of investors was, again, one of euphoria, then it all came crashing down in October '87. The saving grace of the late '80's and early '90's was the increase in technological production and the inquisitive consumer's propensity towards technology. (1,4)

At present we are back to using monetary policy as a means to control the outcome of the economy. Though not necessarily infallible, the monetaristic approach to economic control has become the lesser evil in the eyes of the United States government and its economic controllers. There is also greater discretion used in choosing the tools that govern monetary policy as opposed to the former "throw caution to the wind" ideology which created earlier false euphoria.(1)

In intimating this brief economic history, we can see that the economy is both “old” and “new.” It is “new” in the sense that we have learned in recent decades that there is no stellar performer that is infallible nor is there any magic spell that can be used to conjure up economic prosperity as easily as it came in the post-war years. The post world war era was a time when almost every developed country except America, was recovering from the ravages of the presence of war, putting the United States at a distinct economic advantage.

(1) On the same token, the economy is “old” in the sense that many of the same fundamentals and intertwined economic relationships that affected the economy from the beginning of this nation continue to do so within the framework of the business cycle.

To show this, lets look at some recent information. The National Bureau of Economic Research's Business Cycle Dating Committee determined that a peak in business activity occurred in the U.S. economy in March 2001. A peak marks the end of an expansion and the beginning of a recession. The determination of a peak date in March is thus a determination that the expansion that began in March 1991 ended in March 2001 and a recession began. The expansion lasted exactly 10 years, the longest in the NBER's chronology. This is interesting in light of the fact that the September 11, 2001 terrorist attacks have been blamed for a subsequent recession. The fact is, the United States economy was in a downward trend (recessing) six months prior to the attacks. (5)

A recession is a significant decline in activity spread across the economy, lasting more than a few months and visible in industrial production, employment, real income, and wholesale-retail trade. A recession begins just after the economy reaches a peak of activity and ends as the economy reaches its trough. Between trough and peak, the economy is in

an expansion. Expansion is the normal state of the economy; most recessions are brief and had been a rarity in recent decades. (5)

In looking at these relationships between monetary growth and spending, profits and prices and productivity and savings, we can see the affects of the business cycle continue to be major factors that effect the new economy. Policymakers are realizing that these fundamentals require greater scrutiny and better understanding than they did decades ago. In sum, it is only possible to realize the new economy by coming to an understanding of the old economy. (1,4)

Unlike the “old” economy however, the new economy represents an economic upheaval in our commonwealth. The new economy has its own distinct opportunities as well as its own pitfalls. There are some major distinguishing characteristics of the new economy: the new economy is global, the new economy favors the intangible (ideas, information and relationships) and the new economy is intensely interlinked. (4)

Networks have existed in every economy. The difference between this economy and its predecessors is that now the networks have been enhanced and multiplied by technological advances that have been funded by a more powerful financial industry. Networks penetrate our lives in almost every area to the point that the term “network” has become a central metaphor around which our economy and even our thinking are organized. Unless we understand the distinctive logic around these networks, we can in no wise profit from the economic transformation that has taken place. (1,4)

As stated earlier, the new economy deals in the intangible, ethereal entities such as information, relationships, intellectual property, securities, derivatives, etc. Unfortunately

for economists, bits, bytes, options and copyrights have little measurable economic shape. The products most in demand from the U.S., (exports) lost 50% of their physical weight in dollar value between 1992 and 1998. The disembodied world of computers, entertainment and telecommunications is now the industrial giant; it is larger than any of the giants of the past. It is ironic that in the 1950's, General Motors was the richest company on earth, considered by many as the future of business. GM was what every business aspired to become. When pundits looked ahead 40 years, they imagined that all successful business would look and operate like the old General Motors. Now, General Motors is one among many others that have had to evolve and change to operate like the new economy industries. (4)

Brad DeLong, an economist at UC Berkeley, has an interesting theory about economic history. He states that various sectors of the economy wax and wane out of prominence like movie stars. The history of the American economy can be seen as a parade of "heroic" industries that first appear on the economic scene as unknown entities, and then "heroically" save the economy by performing economic miracles and, for a time, are treated as the economic "stars" of the economy. In the 1900's, it was the auto industry, pulling great innovation and several new companies out of its hat. Now, the latest "star" industry on the scene, according to DeLong, is the information, communication and entertainment industry. With a wave of its proverbial 'magic wand,' success, innovation and economic miracles have seemingly appeared out of thin air. (4)

For a time, Microsoft was considered to be the "star." However, anyone with any prudence would have wondered just how long the giant could have continue to replicate

intellectual property onto cd's and floppy disks and still maintain a 90% profit margin. In hindsight, not for long. However, going back in time and looking forward, many would have said forever. Though Microsoft is by no means "going under," they certainly and quickly have been put in their place with the legal problems that they have faced over the past few years, as well as the economic upheaval caused by the current state of war. (4)

However, the cutting edge is no longer about computers, the vanguard is communications. Computer chips and telecommunications have performed as "enabling" sectors within the economy. Having leveraged power and accelerated the advancement of other sectors, it is the arena that has transformed all other sectors. (1) What great influences, aside from connectivity, are at work in the new economy that have caused such rhetoric? With the increasingly global state of the economy, the basic market principles of competition and choice have swept into every aspect of American life. Consumers face a bewildering number of choices. In the new economy:

- The world is smaller.
- Choices are more plentiful.
- Competition is more intense.
- Consumers are better informed. (4)

In Alan Murray's book, *A Wealth of Choices*, he quotes the analogy that likens the new economy to a bazaar in Istanbul, Turkey.

"...where thousands of vendors sell carpets and curios, icons and samovars. The (our) orderly world of a generation ago, with its limited choices and fixed prices and clear lines of distribution, is being transformed into a chaotic, bustling, teeming global marketplace. Countless sellers court countless buyers, with an endless array of merchandise. Prices aren't fixed. Each merchant tries to extract the highest price for his wares; but each customer has the power to walk to the next booth in search of a better deal."

The new twist is that with communications there is pervasive information.

Through financial history, sellers typically had the advantage over buyers. This is because

they were generally better informed about the products they sold. Today the tables have turned, for the first time in history; the balance of power has shifted to the consumer's favor. The old economy with the notion of caveat emptor is a thing of the past. Consumers are armed with more information and knowledge than ever before. Now it is the seller who has to beware of losing customers to a competitor's lower priced goods and services. In the old economy, prices were fixed. However, the new economy with its information and technology has provided flexibility in pricing that was never present before. (1,4)

The new economy has introduced many changes to our ideology. On the other hand, no matter how digital our economy becomes, there are still tangibles, which have to be managed. Houses still need to be built, vehicles repaired, etc. However much these tasks have been, or can be, enhanced by the intangible networking of CAD or other diagnostic software, they remain entirely tangible. So why is this digital and telecommunications industry so different from its economic predecessors? Because communications – which is what all of the digital technology and media is about – is not just a sector of the economy in and of itself, it is the economy. (4)

Let's look at a few examples. The old economy said the three "L's" were important. Location, Location, Location. However, with the networking of the global environment in the new economy, convenience is at our fingertips. Investors can access investment product information from virtually anywhere, at anytime. I can log onto the Internet and peruse a variety of investment firms that are willing to invest my money for

me. These firms are all competing with one another and are willing to offer prices lower than their competition in order to attract my business. (4)

Economics texts teach the law of one price, the purchasing power parity theory. The theory states that as a characteristic of a perfectly competitive economic market, the same product would ideally cost the same price everywhere. In the new economy, a consumer can bid on the airfares and hotel prices of their choice and at their leisure, online or over the phone. In the new economy, price discrimination has become a key to profitability. In order to move their products, vendors have had to accommodate the desires of their buyers, who could easily move on to another vendor. This is because consumers are armed with the information about what other sellers are charging for the same product and even perhaps with what the vendors paid for the products themselves.

(1,4)

The old economy said that your home is your nest egg. This notion was derived from the idea that during times of high inflation, home ownership was considered the ultimate hedge. Mortgages shrank in relation to inflation driven incomes. All this came with generous tax breaks geared at soothing the inflation-swollen interest payments. In the new economy, inflation has been tamed. Let's look at a situation from an old economy viewpoint and from a new economy viewpoint. What would you do if you had \$100,000 to invest or to use to pay off your mortgage? Investment options offer lower returns and the possibility of taxation. The old economy thinking would have suggested investment. However, the new economy rules may not concur. Assume you are in a 7% fixed-rate mortgage and in a 25% tax bracket. This puts your true cost of the mortgage at 5.25%

using the current legislated tax credits afforded to homeowners. If you invest tax-free in an IRA or a 401(k) plan, perhaps you can get a better rate of return. However, if your investments are taxable, you could be earning less than the 5.25% that you are paying out in mortgage costs. In this case, investing doesn't seem prudent. (4)

This brings us to finance, which is the focus of this paper. Only a relatively small number of people have ever been directly employed in the financial sector. Yet, ever since the days of Venetian bankers, financial innovations such as mortgages, insurance, venture funding, stocks and derivatives, to name a few, have completely reshaped our economy. Having enabled the rise of corporations, of market capitalism, of the industrial age and this current technological age, the financial sector above all other sectors has influenced the way business is transacted and how we structure our lives. (1,3,4)

Thus far I have discussed some of the events, people and technology that have framed the evolution of the economic structure of the United States. I have also pointed out some differences as well as some similarities between the old economy and the new economy. Now, I want to look at the financial innovations within that framework, which have evolved from our old economic structure. Each sector is dependent upon the other, networking has only enhanced the financial sector and networking has used finance as a footstool to propel itself into every other sector of the economy. (1,3)

In the old economy, investing was an insider's game. Investing was set aside for those who had the information, knew what it meant and knew how to use it. In other words, in the old economy, you let someone else do your investing for you. Up until June 1, 1999, Merrill Lynch had been a symbol of the notion that you needed a financial expert

to navigate the treacherous waters of finance and investing. A few months before June 1999, Merrill Lynch's brokerage chief, John Steffens, had publicly proclaimed that, "...the do-it-yourself model of investing, centered on Internet trading, should be regarded as a serious threat to Americans' financial lives." However on June 1, 1999, after the fall of Communism in the Soviet Union and the fall of the Berlin wall, another wall fell, this time on Wall Street. Merrill Lynch, the nation's largest brokerage firm announced that it was entering the world of online Internet trading. (1,4)

Merrill Lynch customers, who, under the old model, could have paid up to several hundred dollars to Merrill's costly, full-service brokers each time that they traded, became able to trade on the Internet for as low as \$29.95 per transaction. This represents a classic example of how, for centuries, information has been a discriminatory weapon, permitting those who had it the ability to wield it over those who did not have it or have access to it, for power, prestige and profit. (4) In the New Economy information is still power, but now everyone has it or has access to it, the New Economy has leveled the playing field.

In the new economy, professional money managers don't know much that you don't. A typical investor in the new economy has access to the same information and is typically as educated – or better educated – in how to best use that information. As the focus of production has shifted from tangible goods to intangible ideas and knowledge, the availability of knowledge and its usefulness are greatly enhanced. All this is to the investor's benefit. Financial engineering has become the norm in the financial industry. (1,3,4)

Financial engineering is the design, development and the implementation of innovative financial instruments and processes (including the technology) and the formulation of creative solutions to problems in finance. (3) Financial engineering manages an organization's existing financial risk exposure, be it losses due to default, lowering prices, rates or taxation.

The financial sector has innovated and improved its products. Information regarding these products is published daily and the knowledge base of the average investor has grown to include these diverse products to attract not only the larger investors and the insiders, but also the small investor and the everyday consumer. The smaller-scale investors are the new players in the financial industry. (3,4)

The innovative investment products are meant to attract through the limitation of risk with instant diversification, such as with funds, and they are priced to sell to a wide range of investors. The new players chance it alongside the older colossal players of the old economy. Everyone can get a piece of the action, everyone can take the risks and everyone can realize the potential in the new economy. Though the level of capital is lower with the smaller investor, this new age of connectivity and information has made way for many smaller investors. There are many more smaller investors than there are larger ones, making the smaller investor more appealing in the eyes of the firms that make up the financial sector. Another attraction of these products is that they were created to minimize or diminish the effects of taxation in response to their respective gains. Mutual funds, index funds, futures and options and other derivatives have become the new game in the financial sector. (1,3,4)

“Let it ride” was an old economy idea. It meant that you maintained your stand in the market and eventually you would see the profitability of your investment after years of holding out. Though this is still good advice for even the new economy investor, the new economy shows the age of overnight investments and day trading. The scrutinizing investor can, with a little knowledge, minimize risk and illiquidity in trades that can keep them in the game for shorter periods of time. The new economy affords the “short-timer” the luxury of quick trades with the ease of the Internet. (4)

So what's out there?

The last decades of the twentieth century were, without doubt, a period of dramatic change in financial engineering, financial innovation, and risk-management practices. An effective new tool that firms have been using to manage financial risk has been securitization. Many of the assets on a firm's balance sheet, such as receivables, can now be securitized--that is, grouped into pools and sold to outside investors. (3,4)

Securitization helps a firm manage the risk of a localized exposure by conveying some of that exposure outside the firm. By pooling a diverse set of assets and issuing marketable securities, firms obtain liquidity and reduce funding costs. Later, I will further discuss issues related to corporate governance and the true disclosure of risk to investors. Moving assets off the balance sheet and into special-purpose entities, with the accompanying creation of servicing rights and high-risk residual interests retained by firms, generates its own risks. (1,3) These risks are then passed on to the oftentimes unaware investor.

Several types of securitization have grown rapidly over the past decade. One of the fastest growing types of securitization has been asset-backed commercial paper, which soared from only \$16 billion outstanding at the end of 1989 to more than \$700 billion as of the second quarter of this year. Commercial paper is a short-term unsecured promissory note issued by corporations and foreign governments.

Commercial mortgage securitizations have also propagated noticeably since the early 1990s. The dollar amount of outstanding securities backed by commercial and multifamily mortgages has risen from \$36 billion at the end of 1989 to nearly \$400 billion as of this past June. In addition, commercial banks and finance companies have moved business loans off their books through the development of collateralized debt obligations. Securitized business loans amounted to \$125 billion in the second quarter of 2002, up from \$2 billion in 1989. (3,4)

Other sources of financial innovation available to investors are derivatives. Derivatives are financial instruments whose value is derived from the price of an underlying asset, hence the term derivative. Derivatives include such exchanges as forward contract, futures contracts, options contracts, swaps, caps, floors and collars. The underlying assets in any of these exchanges can be anything from cotton to interest rates to the stock price of an issuing organization. In times past, the most common underlying assets in the derivatives market were commodities and other agricultural investments. Currently, the most common underlying assets are financial instruments such as stocks, bonds, interest rates or foreign exchange rates. (3)

Derivatives are another important tool that firms use to manage risk exposures. In the ordinary course of business, firms are exposed to credit risk and the risk of price fluctuations in the currency, commodity, energy, and interest rate markets. For example, when an airline sells tickets months before a flight, the airline becomes exposed to fluctuations in the price of jet fuel. A higher price of jet fuel translates directly into lower profits and, perhaps, a greater risk of bankruptcy. Firms can now use derivatives--options, futures, forwards, and so on--to mitigate their exposure to some of these risks. The risk can be transferred to another party that is more willing to bear it. In this example, the airline could buy a forward contract or a call option on jet fuel to hedge its risk and thereby increase its financial stability. (3)

An options contract is a legal contract that gives its holder the right to buy (a call option) or sell (a put option) a specified amount of an underlying asset at a predetermined price within a predetermined set amount of time. Dating as far back as ancient Greece around 550 BC, options are by no means a new innovation in the financial industry. The innovation is in their usefulness to investors. Instead of being a primary source of income for investors, options are used by risk-averse investors to hedge against the risk of loss. Innovation also lies in the underlying asset that is being contracted for. Where options prices were most commonly derived from commodities in the past, more commonly, present day options derive their prices from financial instruments. (3)

A futures contract is an agreement between two parties that specifies the delivery of an underlying asset at a specified future date for a currently agreed-upon price. The holder of the long position i.e. the buyer, assumes the right and obligation to receive the

underlying asset and the short position, assumed by the seller, affords the right and obligation to deliver the underlying asset at the predetermined time. (3)

Forward contracts can be likened to futures contracts with the following three exceptions:

1. Futures are traded on an organized exchange.
2. Futures afford more flexibility in their delivery date.
3. The cash flows in the futures market are marked to market on a daily basis as cash flows into and out of the market whenever futures prices change. (3)

These three differences offer a safer environment for investors. It is said that forward contracts are to be traded among friends whereas futures are better suited for strangers. This is because these differences offer more regulation, and less risk to the investor, making futures contracts more liquid. (1,3)

Now we'll take a look at swaps. Swaps can be thought of as a portfolio of futures contracts involving multiple delivery dates. It is an agreement to exchange specific assets at future points in time. Swaps can derive their value from a number of underlying assets; primarily the underlying assets in swaps are interest rates, which are most common, and currency rates. The first major swap took place in 1981 between IBM and World Bank. At the time, IBM held fixed rate debt in German Deutsche Marks (DM) and Swiss Francs (SF.) Due to unfavorable changes in the foreign exchange rates at the time, IBM wanted to convert its foreign currency liabilities into United States dollar liabilities. In August 1981, World Bank issued fixed-rate bonds in \$2 denominations with the exact maturities of IBM's foreign debt. The net result was that IBM paid the interest in US dollars on World

Bank's United States bond debt and World Bank paid IBM's foreign debt in DM and SF. This was a win-win situation because IBM was able to avoid the unfavorable changes in the foreign exchange market by eliminating their foreign exchange risk and their debt was still getting paid. As well, World Bank probably held assets in DM and SF that generated cash flows in those currencies; these assets could then be used to pay World Bank's foreign debt without the fear of changes in the foreign exchange rates. (1,3)

Other financial innovations include caps, floors and collars. Each of these is an options-based instrument that is used to limit the risk of loss on the underlying asset. A cap is a ceiling that is set on the impact of a particular risk variable. Take, for example, the issuance of a floating rate loan, the cap buyer receives payments when the interest rates are up. On the other hand, a floor is a minimum amount to be paid out to the investor, limiting loss. Again, a floor on the same floating-rate loan, the floor buyer receives payments when the interest rates are down. Finally, a collar is a combination of a cap and a floor. (1,3)

The use of derivatives, like securitization, has been growing rapidly in recent years. The most recent statistics from the Bank for International Settlements indicated that the notional amount of over-the-counter derivatives outstanding totaled \$111 trillion in December 2001, up from \$80 trillion just three years earlier. For exchange-traded derivatives, notional amounts outstanding rose from \$14 trillion to \$24 trillion over the same period. (1,3)

Having mentioned earlier some of the financial innovations available to investors in the new economy, I will continue to describe some other investment options. Mutual funds are fairly recent innovations that have surfaced in the face of the new economic

wave. Mutuals are a nice investment for the more careful and discriminating investor. They offer diversification, manageability and they are affordable. Affordability is a primary attraction of funds as well as return. An investor can invest as little or as much as they like based on what they can afford. There are several types of funds on the market and there are several companies who offer them. Based on what you can afford and how much risk you are willing to take, a smaller investor can be in the market in no time. (1,3)

The mutual funds market dates back to March 1924. Though not an entirely new innovation in the industry, mutual funds have grown almost exponentially in the last sixty to seventy years. As an example, total net assets in mutual funds have increased from \$.4 million in 1940 to a nearly \$4 trillion industry. However, since mutual funds came about to attract the smaller investor and to make investing easier by not having to choose ones own stock portfolio, with nearly 10,000 different funds available of varying classes of stock to invest in, the purpose of simplicity has somewhat been defeated. (1,3,4)

Another type of fund is the index fund, which are becoming quite popular of late. An index fund is a fund that replicates a given index. For example, the S&P 500 Index fund is simply invested in the stocks and weights that make up the S&P 500 Index. Management fees are low because index funds are somewhat easier to manage since they don't have to maintain liquidity. However, should a nervous investor want to redeem their shares, stocks held by the fund have to be sold in order to satisfy the investors' claim since the fund holds no cash. This feature can make liquidity an issue in holding index funds. (1,3)

Another financial innovation is monthly income preferred securities, also known as MIPS. Offering a higher yield than other existing preferred securities, MIPS allow the issuing firm to deduct the dividends for tax purposes. As well, investors can reap the benefits of a steady monthly income stream. The tax break is made possible as the MIPS are issued by a special purpose partnership, which then lends the proceeds to its corporate parent. The parent is then obligated to pay interest back to the partnership on the proceeds, which is returned to investors in the form of a monthly dividend payment. This offers all players, with the exception of the tax man, a win-win situation. (3,4)

Indexed bonds are another financial innovation that can benefit both the issuer and the investor. An example of these would be the United States Treasury's issue of index linked bonds. These are bonds in which the principal and the interest are linked to the cost of living index. The issue of these Treasury bonds eliminates inflation risk for the government as well as for the investors. First of all, the government knows exactly how much it is paying out in interest payments in real terms, whereas with a non-linked bond, the interest rate fluctuates with the market. As well, investors are released from inflation risk. (3,4)

Though indexed bonds can work to the favor of both issuer and investor, this is not always necessarily the case. For example, a commodities company, such as a copper mining company could issue indexed bonds that are linked to the price of copper, which would be its primary risk variable. This type of symmetric hedging passes the exposure of risk on to the holders of the bonds as opposed to the shareholders. Symmetric hedging is useful to eliminate the risk of loss, but this is at the cost of potential gains that could be

realized should the price of copper rise. Alternatively, asymmetric hedging strategies such as buying stocks or put options insure against risk but also allow potential gains to be realized if prices move favorably. (3)

Is it safe?

Thus far we have looked at the technology, key decision-makers and the financial instruments used to influence the new economy. To close, I want to discuss some of the greater issues that have emerged along with our global economy. In this we can ask ourselves a few questions. Just because everyone can get in on the game, is everyone playing the game? Or the better question could be; is everyone playing with the same information and tools? Just because access to information is available, is the economy free from the problems of the past?

I've established that the new economy has set the stage for a new breed of investor with its information and the communications capabilities available. Is this new breed a real presence? How much say would the individual investor have in corporate governance? Just as financial innovations have spawned a variety of risk-management tools for businesses, they have also been responsible, in part, for changes in the structure of equity ownership. Along with advances in technology that have simplified the management of ever-larger portfolios, an increasing awareness among investors of the value of portfolio diversification has led to a dramatic rise in the share of equity that is held by institutional investors on behalf of households.

According to the flow of funds accounts published by the Federal Reserve, the combined share of household equity managed by mutual funds, pension funds, and life

insurance companies grew from 1952 to 2001 from only 3 percent to over 50 percent. Mutual funds held 16 percent of household equity at the end of last year, and public and private pension funds held about 10 and 20 percent, respectively. Life insurance companies held about 7 percent of household equity at that time, mainly through separate accounts that were, in effect, mutual funds with insurance wrappers. (7)

Recently, with the fall of the Enron Empire, there have been fears regarding corporate governance and the disclosure to investors regarding risk and information. Yes, this is the information age and there is a boatload of information out there. However, there is also a ton of garbage out there as well, garbage that may look good to the investor information-wise, but is really intended to hide or even deceive even the most financially intelligent. Looking beyond the isolated cases of outright fraud, a fundamental problem is this: As organizations have grown in size and scope, innovative financial techniques have made it more difficult for the outside investor to understand a particular firm's risk profile and the performance of its various lines of business. Traditional accounting standards have not kept pace with the risk-management tools that are being employed by sophisticated corporations. In this, the disclosure of firms' risk management positions and strategies is crucial to improve corporate transparency for all market participants. As well, auditors have become so much more focused on selling services and innovation that their primary focus of accountability has become compromised. (7)

Another issue is that financial innovation has also helped to increase the importance of institutional investors and the roles that they play in mitigating corporate governance. These would include mutual funds and pension funds in our equities market.

Because shareholders play a key role in corporate governance, the emergence of institutional investors as major shareholders of corporate equity also has implications for the governing and accountability of corporations. This is because the larger institutional investor is going to have more pull in a firm's accountability and business practices. This is going to be useful in the long run to protect the smaller investor from losing their shirt in a deal in which information has been withheld or tainted. (7)

These dramatic changes motivate an important policy question: Should we be comforted or concerned that an increasing share of household equity is in the hands of institutional investors? A primary issue is whether institutional investors are more "active shareholders" than individual investors. Shareholder activism may provide market discipline directly by preventing management from pursuing its own interests at the expense of shareholders. Shareholder activism may also pave the way for other forms of market discipline - such as corporate takeovers, share price changes, and funding cost changes - by eliminating management-takeover protections and by generating greater clarity into the risk structure of an organization. (3,7)

A necessary response to the recent wave of financial innovation is a combination of enhanced transparency and the market discipline applied by creditors, investors and other interested parties - including the institutional investors that now hold a large share of corporate equity. Together these efforts should help to lay a foundation for more effective corporate governance. (7)

It is not clear whether institutional investors have more or less incentive to be more active shareholders than do individual investors. On the one hand, because institutional

investors make large investments in companies, they will have more bargaining power over company management than individual investors have, and they will derive the greater benefit from mitigating corporate impropriety than individual investors will. Among institutional investors, pension funds and insurance companies are thought to benefit the most from shareholder activism because they tend to have relatively long-term investment horizons, while more actively managed mutual funds are thought to benefit the least. (7)

On the other hand, index fund managers may have no interest in shareholder activism since they merely adjust their holdings when the mix of the index changes and only want to follow the index, not influence it. In addition, mutual funds and pension funds may have conflicts of interest that encourage passivity. Activism by a mutual fund complex or a pension fund manager could strain its relationships with corporate clients. For example, a fund manager bidding for the management of a firm's 401-K plan may be reluctant to vote against the Board of Directors' proxy recommendations. (7)

In practice, institutional investors appear to have been relatively passive shareholders, in the sense that they have tended to initiate relatively few reform proposals. Prior to the past twenty years, most reform proposals were submitted by a handful of individuals and religious groups. Since the mid-1980s, some institutional investors - mainly large public pension funds and a few union funds - have stepped up to the plate and offered their own proposals, but corporate pension funds, mutual funds, and insurance companies have remained on the sidelines. (7)

However, appearances can be misleading. Some institutional investors are active behind the scenes, keeping close contact with the management of the firms in their

portfolios directly rather than through more formal reform proposals. Moreover, passive institutional investors may still benefit shareholders as a whole by facilitating the building of shareholder coalitions that are initiated by others or by posing a possible threat to managers who might fail to act in the interest of shareholders. (7)

Ultimately, whether institutional investors will alleviate corporate governance problems in turn protecting the individual investor is an empirical question. Academic work in this area has not convincingly linked institutional holdings to firm performance, but some studies have shown that institutional shareholder activism does appear to be motivated by efforts to increase shareholder value. Other studies have confirmed that institutional activism is associated with a greater incidence of corporate governance events, such as shareholder lawsuits and corporate takeovers. Based on these findings, concluding that the rising share of household equity held by institutional investors is clearly good in terms of sound corporate governance would be premature. That said, it does seem reasonable to believe that there are benefits from institutional shareholder activism and that these benefits may help pave the way for market discipline in a broader sense. (7)

Mutual funds reportedly have been paying closer attention to proxy voting in response to recent corporate accounting scandals. Two of the largest fund complexes in the United States now publicize their proxy voting guidelines, and one of them reportedly maintains a full-time governance staff. Now, SEC commissioners have agreed that if the proposals were approved, mutual fund companies that failed to make information available to shareholders, or to report their votes to the SEC, would be liable for potential fraud. (7)

There has also been a lot of recent activity by shareholder rights organizations, which stimulate institutional and private investors to promote the reform of corporate governance. Hopefully, changes in the regulatory environment of the financial industry will promote greater attention to corporate governance thereby protecting all investors. In the wake of recent financial scandals, the Sarbanes-Oxley Act of 2002 requires public companies to validate the accuracy and integrity of their financial management. Firms complain that the processes and documentation required for compliance are rigorous; companies must have established procedures for meeting their reporting obligations, and CEOs and CFOs must personally certify that their companies' statements are complete and accurate. (7)

In conclusion I would like to reassert several of the claims I've made regarding the new economy and the implications to investors. First, technology and finance have greatly enhanced the growth of the new economy. Technology has allowed for a greater flow and availability of information and this has all been enhanced by finance. There are many more opportunities available in the new economy but there are also many of the same dangers that were out there in the old economy. The announced mistrial in the prosecution of Tyco pirates Dennis Kozlowski and Mark Swartz bears further comment as the uproar that accompanied it recedes. The CEO and CFO have shown that "Enron" can still happen, even with current accountability practices being implemented. These will have to be enhanced and amended over time to become more comprehensive and more pervasive. In the meantime, investors can still reap the benefits of the new economy and the new advantages and hazards that it holds for them.

Bibliography

- (1) Hubbard, R. Glen. Money, the Financial System, and the Economy, 2nd Edition. Addison Wesley Longman, Inc. 1997.
- (2) Kiyosaki, Robert. Rich Dad, Poor Dad. New York, New York. Warner Books Edition. 1997.
- (3) Levy, Haim. Introduction to Investments, 2nd Edition. Cincinnati, Ohio. South-Western Publishing. 1999.
- (4) Murray, Alan. The Wealth of Choices. New York, New York. Crown Publishers. 2000.
- (5) National Bureau of Economic Research. "Business expansions and contractions." March 23, 2004. <http://www.nber.org/cycles.html>
- (6) The Federal Reserve Board, Minneapolis. "Glossary Terms: related to the Federal Reserve, banking and economics." February 8, 2002
<http://minneapolisfed.org/glossary.cfm#s>. (June, 2003.)
- (7) The Federal Reserve Board. "Remarks by Governor Susan S. Bies, The Challenge for Corporate Governance Posed by Financial Innovation." October 1, 2002.
<http://www.federalreserve.gov/boarddocs/speeches/2002/20021001/default.htm>. (June, 2003.)