



Summer 2001

George Investments View

Volume 6, Number 2

Closing Remarks — The great UCLA teacher John Wooden once remarked at the Downtown Athletic Club that a championship program is the result of having a “good and decent program and a few young people who *demand* excellence.” I leave Stetson knowing that every year students take major leadership rolls in developing policies, doing the analysis, and completing the presentations. They lead, they cajole, they work tirelessly on projects, and they *demand* excellence from their fellow students. The proof of our program’s excellence is this year’s dominant win at Dayton. It was remarked by a judge that our program is “at a higher level”. Dr. Mallett is the man almost solely responsible for developing our program to a level where students can maximize their potential. His counsel is key to every visiting advisor’s success. Finally, I would like to applaud and encourage the participation of recent George alumni who support the program from distant locations by speaking with students, proposing ideas, and providing information and contacts for the students. Your support is critical in order to maintain the program’s excellence.

by advisor Frank G. Castle, CFA

George Students RISE to Beat the S&P 500

The year 2000 saw the end of the great bull market that began in 1983. Investors witnessed a 68% decline in the NASDAQ, saw consumer confidence plummet, watched oil prices skyrocket, and sat spellbound through a botched presidential election. Given these headlines it is not surprising that the S&P returned -1.0% for the twelve months ending January 31, 2001. What might surprise you, however, is that our Roland George investment students were able to generate a 37% annualized return for the period. How were our students able to exceed the returns of 95% of all professional fund managers?

Four of our current students, Katie Norsen Alday, Jack White, Michelle Dass and Brian Rachwalski, representing the Roland George Investments Program, addressed this question at the recent RISE National Student Investment Strategy Symposium in Dayton, Ohio. The basis for their success included several key ideals that rub against the grain of efficient market theory.

First, they consider themselves contrarian thinkers. The students purchase securities that are out of favor with the market, yet retain strong fundamentals and goodwill. They rely on their own research rather than the consensus of the herd. Mr. Frank Castle, CFA, their professor, attributes the recent success to the program’s long-term view and the market’s recent focus on value. While short-term traders are turning their portfolios 100% per year,

Stetson students are comfortable waiting at least 5 years for a reasonable return. Finally, our students refuse to become involved with forecasting the movement of the market. They concentrate more on the intrinsic value of a company rather than that company’s stock price.

Adhering strictly to our policies and strategies, our students have been able to achieve very superior returns that secured them a finalist position in the recent RISE Symposium at the U. of Dayton. This first-of-its-kind symposium is national in scope bringing leading students, that manage actual money, faculty and investment professionals together in an interactive environment to focus on strategic issues facing tomorrow’s leaders in the investment industry. The symposium included a student portfolio management competition that weighted equally the importance of performance and strategy. Students from 43 universities in 27 states and Canada attended the symposium, with 15 placing their portfolios on the line to compete in one of three categories: growth, blend, or value. Graduate students from Rice University took the top spot for value with a 3% return, University of Dayton finished first in the growth category with 5%, and the Roland

George Investments Program students emerged victorious in the blend category with a 37% return! The winning teams opened the NASDAQ on April 30th.

While the George class of 2001 would be more than happy to assume the credit for this outstanding accomplishment, recent George classes were critical to this year’s championship. The classes of 1999 and 2000 were instrumental in building the foundation for the performance of the portfolio. A large portion of the program’s accomplishments can be attributed to the dedicated leadership of Mr. Frank Castle and Dr. James Mallett. Finally, the class of 2001 would like to thank everyone that was involved at Stetson with the success of the program.

by: Michelle Dass
and Jack White

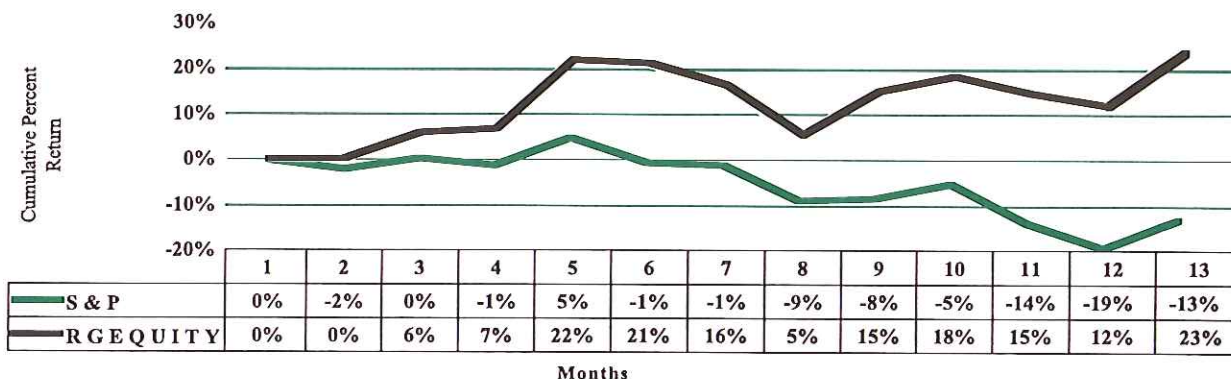


Portfolio Performance

Equities

After generating a 28% return for the twelve months ending 12/31/00, the George Investments Growth Portfolio has generated a 23% return for the twelve-month period ending April 30, 2001. The portfolio has outperformed its benchmark S&P 500 by 36% for the period ending 4/30/01. The S&P was down 13% for that period. The equity portfolio is invested among the different sectors in this fashion: Utilities 3.43%, Energy 15.17%, Financials 15.31%, Cyclical 7.38%, Durables 4.57%, Staples 8.10%, Services 32.13%, Retail 0%, Health 8.98%, and Technology 4.93%. The equity portfolio's best performers for the one-year period were Panera (PNRA) up 276.7%, Perkin Elmer (PKI) up 121.1%, and Phillip Morris (MO) up 142.9%. In addition, our energy investments continue to add to the portfolio's capital gains. Offsetting our gains for the period were losses in Gentex (GNTX) down 25.4%, Fox Broadcasting (FOX) down 34.5%, and Salton (SFP) down 44% (sold). By sector divisions, energy, consumer services, and consumer staples have performed the best. Technology has been the worst performing sector. We sustained only minimal losses in technology given that we sold two-thirds of our technology securities one year ago.

ROLAND GEORGE PERFORMANCE vs. S & P 500 INDEX



Fixed Income

The George Fixed Income Portfolio generated a 10.8% return for the 12 months ending 4/30/01. Our performance reflects recent gains in our longer duration corporate bond portfolio, overseas bonds held in a mutual fund, and a recovery in a high-yield preferred security. The portfolio has suffered capital losses from two high-yield issues over the past 18 months totaling \$26,000, approximately a 2% principal loss to the portfolio. We underperformed a Frank Russell Index of Treasury, corporate, and higher-yield securities that generated a 13.1% return for the 12 months ending 4/30/01.

The portfolio at this date is highly liquid prior to implementing the bond strategy of the class of 2001. The strategy reflects a belief that real rates for the longer duration treasuries will decline, and that while the economy will continue to be weak we do not expect a major decline in long-term interest rates.

Changes In The Portfolio

SALES				PURCHASES	
	Shares	Sale Price	Cost	Shares	Cost
Panera (PNRA)	2,500	\$ 27.75	\$ 6.71	Anadarko (APC)	600 \$ 60.79
Quorum Healthcare(QHGI)	4,000	\$ 14.78	\$ 9.06	Raytheon (RTNB)	1,000 \$ 28.98
Plains Resources (PLX)	1,500	\$ 20.29	\$ 17.06	Exponent, Inc. (EXPO)	3,000 \$ 11.30
Pre-Paid Legal (PPD)	1,200	\$ 20.29	\$ 28.95	The Topps Co. (TOPP)	4,000 \$ 10.00
Micron Tech (MU)	600	\$ 42.00	\$ 14.85	Fischer Imaging (FIMG)	7,000 \$ 4.62
Great Lakes Chemical (GLK)	300	\$ 30.97	\$ 44.00	Inforte (INFT)	5,000 \$ 8.22
Federal Express (FDX)	1,000	\$ 41.40	\$ 32.23	AT&T (T)	2,300 \$ 21.98
				MFC Bankcorp (MXBIF)	7,500 \$ 7.99
				Sawtek (SAWS)	1,500 \$ 25.96

Changes In The Portfolio (continued)

The management of the Roland George portfolio calls for us to constantly reevaluate our asset allocation and the investments in our portfolio. This semester we have chosen to eliminate some positions in technology, increase energy holdings established two years ago, and to increase our medical product exposure. We also initiated new positions in Telecom, Industrial Services, and Entertainment.

Sales -

- * We reduced our Panera position by 2,500 shares to 3,000 shares. Panera had grown to 13% of the portfolio. We feel a 7% position was prudent. The company continues to grow its franchise royalties in excess of 35% per annum. We value the company in excess of \$35/share.
- * We sold Quorum Health rather than receive Triad Hospital's shares in an acquisition by Triad. Triad does not fit the current health care strategy of the portfolio.
- * Plains Resources was sold to fund the purchase of Anadarko and increase our natural gas exposure.
- * Accounting problems and shareholder suits will be problems for Pre-Paid for the foreseeable future. We lowered our valuation and closed our position.
- * After selling 67% of the fund's Micron Technology shares one year ago, we closed out our position in April due to our inability to determine when the cyclical DRAM demand would return.
- * Great Lakes has had difficulty gaining pricing power. We sold our position.
- * FDEX continues to have margin difficulties caused by rising energy prices and by an increasingly competitive UPS. We therefore eliminated our FEDX position.

PURCHASES -

- * We purchased a 3% position (\$36,000) in Anadarko Petroleum, increasing our exposure to natural gas and moving our energy position to 13% of the portfolio. We value APC in excess of \$100/share, a valuation that we expect to increase with rising natural gas prices. We believe a lack of infrastructure spending in the

1990's will keep gas in short supply for at least four years, regardless of the health of the economy.

- * We purchased a \$30,000 investment in Raytheon after concluding that its turnaround is complete, that its earnings are returning quickly to a normal level after recent difficulties, and that the stock is currently trading at 50% of our valuation. We believe moreover, that RTNB's electronic technology and product development are in a "Sweet Spot" to profit from the nation's defense development. We concluded that Raytheon's missile and electronics businesses could grow rapidly for several years.
- * We purchased \$30,000 of Exponent, a growing provider of industrial consulting services. We concluded that the company is trading at a steep discount to our valuation of EXPO's intrinsic value and free cash flow.
- * Our purchase of Topps reflects our analysis of its goodwill and intrinsic value that we value in excess of \$19/share. We believe that TOPP's excellent management will be able to leverage brand power and distribution with new product development and that the current stock price reflects only 2001 earnings estimates with little value given to goodwill and future earnings growth which we believe will exceed 10%.
- * We invested \$33,000 in Fischer Imaging. (See our article in this letter.)
- * Our \$40,000 investment in Inforte was to take advantage of the oversold condition of internet stocks. Paying \$8.22/share, we received a fast growing company that is profitable, well managed, and is selling at a "cheap" price in terms of earnings, free cash flow, and the excess cash in the company. We anticipate that INFT will continue to grow its EPS in excess of 15%, that its earnings multiple will increase, and that the company will be sold at some future date to a large consulting company.
- * AT&T, an undervalued asset situation, was added to the portfolio. Their current business plan is an attempt to maximize shareholder value by spinning off all parts of the company. The company will be divided into Long Distance, Cable, Wireless, and Business Services. We value the company at nearly 200% of its current market value.
- * Our investment in MFC BankCorp is detailed elsewhere in this letter.

by: Katie Norsen Alday

Energy Sector

We maintain an overweight exposure to the oil and gas sector, because we believe this industry will continue to become increasingly significant in the international economy. We are exposed to drilling services through Haliburton, Energy Service Global Marine, and Parker Drilling. We have increased our exposure to natural gas with the additional purchase of Anadarko in recent weeks. Each of these companies has increasing market share and increasing pricing power. Energy Service, Global Marine, and Parker own large drilling rigs. We believe the supply of these rigs in the market is rapidly declining, increasing the asset value of these firms dramatically. Haliburton provides the service and parts to keep these aging rigs running. We added Parker Drilling this spring to increase our exposure to the natural gas drilling efforts in the Gulf of Mexico. Parker continues to grow its return on its

drilling rigs and tool services, thereby improving its operating margins.

We continue to maintain our position in NI Source, a significant gas supplier. NI Source is currently growing its natural gas marketing and distribution arms in the domestic market. Its ability to expand natural gas distribution in the northeastern U.S. is increasingly important as power shortages become a long-term factor in our economy. Given the lack of infrastructure energy construction in recent years, we believe that valuations in our service, rig, and gas distribution companies will continue to grow. The distribution of oil and gas is transforming from a commodity business to a service business. We believe we are positioned to take advantage of these trends in the economy.

Nanotechnology

Imagine a world in which computers run a billion times faster, consumer goods self-assemble, space travel is safe and affordable, pollution is wiped out, world hunger is ancient history, every child receives a first rate education, extinct plants and animals are reintroduced, and most remarkably a world in which illness, aging, and death do not exist. The majority of people after hearing such a statement would in all likelihood burst into a fit of laughter. Present this alternative reality to a nanoscientist and you may get a completely different response.

Nanoscientists are working everyday on what is referred to as nanotechnology. This new technology can be understood as building things one atom at a time, or put another way, *manufacturing at the molecular level*. A nanometer is one billionth of a meter. To illustrate this size think of an orange blown up to the size of the earth. If you did this you would be able to see the individual atoms, which would be about the size of grapes. About three or four atoms fit lined up inside a nanometer. The goal of nanotechnology is to be able to *manipulate* atoms and place them specifically on a structure. The way scientists see this happening is by developing a nano-sized robot arm capable of manipulating atoms into making copies of itself. These copies would then make copies and soon you would have trillions of these nanomachines controlled by nano super computers working together assembling objects rapidly. Pretty scary stuff.

Think about what digital technology has done for the world of information. It has made copying fast, cheap, and close to perfect. By comparison, nanotechnology is expected to do the same in the world of matter. By processing molecules with small, high-frequency, high-productivity machines, products can be made at extremely low costs. The impact this could have on modern day business is close to unimaginable. From an investor's point of view it is crucial to identify which companies will take advantage of this possible nano-revolution early on. It

will also be critical to recognize which products may become obsolete as a result of this technology.

Almost any product could be improved if we could precisely control its structure at the molecular level. So when will we see the benefits of nanotechnology taking shape? The best guess I can offer is ten to twenty years. As more and more people learn about the concept of nanotechnology we can expect research and funding to accelerate. Our new President George W. Bush in his budget proposal has requested \$485 million for research on this subject for the year 2002. This would be a fifteen percent increase from what Congress granted last year. This money will come from twelve different agencies including the National Science Foundation, the Department of Defense, the Department of Energy, the National Institute of Health, the National Air and Space Administration, and the Department of Commerce's National Institute of Standards and Technology. New agencies to join the efforts will include the Department of Agriculture, the Department of Justice, the Treasury, the State Department, the Department of Transportation, and the Environmental Protection Agency. Someone knows this is important! Certainly all of these agencies expect in some way to benefit from this research. In addition to government funded projects, more than thirty universities have launched nanotechnology research centers, including a quarter-billion dollar joint effort between the University of California at Los Angeles, UC Santa Barbara and industry. International interest is growing with Japan leading the way with their announcement of its own \$410 million program.

A 400-page report published by the National Science Foundation is soon to be released that will address how nanotechnology will affect society. One prediction is that in fifteen to twenty years the entire semiconductor industry, along with half the pharmaceutical industry, will rely on nanotechnology.

by: Nick Burwell

Productivity Increases - Are They Real?



Historically high productivity increases have meant that the economy could grow rapidly without fear of inflation, and that rising real labor costs could be off-set by increased production, resulting in higher profits. Productivity measures the growth of labor efficiency in producing the economy's goods and services. Recent 3-4% annual increases have allowed the US economy to sustain a much faster pace of growth than previously thought possible. As a result we have enjoyed an optimal combination of expansion, rising profitability, low unemployment, dormant inflation, and higher real wage gains. In the fourth quarter of 2000, non-farm productivity rose at a rate of 2.4%, vs. a rate of 3% in the third quarter. For all of 2000, productivity rose by a strong 4.3%! This was the best showing since a 4.5% gain in 1983. Productivity gained about 1.5% a year between 1970 and 1995. Since 1995 however, it has increased at double that pace, allowing our Fed Chief to calm the capital markets from fears of inflation. Some economists believe the FOMC backed away from a preemptive tightening of rates as GDP grew in excess of 4% because of productivity. Unfortunately the March/April numbers now show productivity to be slowing dramatically. Economists are worried! Many expect a major decline in productivity with renewed inflation worries.

It now appears that productivity growth was limited to the information technology industry. In short, many believe that no real gains have been evident in other parts of the economy, and that government statistical data may have exaggerated improvements in productivity. Moreover, much of recent capital spending was wasted on dot.coms. Now the ability of good companies to get money for investment has declined. Slow fourth quarter GDP growth at 1.4%, its slowest pace since 1995, reflects to some extent businesses cutting back sharply on capital spending. Capital spending, by businesses fell 1.5% last quarter, its first decline since 1991. The March employment report's statistics by the Bureau of Labor Statistics reflected the sure signs of productivity declines. Therefore, we conclude that any further declines at this time will signal the Federal Reserve that renewed growth will not be accompanied by productivity increases. As a result, the FOMC, fearing renewed inflation, may well restrict actions that would accelerate our economy. We now question the ability of major manufacturers to reduce costs significantly in the face of rising real wages during any expansion. Higher costs translate into higher prices, lower profitability, and the possibility of inflation. We believe that the capital markets and the FOMC will be monitoring productivity growth very closely!

by: Nodyr Tilavoldiev

Bubble Economics - How Badly Will A \$1,000,000,000 Telecom Debacle Hurt The U.S. Economy?



Every modern bubble since 1588 seems to flood huge amounts of capital into an industry allowing companies to spend lavishly in order to launch new businesses. All of this capital results in new businesses being formed that are not viable and viable businesses being swamped with over-capacity. What many of us do not comprehend is the secondary effects of these bubbles on the companies that supplied the bubble companies. The current crisis in telecom has created concern among investors that this industry will flatten the economy. This would be alarming — so let's look at some facts.

Last year the telecom industry was in a growth boom. Start-up companies were entering the market creating a competitive customer-focused marketing environment. This year, ten (10!) telecoms filed for bankruptcy. Many more will file for reorganization, driving the industry's margins down as they try to compete. Industry profits are zilch and the destruction of real capital is just starting to be measured. Virtually every telecom sector is experiencing serious margin and cash flow problems. The industry has moved to a survival-of-the-fittest mentality. Telecom moved from boom to meltdown, because too many competitors are competing for too few customers, and because an estimated 97% of fiber-optic capacity is currently going unused! Telecom companies cut prices, overspent on infrastructure investments, and grew

assets beyond their financial capabilities, all in the name of broadband and growth. The WSJ says that telecom losses are \$700,000,000 and counting. Equity paper losses are currently estimated at \$500B. Initial bond losses are estimated well in excess of \$50B. In the year 2000, Chase Manhattan/Morgan issued \$150B in telecom loans and investment bankers collected \$7B in telecom fees! European telecoms have recently spent over \$100B on 2.5G and 3G licenses, many of which will not be developed for five years — if ever. Analysts conclude that it will take years for blue-chip telecoms to reduce debt levels to workable levels.

Telecom industry problems have spilled over into the economy. Bankruptcies and cutbacks have exposed banks to financial weakening because of easy credit and worthless collateral. Equipment and component manufacturers, content companies, and broadband customers face significant declines in revenue. Critically, major suppliers (i.e. Lucent, Nortel) who financed large purchases to telecom companies, now face dramatic charge-offs of account receivables and loss of credit, thereby triggering corporate downsizing and employee layoffs. Higher capital costs slow investment. Layoffs lead to recessions. In this crisis only the well-capitalized and well-managed will survive, earning less for shareholders.

by: Jack White

The Economy And The Equity Markets

	Number Of Years It Took To Penetrate 25% Of The Market Population	Estimated Number Of Start-up Company Failures During Period
Cars	55 Years	292
Computers	16 Years	145
Cellular Phone	13 Years	350
The Internet	7 Years	Approaching 1,000

We predicted in our last newsletter that we would see the demise of the great bull market in our lifetime, and we were right on the money! How the times have changed. The rampage of the Bulls has come to a cataclysmic halt, and the "new high-growth dot.com economy" that was supposed to carry us through the new millennium is the reason. The four legs of the greatest stock market rally in our history are badly damaged. Technicals reflect a very negative *Market Psychology*. Three weeks ago negative indicators reached highs only seen four times this century. *Earnings* are now in decline, and *market liquidity* has become illiquid. Long-term *interest rates* that have helped drive the market since 1982 refuse to go lower, in spite of a weak economy. The bond vigilantes in the investment houses smell inflation. The word stagflation is again in use, putting a real damper on longer-term rates. The stock market has finally slipped into the bear territory that many of the Wall Street experts had been forecasting for two years. The tech bubble has burst, telecommunications companies are evaporating, oil prices are at historical highs, and California is dark. The Fed finally has the cool economy and the defused equity market it had strived to attain. Given the still expensive NASDAQ P/E ratios, there are those that feel the bloodletting has yet to end; the NASDAQ bottom is a year and a 1,000 points away. All of this is in spite of the current rallies in both NASDAQ technology and DOW issues. The contrarian view is that this is but a bump in the road to prosperity. The question is the size of the bump.

After all the bad economic numbers of October through February, the ugly performances of the capital markets, the discouraging forecasts on job cuts, and the limited potential for future economic growth, first quarter numbers indicate that the economy **accelerated** and **GREW 2%**. As always, we expect revisions (negative), but we doubt that the FOMC's earliest rate cuts were the cause for growth. The alcohol in the new FED punchbowl will ignite the economy later! Our historic expansion is now ten years in length. What do we know about what is going on out there?

We know that consumers increased spending 3+%, a *surprise* to economic forecasters. They bought homes (#2 *surprise*) and cars, reflected the growth in real income salaries and lower short-term interest rates. Savings rates were down marginally as consumers spent 1% more than they earned. We think this reflects the real income growth of recent periods. Government "consumption" rose 4%! Companies

continued to cut jobs, and CAPX fell nearly 1.2%, after what *has been* the longest and most ferocious expenditure on our country's infrastructure since WWII. As corporate spending fell, inventories fell \$7.1B (*surprise* #3), the first major decline since 1991! This is good news for the ailing manufacturing sector. If bloated inventories have already been significantly worked down, factories can gear up for a new demand, and newly displaced workers can rejoin the workforce. Bank One's Economist, Swonk, has concluded that the shelves are bare, setting up for a major acceleration in corporate spending and an increase in GDP over the next two quarters. We are not quite so sure. Corporate CAPX has slowed in the face of: 1) a credit crunch, 2) lower returns on investment, 3) inventory buildups, and 4) the thoughtless, uneconomic build-outs by some technological industries (i.e. Telecom). Many management decisions to invest in computer, telecom, software, and productivity equipment were excessive. Numbers for the last two quarters show investment in equipment and software fell in excess of 2.1%. We think that number could and will be revised upwards. Spending on productivity enhancing information technology **fell 6.4%**, after growing 24% each quarter since January 1999. If this is a sea change event, there is no question that a weak economy and inflation will be major problems for the FED. Any recession at this point would be the first post WWII recession lead by industry, rather than the consumer. While analysts were spending the weekend pouring over the quarter's numbers, Mr. Greenspan forecast that there would be an end to treasury debt, explaining that large budget surpluses (left unspent by the Congress) "... are highly likely to remain sizable for some time." The critical point was that he forecast that long term growth in productivity will "remain intact for a long period of time", this in spite of the 6.4% decline in information technology noted above. His remarks that our U.S. financial markets remain the most efficient and innovative in the world must have given great confidence to many of our equity readers. For the moment we may have evaded a real recession. That is the good news.

The bad news is energy, inflation, Germany and Japan, and U.S. consumer debt. The cost of energy is rising, the result of economic growth, Middle East supply cuts, and a lack of U.S. energy infrastructure or policy. Shortages of natural gas (due to lack of infrastructure), electricity, and refining capacity have already generated higher costs to consumers and corporations alike, and these numbers have

now worked their way into both the CPI and the implicit price deflator. The problems of higher energy costs and an inability to depend on its availability could have severe consequences on the U.S. economy and its growth in the foreseeable future. Although many economists forecast a drop in the expected rate of inflation to below 2% for the next two years, the first quarter's implicit price deflator rose 3.2%, up from 2% in the fourth quarter and 1.6% in the third quarter. Energy was not the only cause. Service sector inflation has now increased inflation by pushing cost hikes into higher prices for goods. The news has to be troubling to the FOMC, and we anticipate that this variable could be a key reason for a decision not to reduce short-term rates further. Given first quarter numbers, the FOMC may well believe that 2% is enough. A further damper on our economy has to be the performance of Japan and Germany. Japan continues to struggle. The current hope can only be that the new reformist leader may be able to initiate long-range programs for reducing deregulation and improving the country's productivity and growth. In Europe, smaller economic engines are accelerating, but the main engine, Germany, has only anemic growth, the result of its costly and inefficient government programs to spur reunification. Germany's outlook is very poor, given the current government's failed efforts to reform costly and inefficient social programs and significantly reduce taxes. The final major negative is the growing level of consumer debt in the U.S. In recent history, lower interest rates and climbing real wage rates have enabled the debtor to manage his debt load. We would suggest that the coming tax cut is not sizeable enough to offset current energy cost increases and any increase in consumer borrowing costs caused by both inflation and bad debt charge-offs. On this matter the situation is grim indeed! Cheap money from the FED, easy credit availability by the highly competitive banks, and real income growth in a late stage economic cycle may have just lengthened the fuse on this bomb.

We remain, however, optimistic for the longer term. We would ask our readers to remember that Sir John Templeton pounded the table when he emphasized that the destruction of the Berlin Wall would be seen historically as one of the three or four most important economic and social events effecting world economic growth in the last two hundred years. Our long-range focus today would be on philosophy, technology, productivity and their impact longer term on our economy. We believe that the impact of reduced defense needs in combination with the Greenspan-Clinton era helped bring the U.S. debt problem under control. This in turn allowed for lower nominal rates, greater investment, and improved productivity for the U.S. economy. The Bush-Greenspan shared relationships appear ready to initiate a new era where there could be improvements in education, health care, privatization of social security, slightly reduced government spending as a percentage of GDP, and lower marginal tax rates. The positive impact of any of the above initiatives would provide dramatic efficiencies and real growth within the economy.

Finally we would put in a strong "plug" for technology as a powerful impetus for continued economic growth. Our professor just bought a new powerful Dell, and his productivity is up substantially and should continue to accelerate into next year. He needed a solution and bought a computer. We think that the "tech wreck" will be over shortly and that technology demand is poised to drive the economy even further. Demand should return for equipment to improve productivity and profitability. We do not see long-term excesses in capacity. The "digi" economy is in transition. The CEOs of Exxon Mobil, GE, Intel, and IBM all confirmed again this week that they would seek greater productivity and cost savings through the use of new technology, faster hardware and software, and new B2B and Collaborative-Commerce Web solutions. They confirmed as well that we are in the earliest stage of seeing corporate applications and problem solving following corporate transactions to the web! According to the Milken Institute, the U.S. high tech GDP has been growing 40+% faster than the low tech GDP since 1995. The growth in the digital economy has paused due to the irrational exuberance of quite a few aggressive managers that failed to keep their eyes on the competition, the business cycle, credit demands, rising inventories, and the short term demand schedules of their customers.

We like Warren Buffett's comparison of the new economy to the auto industry in the first half of the twentieth century when a shake-out took out a large number of creative high-risk managers and their companies. A key point is that the survivors are normally allowed to compete with higher margins. A Pembroke Consulting Group study points out that it took 15 years to shake-out 70% of the start-up auto manufacturers when the industry's multi-year annual growth rate was 25%. It took another 25 years to reduce the industry to seven players. Pembroke points out that this pattern has been repeated in many technology and scale-based industries. We would point out that the technology, semiconductor, storage, web, and solution industries are growing a lot faster than 25%! Given the demand by major corporations for solutions to multiple problems, available capital, smart entrepreneurs, new ideas, and technology will continue to be in high demand. Moreover, large corporations today have no pricing power, and the road to improved profitability is lower costs, driven by productivity through technology. Demand for technology will again be high, driving our economy to a new level of growth and productivity. Markets normally lead, and the very recent performance of technology indexes may reflect that technology will soon lead the U.S. economy higher.

by: Noddyr Tilavoldiev, Shukhrat Abdullaev,
Jeff Fisher, and Jeremy Adams

High Real Rates, Wide Spreads to Treasuries, And A Steepening Yield Curve

The 2000-2001 corporate bond market reflected economic uncertainty, tightening credit, and a dramatic decline in credit for the ambitious technology capital investments of the late 90's. Bank charge-offs rose and downgrades skyrocketed, reflecting declining corporate profits and an apprehension for the future. By year-end, the spreads for corporate bonds over treasuries became very wide indeed. Corporates were perhaps even oversold.

Aggressive and dramatic FOMC rate cuts in January ignited a major hi-yield bond rally with corporates and treasuries participating modestly. We think that investors who concluded that credit concerns were over were short-sided. A large number of excesses produced by the new economy remain. We expect investment losses and yet to be replaced wasted assets could deter capital spending decisions and economic growth until 2002. It was quite a bubble. No one is sure how long these factors can remain a drag on the economy. The WSJ estimates that \$50 billion of telecom bonds alone must be written off. These "new-economy assets" are expected to yield less than ten cents on the dollar for bond holders. That's a lot of pain to overcome in a short period of time.

However, we have to conclude that the recent steepening treasury yield curve reflects the investors' belief that recent rate cuts should bring growth (not inflation), and that the longest expansion in history will continue without an official recession. Stronger than expected consumer confidence, consumer spending (up 3%), lower inventories, NAPM numbers, and real wage rates all presented a positive tone as of May 1st. As economic numbers turn from being totally negative to a mix of positive and negative (425,000 lost jobs and 4.7% unemployment), we forecast that positive trends and the .5% Fed rate cut today is merely insurance against a recession. We may have reached a bottom for short term yields just .25% higher than the 3.75% 1994 low for overnight money.

Real Rates Remain High In The Face Of Any Recession – With a weak economy and current 2002 estimates for inflation at 2%, real short-term rates remain high at 2.0%. Given the economic slowdown, 2.0% seems restrictive, especially so if the economy continues to deteriorate. This condition would suggest further rate reductions by the Fed are possible, perhaps another 100 basis points in as many as four steps. It appears that Fed policy was to position the Fed Funds Rate well above the rate of inflation. This current condition of positive real rates at the short end of the bond market has acted as a bridle on economic growth, reducing the risk of runaway boom conditions. With economic growth now near zero, interest rates are declining. This should lower the real level of interest rates this year. We believe the FOMC is willing to reduce the real rate of interest to a level below 1% until economic growth surges again.

For corporate debt investors with credit skills and a very high tolerance for risk, there are exceptionally high yields available in technology, particularly in telecom. This would appear a risky strategy to us, but some telecom issues are doubtless oversold in the current disaster. Some well-known companies with good business plans, adequate near term liquidity, and experienced management appear to be oversold. For the less risk averse our analysts recommend investigating health care companies, where growing revenues and cash flows would appear to make their high corporate yields attractive.

For investors that believe that inflation will be above 2%, we recommend TIPs. TIPs are priced to outperform treasuries should inflation go above 2%, and they would do well in any environment of declining real rates.

by: Brian Rachwalski, Max Veselovskiy,
Shukhrat Abdullaev, and Noddyr Tilavoldiev

Wireless Industry Analysis

This rapidly growing industry has been around since the creation of radios. Over the years companies have developed new and better ways to take advantage of the airwaves to transmit information. The most recent trend is to use the electromagnetic frequencies to transmit voice as if using a phone. Now everyone has a cell phone, and there is a lot of competition in this market.

The wireless industry players are changing constantly among manufacturers of phones, the parts for phones, the base station builders, and the service providers. Motorola

has been a key player since the conception of wireless systems. Motorola is involved with the manufacturing of handsets and parts (semiconductors) for handsets and base stations. Motorola used to be number one in the handsets arena, but has fallen to Nokia, and feels strong competition from Ericsson. Motorola is number one in the electronic equipment manufacturer group. Other industry leaders include Alcatel, Nortel Networks, Lucent, and Ericsson. With the introduction of the next generation wireless (3G) the participants within the industry will change



again. Whoever penetrates the market first could become the leader. All of the manufacturers are pushing for this goal.

The industry was moving slowly for many years, with the size of handsets and infrastructure costs hindering growth. Many of the companies cannot keep up with the growth rates and capital spending demands. The trend with any sector within the wireless industry is to develop products that are smaller, better quality, better designed, more power, and more productive.

Now there has been a slowdown in the global economies and a decline in consumer's disposable income. Consumers will be more likely to save their money rather than spend it on extraneous goods such as wireless electronic devices. In order to make wireless products more appealing and affordable to consumers during an economic slowdown, the wireless equipment companies must drastically lower the prices of their products. This has caused the wireless equipment companies to enter into an all out price war. Profit margins are being squeezed.

Lower product prices have forced the wireless equipment companies to outsource the manufacturing process. Companies such as Motorola and Ericsson will now be able to focus on their core competencies of research and development, designing the wireless devices, and selling the devices. Companies, which specialize only in electronics manufacturing, have been hired for the production of the wireless devices. The outsourcing agreements allow the wireless equipment companies such as Motorola and Ericsson to take in greater profits from their businesses, and allow the electronics manufacturers to achieve economies of scale. The use of outsourcing agreements leads to the closing of the manufacturing plants owned by Motorola and Ericsson, thereby increasing their asset turns.

With the lower prices, greater geographic coverage, and better payment plans, there will be an increase in the demand for wireless devices. The demand for wireless devices will also increase the demand for semiconductors.

With the introduction of wireless calling plans that include features such as no roaming charges and one-rate long distance, there has been a large increase in the demand for wireless phones. The market for wireless phones is rapidly stealing market shares from local and long distance exchange carriers. The competition among wireless service providers has been a catalyst for accelerating the demand for wireless phones.

The big opportunity facing the wireless equipment companies is selling the new technology solution that will deliver increased wireless speeds and broadband width. That solution is called 3G. There is also a demand for Personal Digital Assistants (PDA's) and wireless phones. However, it is cumbersome to have to carry both a phone and a PDA. Ericsson and Kyocera have recognized this and are making devices that combine the features of both

products. Both are releasing devices that are wireless phones built into a Palm Pilot platform. Motorola as well has shown a new PDA phone at CEBIT in Germany. The phone is very small and has a PDA. As these new products are released and prices fall, demand will rise. Moreover, with the improvement of regular wireless phones, customers are exchanging their phones for newer ones that have more features. Some people are disbanding traditional phones and using wireless for their home phone. Although these practices may not accelerate, they continue to increase the demand for new wireless phones.

Key threats to this industry —

The slowdown in the global economy will slow growth in the demand for wireless products. When new wireless devices featuring new technology are first released they are expensive; and in a poor economy, consumers will be reluctant to spend on the new phone technologies.

New high technology product invites increased competition in the industry, generating lower prices and lower production costs as companies come down the learning curves in a race to be low cost producers/high market share producers. Lower prices will mean higher product demand. As the demand for the products increases, the wireless equipment companies will need to increase production or face loss of market share.

A third threat to the wireless industry is the delay in the rollout of new technologies. The new 3G wireless devices require advanced wireless infrastructure for a new spectrum. As wireless service providers (wsps) rush to build the 3G infrastructure, they face enormous capital expenditures. Given the capital expenditure, it will take an extended period of time to install infrastructures across the country. A delay in the rollout of new technologies will cause consumers to keep their current devices until the new technologies are available. Many analysts believe that 3G will not be released in the United States for up to five years but could be in Japan within the next few quarters. A resulting slowdown could mean much slower near term growth for new products.

The wireless industry needs to provide small high quality handsets that contain all of the needs for today's society. The general market is geared more towards a phone or electronic device that is easy to carry and contains features such as an: address book, calendar, e-mail, web access, and any other useful organizational tools. The wireless industry has been providing this service and will continue to increase capacity and reduce product size. The industry as a whole has been pretty much on target for satisfying the customers' needs, but needs to keep the consumers happy until the new technologies are released. The question is which of the industry players can do this profitably?

by: Sidney Taylor & Graham Forum

SAWTEK (SAWS \$23)

Recommended Strong Buy for Long-Term Growth Portfolios

Portfolio Strategy Rationale:

- | | |
|-------------------------------------|---|
| * Highest Industry Yield / Low Cost | * Strong and Growing Customer Base |
| * Solid Earnings Stream | * Undervalued – Steady Earnings Growth |
| * Moving to diversify risks | * Technology Can Be Applied to Many New Markets |

* **Facility**— SAWS has new manufacturing operations in Costa Rica, decreasing its tax rate to a 30% marginal tax. The facility provides lower production costs giving SAWS competitive advantages over its competitors.

* **Background**— SAWS is a major supplier of electronic signal processing components. Their systems use proprietary, cutting edge, surface acoustic wave technology. The company's primary focus is custom designed band pass filters, resonators, delay lines, and oscillators. The products are used in a variety of microwave and radio frequency systems such as cable televisions, chemical sensors, PDA's, wireless networks, and cellular phones.

* **Customers**— SAWS customers include Nokia, Motorola, and Lucent. SAWS continues to improve product quality, fast delivery, and customer service in order to retain their long-term customer relationships. SAWS increased its capacity to supply parts for cellular phone handsets last quarter. Motorola is in the middle of consolidating its suppliers and keeping SAWS as its #1 supplier. Motorola expects to ship between 425 million to 450 million handset units in 2001. This production and shipment could drive SAWS revenues higher. SAWS has announced its first order for its new line of RF SAW filters for wireless personal digital assistants, or PDA's. This order, from one of the world's leading manufacturers of wireless data communications devices, is scheduled for its first shipment in 2001.

* **Earnings**— SAWS has a five-year EPS growth rate in excess of 38%, reflecting its industry leading low cost strategy. We conclude that after a poor 2001 19% EPS decline (\$1.46), earnings will recover in 2002 to at least \$1.66/share. Analysts estimate that SAWS will grow in excess of 25% EPS for five years. Our model reflects a 2003 EPS estimate of \$2.15/sh., a 29% increase over 2002. Lower tax burdens, new PDA orders, and a growing demand for SAW products in the cell phone industry, should maintain current margins, increase asset turnover, and increase ROE.

* **Good Business**— The future of the wireless industry looks outstanding for SAWS. Their size, ROE, and

growth rate warrant the company being acquired by a semi-conductor manufacturer. There is accelerating demand for SAW filters and derivative products. SAWS has few competitors, and it controls 40%+ of its markets. Barriers to entry are difficult. Given the current market valuation for SAWS, the need for SAWS as a supplier, and the company's continuing ability to outperform its competition, we believe that there is little downside risk to owning the company at this price. Current market valuation reflects the risk of the slowing wireless devices sales and the current market psychology for technology. This has created an opportunity to own a dominant supplier with a good growth rate in a solid longer-term growth industry.

* **Organization**— Directors and management are experienced in this industry. The company made the transition from entrepreneur to professional managers years ago. During our visit, workers appeared to take great pride in their work and company. All employees own stock. Quality control is a key factor to why SAWS has exceptionally high yields (95%) and market leading gross margins. SAWS concentrates daily on improving those yields, eliminating waste and lowering costs — a key to their low cost corporate strategy.

* **Valuation and Recommendation**— We value SAWS' at \$34 per share or 20x our conservative 2002 EPS estimate of \$ 1.66/sh. Given SAWS' dominant market position, its recent 38% ROA, its 41% ROE, and its 52% operating margins, we believe our valuation to be very conservative. Moreover, given SAWS outstanding balance sheet, and our belief that its growth rate will again approach 25%, we strongly recommend SAWS below \$25 per share.

On 5-15-01 Triquint Semiconductor has offered to acquire/merge with Sawtek for common stock at an approximate price of \$30 per share. The proposed merger would allow SAWS to operate as a subsidiary of TQNT and would provide both sets of shareholders with a more diversified company. Our initial analysis is favorable.

by: Sidney Taylor

FISCHER IMAGING (FIMG \$5.45) —

The Roland George Investments Program purchased 7,000 shares of Fischer Imaging for the Growth Portfolio at a cost of \$4/share. Fisher Imaging is a manufacturer in the breast cancer screening and biopsy markets. These markets combined are in excess of \$10 billion. We purchased Fischer Imaging for their technology in the fields of digital mammography imaging and stereotactic core needle biopsy.

Fischer's product in the field of digital mammography offers technological benefits that include:

- ✧ 50% reduction in exposure to X-ray radiation
- ✧ Superior clarity of picture
- ✧ Accurate detection in cases of dense breast tissue
- ✧ Prediction of the necessity for biopsy

Fischer's second product, the Stereotactic Core Needle Biopsy, offers an alternative to a lumpectomy. Physicians can use a needle rather than open surgery to test a sample of any cysts in the breast and determine malignancy. Approximately 80% to 90% of surgeries determine cysts to be benign. The Stereotactic Core Needle Biopsy offers a safe alternative to test for breast cancer without surgery and should greatly reduce the necessity for painful and expensive surgeries. The industry believes that greater use of this technology will save \$2-3 billion per year. In this market Fischer Imaging generates gross margins in excess of 60%. Fischer enjoys technological advantages and barriers to entry of four to five years over competitors. We like the fact that Fischer is successfully transitioning out of unprofitable businesses and that the company will dramatically improve margins going forward. New management, a confirmed turnaround, profitability and competitive advantages in a long product cycle make this investment attractive. We consider FIMG a triple dip: accelerating revenue, improving P/E, and a takeover candidate. They have technology others will want (Siemens, Phillips, GE) for several years. FIMG remains a hated stock due to its past problems. Given our \$7/sh. valuation and FIMG's unvalued technology, we believe that there is a large margin of safety in this investment.

by Katie Norsen Alday

MFC BANCORP (MXBIF \$8.07) —

MFC Bancorp is not just any run of the mill bank. MFC is a financial services company specializing in investment banking, insurance and funds management. The company's investment banking operations include proprietary investing activities which involve using its own resources to invest long term in fundamentally undervalued assets or companies in turnaround situations. Because MFC does not participate in banking activities such as commercial and real estate lending, they are shielded from problems like interest rate risk and bad loans.

MXBIF's margin of safety becomes even greater when you look at their off-balance sheet assets. With real estate in the Pacific Northwest, property on an island in the Mediterranean and a mine that consistently produces a royalty stream of \$8 million annually, these off-balance assets are expected to add an extra \$6.50 to MFC's book value of \$10. In addition to its net asset value, MFC has an earnings growth rate of 25% and generates a Return on Equity of +20%. At .80x book, one times revenue, four times 2000 projected earnings, this company warrants a much higher multiple. A conservative estimate is that a takeover would likely occur at 10 times 2000 earnings. This would equate to a share price of \$18.60. A well known Wall Street investor has acquired 22% of MXBIF's outstanding shares.

by: Jack White

FOX (FOX \$24.20) —

- ✧ **FOX Remains Cheap, A Relatively Inexpensive Stock In Terms Of Growth, Cash Flow, And Earnings.**

Over the past year, FOX's advertising revenues have fallen, reflecting a soft economy. The market has heavily discounted FOX's intrinsic value and growth rate. Many investors dislike management's long term outlook.

- ✧ **FOX Has Acquired A Power House In Chris Craft.**

The Chris Craft acquisition allows FOX to establish television duopolies in major markets in the U.S. Chris Craft has margins of 35% that are at the bottom end of the industry. Given Chris Craft's disappointing cost cutting performance there is room for improvement by experienced cost focused management at FOX. We expect FOX management to dramatically improve cash flows at Chris Craft, making this acquisition a winner for FOX.

- ✧ **FOX's Ratings Are Up.**

FOX is number one among the 18-24 group. This season the FOX network is up 5% among adults 18 to 49 and up 5% in total households. During February, FOX's ratings improved 23% in adults 18 to 49 and 19% in households. People are beginning to watch FOX — earnings and CFO are improving. On the basis of growth, FOX is undervalued.

- ✧ **The Company Has A Backlog.**

Improved programming backlogs give the company the ability to increase its cash licenses. As the advertising market improves, we also expect that the company will increase its advertising rates, improving its margins and profitability longer term. With improved performance FOX should see an improving P/E multiple reflecting its quality of earnings, growth, and growing free cash flow.

by: Jeff Fischer



School of Business Administration
George Investments Institute
421 N. Woodland Blvd., Unit 8398
DeLand, FL 32720-3774



COMMENTS & DISCLAIMER

The Roland George Investments Program was created in 1980 by Sarah George to provide a unique experience for future investment professionals. This bequest was intended to honor her husband, Roland, who, after completing his education, began to ply his trade and promptly lost money. Mr. George decided that serious flaws were evident in the traditional educational process for future investors since by overcoming his formal education he was able to master investing and in short accumulate wealth.

From this start, Mr. George formed the ideas of creating an investment curriculum that combined academic theory with real world experience. This dream came true when Sarah George funded the Roland George Investments Program. This program provides support for the applied investments program at Stetson University where students manage a portfolio valued at over \$2.5 million dollars. Insights are gained through contact with professionals such as Robert Stovall, CFA, of Prudential Securities, Inc.

For information on the Roland George Investments Program contact Dr. James Mallett at 386-822-7442.

GEORGE INVESTMENTS INSTITUTE STAFF

Director:

James E. Mallett, Ph.D.
jmallett@stetson.edu
www.stetson.edu/~jmallett

Advisor:

Frank G. Castle, CFA
Visiting Roland and Sarah George Professor
of Applied Investments
fcastle@stetson.edu

Publications Specialist:

Lynn Thompson

The George Investment View is intended to be an educational document. Investment views belong to the authors and not Stetson University.