YOU GOTTA KNOW WHEN TO HOLD 'EM

-THE GAMBLER, SUNG BY KENNY ROGERS

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The inspiration for this article came from two blockbuster investment pieces published in the early 1980's. The first was titled "The Greatest Financial Story ever told", written by Greg Smith, the lead investment strategist for Prudential Securities. The second was titled "Revenge of the Nerds", written by Stan Salvigson, a strategist at Merrill Lynch. Both titles were clever and a clear signal that these pieces were going to be different. And they were. Both correctly laid out the investment framework for the foreseeable future, a future in which financial instruments (primarily bonds, derivatives and stocks in financial service companies) would be the winning investments. Remarkably this strategy lasted until 2008, a span of over 25 years.

We hope to convince you that the U.S. financial markets are entering a new era, in which the key to investment success will be to invest in the stocks of winning companies at fair prices or less and hold them for long periods of time.

Innovative enterprises will be the champions of the new era. Their springboard for success will be their successful exploitation of the massive technological innovations which have been brewing for over thirty years. Enterprises must learn to think and behave differently in order to prosper in the new paradigm. There will be at least three major variables which will need to be addressed:

- **People** – The winning enterprises of the future understand that their most important assets are their people. Long-term success will be contingent upon an enterprise's ability to attract and retain the right knowledge workers. At a minimum, this means establishing a culture defined by a high level of trust and transparency.
- **Tools** – Once the enterprise has the right people on board, they will need to provide the tools that help maximize individual potential. We define tools broadly to include both the devices and domain knowledge that will spur productivity gains. This means each enterprise must have a proactive stance toward new technology and the ongoing education of its personnel.
- **Systems** – Finally, the winning enterprises of the future will understand that maximizing individual potential is not the same as maximizing the potential of the enterprise. To be successful, the organization must design and implement systems that act as a multiplier to individual contributions. The most obvious of which is developing an innovation engine that leverages the collective insights of the organization

2000-2009: A PERIOD OF TRANSITION

Before we can predict a new era, we must close down the last era, in which financial instruments were the leading investments for over 25 years. With the benefit of hindsight, we can see the era of financial instruments began the process of ending in early 2000. The transition has been brutal. Over the course of the next nine years there were two convulsive bear markets. Both bear markets were severe but very different. There are valuable lessons and insights about the new era to be learned from each one.

Bear market #1 began in 2000 and ended in late 2002. Bear #1 involved two key interrelated elements. The first was excessive valuation. By late 1999 stock prices relative to their actual values had reached extreme levels. The extreme overvaluation was mostly focused on the technology sector. Cisco was the bellwether stock. In 2000 Cisco's peak market value was nearly $550 billion! Thirteen years later Cisco is valued at a much more reasonable $122 billion (as of 10/31/13).

Equity market overvaluation was only a part of the story, perhaps not the enduring part. The basis for the willingness of investors to pay such

lofty prices was their emerging recognition that the computer/connectivity revolution was coming of age. Dramatically cheaper computer processing capacity merged with the worldwide web. Investors presciently foresaw that innovative enterprises and their constituencies were about to experience the benefits of massive technological change. Their enthusiasm for the upcoming changes overrode their investment prudence; they simply overpaid for the change.

Thirteen years later it is safe to say the technological changes have been profound and lasting. They have set the foundation for an increased capacity for innovation and growth. We will address these changes and the implications for investors in more depth later in this piece.

The third element of bear #1 was the collapse of Enron. Just as Cisco was the bellwether stock for tech overvaluation, Enron became the poster child for corporate malfeasance. Sporting a beautifully written statement of values, the company management believed none of the words written therein. More importantly, Enron enticed its auditing firm, the previously pristine Arthur Anderson, into its spider web of deceit.

Bear market #2 began in early 2008 and ended in the middle of 2009. Bear #2 punished investors as severely as did bear #1. Yet the two bear markets bore little resemblance to each other. Bear #1 was based on overvaluation. Bear #2 was focused on the collapse of mortgages and financial companies. Yet the two bear markets were connected. The 2000-02 bear market began the process of ending the investment era which began in 1981; the 2008-09 bear signaled, with a tumultuous bang, the final chapter. After 2009 any aftershocks related to the last era more properly belong in the "addendum" section of the story.

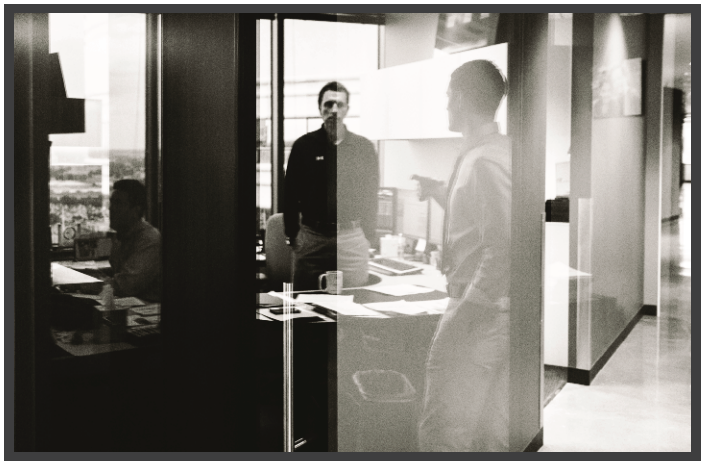
Bear #2 also offered valuable lessons to investors. Formerly "safe" investments like AAA bond pools and Fannie Mae common stock turned out to be worthless. A leading money market fund broke the buck. AIG (American International Group), then the largest insurance company in the world, failed because of ill-advised speculation of enterprise-threatening magnitude. The prevailing measure of risk, historic volatility, was turned on its head. So-called "investors" purchased assets about which they knew little, except that prior volatility had been low. A simple example can explain how delusional and dangerous this practice was. Every fall trees drop their leaves on our yards. Suppose your neighbor rakes all of his leaves into a large pile. He pours gasoline on the pile. Your neighbors gather around to watch; nothing happens. They all know that if a match is applied to the gasoline-soaked leaf pile the entire pile will explode in flames. Yet until the match is struck the pile just sits there. The historically low volatility of the leaf pile offers no clue as to what happens when the match is struck. The same is true for any investment: you have to know what you own so that you can understand how the investment will behave based on future events, not the recent past.

Bear #2 also showed the power and misuse of some of the new technology. Financial "professionals" allowed themselves to become dazzled by their ability to historically measure an enormous amount of past data. In doing so, they forgot that the quality of the data was as important as the data itself. Thus, investors were able to look at mountains of data on sub-prime mortgages showing historic loss ratios; this reassured them that the mortgage pools were really quite stable. They and their computers failed to understand that far too many of the mortgages written were worthless. The mortgages were so badly written that the meltdown in the mortgage industry actually occurred in 2007, well before the economy entered into a recession.

It is fair to say that computing power did not account for the decline in lending standards, but the computer enabled the securitization of all sorts of loans, amplifying the decline in lending standards and nearly causing systemic collapse.

Bear #2 also had its own scandal, on a par with the Enron collapse. Bernard Madoff managed to garner tens of billions of dollars of assets in a classic Ponzi scheme. Mr. Madoff cleverly promised his customers half the moon (12% per year) instead of 20% per year, which would have aroused suspicion. His ability to provide 12% per year with little volatility allowed him to attract billions of dollars of assets over at least two decades. On December 11, 2008 the entire scheme collapsed. Madoff's clients, after many years of comfortable returns, experienced a one-day return of -100%. In effect, Mr. Madoff compressed 20 or 30 years of volatility into one day.

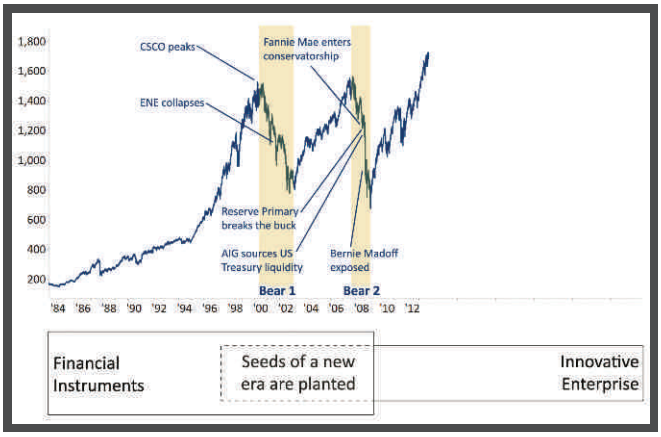
Our assertion that we have seen the end of the era of financial instruments does not imply that financial instruments are not here to



stay but that they will be relegated to a role as tools. The general decline in lending standards plus enormous increases in computing power promoted a "financial" bubble, and this phenomenon seems to have conclusively ended. This bubble included many companies and investment strategies which did not represent new products or technologies but instead represented, at their core, new and opaque ways to achieve leverage.

The following chart shows the price level of the S&P 500 from the beginning of 1984 until today. For your reference we have also included the major events during the period of transition, from 2000-2009:

S&P 500 Performance, 1984 to present



Source: Standard & Poor's, Disciplined Growth Investors

THE SEEDS OF A NEW ERA ARE PLANTED

The chart above showing the price history of the S&P 500 index looks relatively benign. In fact, the transition period from the old era to the new one was extremely difficult. The tension between the two eras arguably enhanced the severity of the two bear markets shown in the chart. Those two bear markets ranked among the five worst in the last century. One must go back to the 1930's and 1970's for comparable bear markets.

It is generally true that most of us learn the most from adverse experiences. If so, this transition period has offered a treasure trove of learning.

We expect most investors will absorb the obvious lessons from the period. Most investors now understand it is folly to overpay for a stock. Gradual improvement in risk management is likely to develop; prudent investors will learn not to rely solely on historic volatility as a measure of risk. They will need to build new risk management models and test them.

Investors must and will demand more transparency.

The "noise" created by the severity of the two bear markets has mostly threatened to obscure the most important lesson of the transition period, the dawning of a new era, the era of the innovative enterprise. This is understandable. An inventor friend of ours, Nick Van Brunt, knows a lot about innovation. He has invented three national class products for three different markets, a remarkable achievement. He has asserted many times that the impact of innovations always starts far more slowly than anticipated but ends up being far larger than expected.

And so it is with the innovation revolution we are experiencing. There is no clear beginning date. The revolution is gaining steam.

The Information Transformation

The next wave of technological innovation (we will call it the "information transformation") that investors enthusiastically embraced in 1999 and early 2000 has become the dominant force in American commerce and will largely shape the new era. Those companies on the right side of this wave will flourish; those on the wrong side will wither and likely die.

The center of this tsunami of innovation will be the relationship between the enterprise and the employee. "Employee" will likely become an obsolete term; employees will become more like associates and/or partners. Human capital is becoming more important than financial capital and physical plant. The first priorities for enterprise investment have become R&D and employee education and training; spending on physical plant has taken a back seat for many enterprises.

Product content (does our product or service make the world a better place?) will remain vitally important, but relationships with customers have been radically altered. The ubiquitous flow of information has allowed the customer to easily become better informed. Overall pricing efficiency is vastly better. Nearly twenty years ago in an analyst meeting in Minneapolis the president of American Airlines, Robert Crandall, bemoaned the effects of the computerized reservation models on industry pricing. He complained that if American changed its prices on a specific route in the morning then American's competitors knew about the change immediately. The pricing efficiency which hit the airline industry two decades ago now is part of every market.

Distribution systems are changing as well. Companies must ensure that their distribution system is appropriate for their product. Steve Jobs of Apple correctly understood that the iPod (remember it?) was a

distribution system for iTunes. It is easier today to shift from a distributor-based model to a direct model. In many cases the existing distribution system is too expensive for the product. The traditional newspaper business is dying for this very reason. Newspapers still provide content, but their readers have shifted from hand-delivered newspapers to the web. The Wall Street retail brokerage business may suffer the same fate; its costs are too high for the value it delivers.

Companies will have to adopt a new pace to capital investments. At one extreme the decision to invest in a new plant can be postponed based upon current business conditions. Today the situation is radically different. Companies must commit to a steady, year-by-year approach to investing in new innovations and education/training. Those companies that choose to increase or decrease R&D and education/training based on the business cycle may miss a round of innovation. Catching up is not merely a matter of a rush of spending on new equipment; employees will need to be trained on the new technology. Missing a cycle of innovation may put the future of the enterprise at risk.

This new era has begun with some stunning successes of individual companies. Apple has smashed the upper barriers of how large and profitable a company can become. Recently, the founder of Amazon, Jeff Bezos, purchased the Washington Post for a fraction of his net worth. Twenty years ago the Washington Post could have bought Amazon. We expect more outlandish examples of extreme changes in the landscape.

The stock market in general should outperform other asset classes. The extreme success of the winning companies should more than offset the losing enterprises. And the expected returns from bonds and money market funds are well below the standards for a prudent investor.

As this era matures the effects of innovation will be more evenly distributed throughout corporate America. The broadening of the information transformation will have at least two major effects. There will likely be fewer outlandish winners. Second, there is likely to be a major improvement in productivity across all companies and industries. We expect this process will unfold gradually, perhaps over years or decades.

What is The Information Transformation?

For our purposes here we will define the information transformation as the cumulative effects of advancements in

1) **Computing** – devices, algorithms and/or networks that enhance our ability to capture, create and analyze data.
2) **Connectivity** – devices and/or networks that improve data collection, access to data, and potential for collaboration.
3) **Design** – the process of recognizing problems and creating breakthrough solutions, building innovation engines.

The key driver of the information transformation has been intelligent, purposeful design, or the process of recognizing problems and creating breakthrough solutions. This is where practical applications are conceived and developed using the basic building blocks of computing and connectivity. Many enterprises have developed robust innovation engines. Those that have not are likely to suffer a fate similar to the Washington Post, or worse.

The information transformation may be developing in a unique way: advancements in one area are combining with advancements in another to produce quantum jumps in performance and usability. The personal computer was joined with telecommunications lines to produce the internet. The personal computer joined with GPS to put the user at the center of his own personalized map. Computing power and massive data stores have combined to give us insight into the flow of billions of actions and transactions which were too large to understand previously. Efficient and effective cloud computing has upset entire sales and distribution models across all industries.

There is another unheralded development to the information transformation. We call it infectious innovation. Innovative enterprises in markets far from classic technology markets are re-writing the competitive landscape of their markets.

It is difficult to ***overstate*** how thoroughly the information transformation has changed our lives. We challenge each of our readers to examine the information transformation in his (or her) own life. Consider how completely your own experience has evolved over the last decade. Then we ask you, our readers, to consider that the corporate world has experienced the same breadth and depth of change.

We are all innovators now

The information transformation is so pervasive that it is no longer possible for enterprises to passively approach the subject of innovation. They must begin to ask (and answer) a series of questions about their own stance on innovation, such as:

1) Are we applying innovative effort to revolutionary new products, improvements of existing products, or improvement of internal processes?

2) Have we set an innovation budget? Do we have an upper limit for IT spending?

3) What new existential threats to our enterprise come along with new technology?

4) Do we want to be leading edge or bleeding edge?

5) Do we have an effective innovation engine and a vibrant feedback loop to identify and rectify problems at an early stage?

6) Do we have the right domain expertise to innovate? Or do we need to leverage outside resources?

7) What is our relationship model for key technology vendors?

8) The innovation process must allow for failures and dead ends. Is our process capable of learning from inevitable failures?

A plethora of Brand New Products

The information transformation has not only increased our collective ability to manage innovation but also paved the way for whole new sets of companies, whose success was built directly on the development and successful commercialization of brand-new products. The personal computer revolution spawned a whole new set of companies, from Microsoft to Intel to Dell to Apple. The web allowed for the creation of another whole new set of companies, from Yahoo to Google to Cisco to Netflix to Amazon to Priceline. Social networking has spawned another whole new set of companies, the most notable is Facebook. The GPS technology helped create Garmin and Trimble. Mobile solutions boosted Apple to the most successful technology company ever. Mobile paved the way for the success of companies like Arm Holdings.

The business models of these companies are unlike any before them. Most have little or no cost of goods sold. Hence, most carry little or no inventory. Many of these companies use a direct selling model versus going through distributors. It is not uncommon to see operating margins in the 30% range. These operating margins were rare in the golden age of the industrial revolution. Most of the companies have little capital in the business; their capital "investments" are research and development (expensed when incurred) and employee development.

The growth and profitability of these new companies has transformed the landscape of corporate America. The process has been unrelenting and ruthless. There have been extreme winners and losers. Eastman Kodak, once a leading innovator, has gone out of business; its paper-based pictures can no longer compete with iPhone snapshots uploaded to Facebook, or Instagram, or Pinterest, or Snapfish.

Infectious innovation has begun to stimulate the creation of new products in supposedly mundane industries. Middleby is a maker of ovens. The company's goal is to obsolete every one of its products every three years, to make the ovens smaller, use less energy, and cook faster. Select Comfort is an innovator in mattresses, from its retail network to its robust new product flow. Edwards Lifesciences is radically changing heart valve replacement surgery. Intuitive Surgical is applying sophisticated robotics to surgical procedures. The oil and gas industry is revolutionizing itself based on fracking. The airline industry now flies 80% full; twenty years ago the planes were only 60% full.

All investors should be open to the possibility of major innovations in other areas, too.

Hooray for the tools providers!

Tools which not only retrieve data relevant to the problem at hand, but critically organize it for more immediate utilization, are provided by many companies. We are fortunate to have purchased several of these on behalf of our clients. CoStar Group supplies data to the real estate market, FactSet to the investment industry, and IHS to the energy sector and other capital-intensive businesses. Companies such as Intuit, Ultimate, Paychex, OpenText, Advent, or comScore, supply the tools to collect and organize data; other companies build businesses upon their own proprietary designs and data, such as Dolby, ARM, DTS, CEVA, Myriad Genetics, Corporate Executive Board, and Align Technologies.

For example, CoStar provides a comprehensive database covering commercial real estate throughout the US. This data is supplied through tools which allow commercial real estate market participants to quickly evaluate properties on metrics such as listings, lease rates, tenant information, specific physical property features, past sales and taxes, and, importantly, the market context of this entire dataset. The job function of a real estate broker, in the presence of such data, shifts from collecting relationships and data to comparatively evaluating properties and client fit. In the average day, a broker will not only view all the data they used to, but they will additionally have freed up time to create further value in their analysis and application of that data.

The quieter revolution- Let's make ourselves a whole lot better

The information transformation has begun to revolutionize American (and worldwide) commerce in more subtle but equally profound ways.

Instead of creating new products to bring to market, companies are using innovation to gradually improve their own products and services.

Our company, DGI, could be a case study on the impact of innovation. We have not created any new products, but have used the information transformation to improve our product quality. Over the past ten years we have had no single breakthrough in technology. We would guess that we have perhaps improved our productivity by 5-10% per year. While each year may not yield dramatic gains, our business has been radically transformed over the last ten years. Today we manage $3.6 billion with 17 employees (as of 9/30/13).

The quality of our services has greatly improved. Our trading allocation process is more accurate and fairer. Each *day* we reconcile our client accounts with over thirty custodians trusted by our clients to hold their assets. Fifteen years ago we would spend nearly a month to issue quarterly reports; today our quarterly reports to clients are typically mailed within four business days after the end of the quarter. We are able to respond more completely to client requests. Our biggest improvement has come in the area of investment information. We use Factset for our equity research platform. Their capabilities today are better than my wildest dreams of 20 years ago. And Factset is one of the new breed of innovative companies. Their stuff just gets better and better. They constantly pester us for ideas on how to improve their products and services.

The information transformation has brought timely and accurate information to our fingertips easily and with low cost. We used to spend a lot of time on data collection and organization. Now we spend a lot of time thinking and analyzing. Our clients are the beneficiaries of these technological improvements.

We spend very little time arranging meetings. Our phone calendars are synched to our iPads which are synched to our work computers. We have a dwindling number of excuses for missing meetings!

We have no secretaries. We type our own letters or transcribe them via voice recognition software.

Twenty years ago our CIO declared that cell phones were a fad. He would prefer to have that forecast forgotten. Fortunately, our organization ignored his prediction and our customers have benefitted from our adoption of the information transformation.

THE PEOPLE TRANSFORMATION- HUMAN CAPITAL REPLACES BRICKS AND MORTAR

Today businesses are hungry for knowledge on how to improve employee productivity. Why? We believe business leaders are beginning to realize the vast changes associated with the information transformation. They realize these changes will spur a major revolution in the way employers relate to their employees. The second reason is that the U.S. is likely to compete in this century with China and India. Since their populations dwarf ours we must improve our productivity if we are to continue to lead the world.

Numerous ground-breaking authors have been publishing books on a variety of ways to enhance employee productivity. Jim Collins' seminal work on culture is astonishingly good. Patrick Lencioni, Henry Cloud, and Gay Hendricks are adding to the work done by such pioneers as Peter Drucker and Stephen Covey.

Our company, DGI, is a case in point in this revolution, too. We have sought out the best consultants and business thinkers we can find. We have been fortunate to receive game-changing insights from Jim Ware of Focus Consulting Group and Tom Mungaven of ChangeMasters. Jim has written extensively on investment firms' culture. His brilliant insights are too many to mention. Tom helps leaders align their external image with their internal self. Last year Jim Dethmer shared his insights about personal development with our entire staff. After Jim spoke for 3 and ½ hours his stomach justifiably growled, and he inquired if anyone wanted to stop for lunch. Mesmerized by his insights and hungry for more, not a single member of DGI wanted to stop. Al Ritter has worked with two of our teams; Al is primarily interested in one big thing: breakthrough performance.

Successful companies will directly address the seminal changes involving their employees. Each winning enterprise will be backed by a strong culture that supports that company's purpose (How do our products and services make the world a better place?). The corporate culture will have to successfully address three factors in the labor force:

- **Attracting/retaining talent** – clarity of purpose, trust, transparency, workforce flexibility
- **Maximizing individual potential** – critical thinking, incubation of new ideas
- **Maximizing enterprise talent**– clarity of purpose, culture, connection/collaboration

Leaders of winning enterprises must think differently about the relationship between the company and the employees, using the same concepts listed above:

- **Eliminate unnecessary friction.** Promote cultural elements that lessen organizational "friction" to insight development, i.e. *trust and transparency.*

- **Stimulate individual insights.** Emphasize "tools" that augment individual capabilities to develop practical insights, e.g. *critical thinking skills, incubation.*

- **Enhance group insights.** Develop and maintain a culture of trust, develop tools which promote the free exchange of insights to solve an array of issues from enterprise-wide to the smallest challenge for an individual employee, e.g., *connection, collaboration.*

- **Be a partner of choice.** Develop a clear sense of purpose and retain the right employees (partners) by offering flexibility in the nature of the partnership, e.g., *FTE, outsourcing/partnering, retirement.*

Our readers will note we have mentioned the following concepts regarding employees:

1) Clarity of purpose
2 Trust
3) Transparency
4) Connection/Collaboration
5) Critical Thinking Skills
6) Incubation of new ideas
7) Flexibility

These are worth discussing.

Clarity of Purpose

The information transformation will ruthlessly expose those enterprises which fail to identify and communicate a clear sense of purpose about the company. Patrick Lencioni has written brilliantly on this subject. He believes most companies need to address the basic question of why they exist. This is not an easy process. Yet this effort will serve as the foundation for a culture able to capitalize on the information transformation.

The benefits of a clear sense of purpose are numerous for employees and leaders. Leaders will have a blueprint for decision-making and a feedback loop to measure how decisions fit into the larger purpose of the enterprise. Employees will be able to see how their own efforts contribute to the purpose of the enterprise; this should inspire and motivate employees.

Trust

A central part of enterprises in the new era will be the granting of trust from the employee to the enterprise. This is a complete reversal from the past, when the employee had to earn the trust of the company.

Employers can require an employee's physical presence and measurable output but can only request they contribute their creativity to the innovative process. This request will be honored in a culture of trust.

Trust engenders a sense of ownership in the outcome. Organizations with high levels of trust will find employees willing to take personal risks to benefit the group. Staff members will be eager to suggest better ways to accomplish tasks. Employee feuds will be minimized.

Those enterprises which create a culture of trust will see breakthrough performance. Enterprises with low trust will not survive.

Transparency

High transparency is one of the key requirements for a trustworthy environment.

Successful enterprises will operate as though all company information is public, except for clearly proprietary information. For company leaders it means that most employees will easily know about your decisions, how you spend your time, and how much you earn.

Employees must learn to operate in a virtual fishbowl. Emotional outbursts on e-mail or via twitter may temporarily alleviate one's tensions but leaves a written record which will likely see the light of day.

The web will require companies to draw a clear line between proprietary and public information. The irony is that the more transparent a company can be, the more clearly it can draw this critical line.

Successful enterprises will be transparent to their customers and shareholders. In many cases customers will be shareholders. For company leaders it means that customers and shareholders are likely to be as knowledgeable about your decisions, etc. as your employees. Derogatory comments about customers in e-mails by employees will likely find their way into the hands of the customer.

Connection/Collaboration

We are all connected to the web all the time via iPad or mobile. This gives employers and employees an unprecedented opportunity to remain connected with customers, vendors and each other. This connection will involve two elements: 1) remote connection and 2) face-to-face interaction.

Successful employers will seek to promote a healthy balance between remote and face-to-face connection. We expect many employers will gravitate towards a central location where employees can interact face-to-face at least once or twice per week. This central location will serve as the cultural center of the enterprise. The interior spaces will be designed to promote maximum collaboration and team-building.

Successful enterprises will also promote close connections with customers and vendors. It may be necessary to develop a community of customers and a community of vendors. Customers and vendors will be attracted to enterprises which have displayed clarity of purpose and high internal and external trust.

A strong connection will establish the basis for effective collaboration. Successful collaboration can focus the wisdom and experience of the entire group on a specific problem and solution. A richer array of critical insights can be part of the decision process.

Critical Thinking Skills

The proliferation of data and the 24/7 nature of information flow will elevate critical thinking skills to a new level of importance. It is not a stretch to envision an economy where every competitor has access to the same information at the same time. In that environment critical thinking skills will be a key differentiator of success.

There are three components to critical thinking skills:

1) The ability to view 1000 pieces of data and select the 2 or 3 critical items.

2) The ability to ignore noisy but unimportant developments in order to focus on the key variables.

3) The ability to patiently let the facts build your scenario rather than trying to bend the facts to fit your desired outcome.

Truly superior organizations will learn to develop critical thinking skills involving more than just one person. An enterprise with a high trust level and extensive collaboration would be able to develop group critical thinking skills. This would indeed be a powerful enterprise.

Incubation of new ideas

The increasing ability of employees to connect from virtually anywhere at any time allows employees to consume vast amounts of information. But critical insights can only be developed if employees are provided time to disconnect, time to allow ideas to germinate. Enterprises will have to encourage employees to disconnect on a regular basis. This will enable the employee to assess his own emotional health and to think deeply about the future.

Critical insights can only be developed if employees are provided time to disconnect, time to allow ideas generated by that information to incubate before they are blocked out by another flood of data.

Flexibility

Employers will need to re-think their strategies towards their employees. Partners or associates will be a more apt description of the employer-employee relationship.

Successful corporations will tend to employ fewer full-time employees (FTE's). Non-core and nonproprietary functions will be outsourced. This will be a two-edged sword. For many, a full-time job will be no more than a dream. For others, there will be major opportunities to provide services to other corporations.

Because FTE jobs will be relatively less common, both employers and employees will recognize the importance of a long-lasting relationship. Employers will commit to creating a workplace that challenges and motivates employees; employees will be less interested in hopping to the next job.

Retirement is fast becoming a less relevant concept. Employees will change roles as they become older and more knowledgeable. A physician client just retired as a world-class kids' eye surgeon. He stopped doing surgery but still does office visits. He was one of the first doctors in the U.S to use Botox. He now has a thriving practice injecting Botox for cosmetic reasons. Our CIO's brother just "retired" as an engineering professor at the University of Wisconsin. He has formed a new company to develop new products, most likely to be sold on a royalty basis. Another client is 72 and has consulted to charitable organizations for over 40 years. He wants to retire but his clients will not let him. He is simply, too effective.

LEADERSHIP IN THE NEW ERA

Corporate leaders in this new era will be tested as never before. To be successful, a leader must be fully committed to a strong corporate culture. Leaders must embrace transparency, for this will be one of the

main foundations of a culture of trust. Leaders must view their employees as partners. Education and training must become a central and long-term part of the investment efforts of the company.

Leaders must learn how to handle the web. On the one hand, it can be a great facilitator for connection and collaboration. On the other hand, it can create controversy. For example, a business owner recently told us of a dispute between two of his employees. One employee hacked into another's emails and discovered negative comments about him. The owner was wrestling with what to do.

Leaders must learn develop a culture which balances the needs of the individual employee to be connected but also to have time to incubate new ideas. Future successful companies will balance the flexibility to work offsite with the important face-to-face connections which have always been and will continue to be extremely important.

Consider the example of two companies, ABC and XYZ. Both companies have terrific new products and business models which support high growth and free cash flow. The leader of ABC has developed a culture which encourages trust and collaboration. The leader is transparent except for proprietary information. The leader is also fiercely protective of employees' privacy. The leader is very focused on using innovation and education and training. The leader of company XYZ is an old-style autocrat. He makes all of the decisions. He does not trust his employees. He thinks culture is nonsense. Which company has the better chance for long-term success?

MACROECONOMIC IMPLICATIONS OF THE NEW ERA

Just as the information transformation will revolutionize the individual enterprise, the challenges for the general economy will be equally profound. Overall corporate profit margins are higher than before. Second, the relationship between the employee and employer has been transformed in the benefits area. Third, the extreme divergence in outcomes between the winning and losing enterprises is creating great disparity in wealth. Fourth, the measurement of GDP activity has become suspect. Fifth, transparency has become a major factor for central bankers. Sixth, fracking technology is altering the U.S. trade balance. And seventh, the U.S. is poised to maintain or even enhance its status as the most powerful economy in the world.

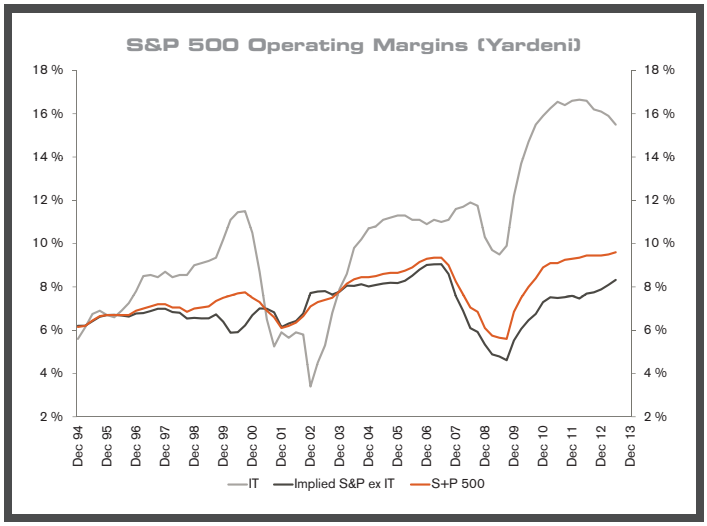
Corporate profit margins have moved to a much higher level

S&P 500 operating margins have achieved the highest levels in 20 years. Thus far, the improvement has come from huge upward movement in the IT sector margins. The combination of relatively new, very large enterprises in the IT sector plus high margins has lifted the margins of the entire S&P 500 index. In the chart below we have broken out IT sector operating margins, S&P 500 overall margins, and the S&P 500 excluding IT sector margins. Please note that the operating margins of the IT sector companies have pulled the operating margins of the S&P 500 to the highest levels in over 20 years.

The fact that the most innovative sector in the U.S. economy has lifted the prosperity of the entire S&P 500 is consistent with our assertion that we are in the early stages of a new era, in which a few enterprises are outlandishly successful. As the information transformation spreads more broadly throughout corporate America, we expect improvement in operating margins for those S&P 500 companies outside the IT sector.

The improved operating margins of the S&P 500 companies are not merely an accounting fiction. Corporate cash flow and corporate balance sheets are the strongest in at least a generation.

S&P 500, Select Operating Margins, 1994 to present



Source: Yardeni Research, Disciplined Growth Investors

Employee-Employer relationships are already changing

A major change in employee benefits has begun to reflect the new relationship between enterprise and employee. More than 20 years ago newly formed companies began to offer employees participation

in 401(k)s, in lieu of defined-benefit pensions. This has shifted the liability for retirement from the company to the individual. It has also removed a major reason for an employee to remain with a company.

We expect the information transformation to further alter the employer-employee relationship. Health care benefits have been changing. The introduction of Health Savings Accounts about five years ago began to shift health care decisions to the individual employee. Like 401(k)s, the assets in an HSA belong to an employee, not to the corporation. The introduction of health care exchanges in the Affordable Care Act may accentuate this trend.

The increase in free-lancing is likely to continue. Employers and employees both have a shared economic interest in free-lancing. Employers are free to hire fewer FTE's and employees can act more like partners.

Increased disparity in Wealth

The huge difference between companies that capitalize on the information transformation and those who fail to embrace the change has produced major differences in outcomes. Shareholders in winning companies will enjoy extreme prosperity while shareholders in losing enterprises will find themselves figuratively out in the cold. Since 2000 America is experiencing rapid mobility of wealth, arguably the most since early in the 20th century. This trend is affecting all levels of society.

The key to upward mobility in wealth for individuals will be character. Initial training and education will be less important than a willingness to continue to learn and grow. Winning enterprises will be focused on finding and developing people who can thrive in the information transformation. The need for committed partners and associates will be unending and will expand far beyond the national borders of the U.S. Successful enterprises will not keep employees who are unwilling to learn and adapt.

Measuring systems will need to be upgraded

The U.S. is moving from producing widgets towards a service and intellectual-property based economy. Our GDP measuring systems are finely tuned to measure widget production but not so good at measuring services. Importantly our measuring systems do not measure the qualitative improvement in services and corresponding productivity gains.

A specific issue caused by obsolete measuring systems

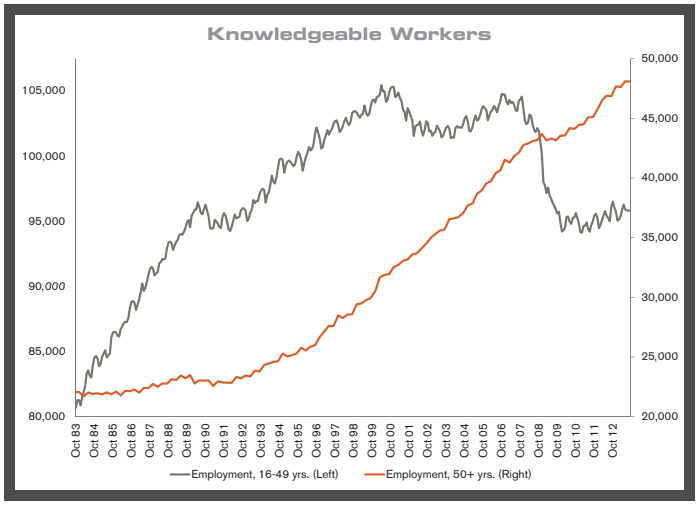
In the course of researching this piece we happened across a startling bit of information. Since 2000 the U.S. GDP has grown at 3.9% per year in nominal terms. This figure includes inflation. During the same time frame the revenues of the S&P 500 have grown at 9.4% per year. The S&P 500 is the index most closely associated with the largest companies in America; in 2012 the S&P 500 companies generated sales of $10.7 trillion, a very sizable number. We have attempted to adjust the revenue growth of the S&P 500 for changes in the companies included in the index and for foreign sales. Using reasonable corrections, the S&P 500 revenues likely grew at 7-8% per year from 2000-2012 versus reported GDP growth of 3.9%

The implications of this divergence in the growth rates between the S&P 500 and reported GDP are staggering. It changes the entire framework for discussion about the U.S. economy today. If the revenue growth of the S&P 500 is going to be nearly 4% higher than reported GDP growth, then the pessimists who have declared that the U.S. economy is growing slower are dead wrong.

What could account for these different rates of growth? Our best guess is that the measuring system is not measuring services and intellectual property correctly. This means that the U.S. economy is larger than reported. This leads to a series of interesting issues. Federal government spending may be a smaller portion of GDP than reported. The current federal deficit problems may be more a factor of revenue collection than GDP growth. This is rational. Income in an economy with growing services and intellectual property plus global trade means income is harder to classify. A complex tax code provides incentive to reclassify income into categories with lower rates or to shift income into jurisdictions with lower rates.

If the real economy is larger than reported why is unemployment so high? The unemployment rate may be more related to a mismatch between education/training/character and the available jobs than a dearth of jobs. Recent statistics support this idea. The chart below shows the employment situation for two age groups, 17-49 and over 50. Employment among younger (unskilled or unmotivated) workers is a problem; unemployment for those over 50 is not. This is different behavior from past recessions, during which the older (i.e., higher paid) employees were replaced by younger (i.e., cheaper) employees. The difference today may be that those over 50 are far more effective employees for the new era.

Total Number Employed by Age, 16-49 years old and 50+ years old, 1983 to present



Source: Bureau of Labor Statistics, FactSet Research, Disciplined Growth Investors

It will likely be years before the national economic authorities will be able to accurately measure overall GDP, including services and intellectual property.

Transparency will become increasingly important for central bankers

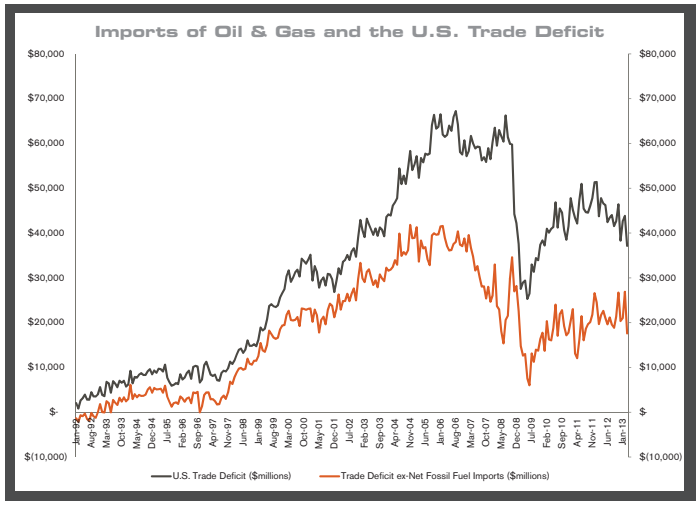
The Federal Reserve will be forced to adapt to the new era. For example, the Federal Reserve has resisted providing audited financial statements. That position is not defensible. As more business enterprises develop cultures of trust and transparency, the pressure on the Fed will likely intensify.

Fracking will continue to fuel the U.S. Energy production boom and change the U.S. Trade balance

The result of this shift to domestically-produced energy has caused a significant positive impact on the U.S. trade deficit. For the last several years, oil and gas imports comprised between 40%-70% of the trade deficit. For every dollar reduction in foreign consumption *and* exportation of domestic fuel, the U.S. would see a two dollar net reduction in the deficit. The shift to exporting domestic production has just begun. Eight new natural gas liquefaction export terminals are planned for construction at several coastal locations across the U.S. (including Oregon, Maryland, Texas, and Louisiana); several existing regasification plants are also being converted to include liquefaction facilities.

The following is a chart of the total U.S. trade deficit and the trade deficit ex-oil since 1992. Readers may note that the total trade deficit shrank sharply after 2007 because of the recession. In the recovery oil/gas imports have hardly risen.

U.S. Oil and Gas Imports and U.S. Trade Deficit, 1992 to present



Source: U.S. Bureau of Economic Analysis, U.S. Energy Information Administration, Disciplined Growth Investors

The next 25 (at least) years will be uniquely American

The U.S. is likely to continue to lead the world in the successful adaptation of the new wave of innovation. The U.S. has the most open capital markets and the freest flow of information. The U.S. also has the strongest and most pervasive culture of innovation. The rest of the world will, in varying degrees, improve along with America. The success of individual countries will mostly correlate with their embrace of the innovation and transparency needed to capitalize on the new innovations.

CONCLUSION

After a long and difficult transition period the U.S. economy has entered a new era. The information transformation is fueling the new era. Winning enterprises will be the stars. The winning investment strategy will be to find innovative companies, buy their stocks at fair prices or less, and hold them for long periods of time.

Investors are still likely to experience aftershocks from the last era. There are still numerous problems with the debt markets and major financial entities. The ability of governments to sustain themselves at their present level of activity and honor their future commitments is still open to question.

The promise of the trends of the new era offers a sharp contrast to the lingering problems from the last era. This has created a major dilemma for investors. Do they structure their portfolios to protect against a repeat of the 2008 financial crisis or do they seek out and invest in those innovative enterprises likely to prosper in the new era?

For long-term investors this issue is clearly resolvable. On the one hand, the new era is well-established and becoming more pervasive. The stocks of many innovative companies are still favorably priced. On the other hand, future economic events caused by problems from the last era will be difficult to forecast, both in content and timing. Even more problematic, the market reactions to events from the last era are even harder to forecast. Finally, progress on solving the problems from the last era will likely be uneven; it will be difficult to know when "the coast is clear".

Our advice:

"YOU GOTTA KNOW WHEN TO HOLD 'EM"

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CONTACT:

ROBERT BUSS
CFA, CIPM DIRECTOR OF MARKETING
612 317 4107
ROBERTB@DGINV.COM

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