BALTIMORE BUSINESS REVIEW

A MARYLAND JOURNAL

2012

BALTIMORE CFA SOCIETY

TOWSON UNIVERSITY
Thinking Outside

Baltimore Business Review A Maryland Journal — 2012

Produced jointly by the Baltimore CFA Society and
the Towson University College of Business and Economics

Edited by Joanne Li, Ph.D., CFA, Chair and Professor, Towson University Department of Finance
and Niall H. O'Malley, Past President and Program Chair, Baltimore CFA Society

Designed by the Towson University Design Center,
Rick S. Pallansch, Director

For more information about the contents of this publication, contact the
Towson University College of Business and Economics press contact, Joanne Li, 410-704-2465,
or Baltimore CFA Society press contact, Niall H. O'Malley, 443-600-8050.

This publication is available online at www.baltimorebusinessreview.org

1111.032

Shohreh A. Kaynama, Ph.D., The George Washington University, 1991, is the Dean of the College of Business and Economics and Professor of Marketing at Towson University. Her research interests include services marketing, e-Commerce/e-Business solutions, marketing research, international marketing, and decision support systems in marketing. Her work has been published extensively in many credible journals (nationally and internationally). She was named one of the 2005 Top 100 Women in Maryland by *The Daily Record* and is an honored member of Empire "Who's Who of Women in Education." In addition, she is a member of Network 2000 and serves on the boards of SBRC, the Academy of Finance (NAF), Baltimore County Chamber of Commerce, Better Business Bureau of Greater Maryland, Maryland Council on Economic Education, and the Towson University Foundation.

Message from the Dean

Towson University College of Business and Economics

Dear Colleagues and Friends,

We are very excited to present the third issue of the Baltimore Business Review in partnership with the Baltimore CFA Society. At Towson University's College of Business and Economics (CBE), we believe that investing for the future is critical. As the local business community continues to evolve and introduce new opportunities, the CBE is in the midst of several thrilling new initiatives that we are certain will help shape the future of the College and the community at large.

With a major pledge from T. Rowe Price and the support of many generous donors, I am thrilled to announce that our named T. Rowe Price Finance Laboratory is expected to be in full operation by the fall of 2012. The creation of the T. Rowe Price Finance Laboratory represents a major investment in the future — not only for our students, but for the College as a whole. This invaluable learning environment will simulate a Wall Street trading room, allowing students to have hands-on experiences with financial transactions and stock trading in real time. This opportunity will enhance students' marketability as they enter the job market by teaching them practical, job-ready skills. At the same time, the new resources and tools of the finance lab will boost the College's overall dedication to promoting financial literacy. We also are continuing to invest in our stellar faculty by rolling out new technology programs this year that will aid in academic research. Giving our faculty the tools to stay on top of groundbreaking research ensures an innovative learning community.

Our model of investing for the future is further demonstrated by the creation of the Supply Chain Lab this fall in conjunction with the launch of our new graduate programs — the Master's program in Supply Chain Management and post-baccalaureate certificates in Project, Program and Portfolio Management and Supply Chain Management. By combining existing facilities with generous new funding, we have given these new programs dedicated space and resources to host the unique courses they offer. Equipped with brand-new computers and industry-standard technology for managing supply chains and other projects, the lab is a wonderful asset to ensure the new graduate programs are not only successful this first year, but have room to expand as they grow.

By investing in our faculty, students and the College now, we are paving the way to a prosperous, dynamic and successful future here at the CBE. Moreover, by continuing to build relationships with outstanding partners like the CFA, we are sharing our success with the larger community.

As always, we welcome your feedback and impressions of this publication as well as ideas for contributions. Also, if you wish to help sponsor future issues, please contact me at any time.

Best regards,

Shohreh A. Kaynama, Ph.D.
Dean, College of Business and Economics

The Baltimore CFA Society

www.baltimorecfasociety.org

Dear Colleagues and Friends:

The partnership between the Baltimore CFA Society (BCFAS) and Towson University's College of Business and Economics (CBE) that creates the Baltimore Business Review (BBR) is in its third year. When we started this publication under the excellent leadership of Niall O'Malley, it was intended to be a one-timer. Essentially, the BBR was an experiment on a number of levels including, but not limited to, CFA awareness, university outreach, and community education. The partnership relied heavily on a collaborative effort between two editors - Mr. O'Malley from the BCFAS and Joanne Li from the CBE. The professionalism and positive energy of Dr. Li helped propel this publication well beyond the experimental phase. Additionally, with the generous support and donated hours of Towson University's Design Center and its Director, Rick Pallansch, the third issue of BBR has proven to be a success again. I daresay this publication will grace office waiting rooms and coffee tables throughout Maryland for years to come.

One of the basic building blocks that students of financial analysis learn is that the value of any investment is the discounted value of future cash flows. The key element is the word *future*. Any investment we make today should be based on the future, and all too often we look at the past. With all of the global economic issues facing investors, it is very easy to ignore the future and dwell on yesterday's headlines. I am hopeful that this third issue of the Baltimore Business Review will inspire readers to look past current events and focus on the future.

At the Baltimore CFA Society, we too have been investing for the future. Our local society has been investing our time, energy, and money to educate our members and clients better on how to invest in this difficult environment. This year, we have partnered with the CFA Society of Washington to co-sponsor the CFA Institute's Global Investment Research Challenge (GIRC). The GIRC will pit five local universities against each other to see which team best analyzes our selected company – Under Armour. The winner will move on to the regional level, and from there to the finals, which are global. I am excited to announce that the Baltimore CFA Society has entered into an awareness campaign to make our credential, the CFA Charter, more recognizable. Within our industry, the CFA designation is widely accepted as the gold standard among financial credentials. Unfortunately, outside our industry, the CFA Charter is not widely known. Our society's goal is to start the long process of changing that in our community. We already ran several radio spots promoting the virtues of the CFA designation and will run print ads in the Baltimore Business Journal starting in January.

Please enjoy this great publication. We look forward to hearing any feedback you might have.

Best of luck investing for the future.

David G. Stephenson

David Stepherson
President
Baltimore CFA Society

Top 10 Employers of Baltimore CFA Society Members

1.	T. Rowe Price	132
2.	Legg Mason	31
3.	Stifel Nicolaus	30
4.	PNC	22
5.	Brown Advisory	14
	MTB Investment Advisors	14
7.	Morgan Stanley	13
8.	Brown Investment Advisory	11
9.	M&T Bank	10
10.	Constellation Energy	5
	Johns Hopkins Univ.	5
	LaSalle Investment Management	5
	MD State Retirement Agency	5

Investment Opportunity of a Lifetime

David Stepherson, CFA

Chief Investment Officer
Hardesty Capital Management, LLC

As Warren Buffet said, "Be fearful when others are greedy and greedy when others are fearful." Maryland investors do not need a "high-powered" New York investment advisory firm to follow this advice. Our Baltimore-based firm believes so strongly in these words that we've placed the quote at the top of the agenda for our weekly investment committee meeting. It's so easy to get caught up in the emotional side of investing because it is our emotions about money that drive us to invest in the first place. We all love to make money and hate to lose it—greed and fear are the engines of the markets no matter where you live.

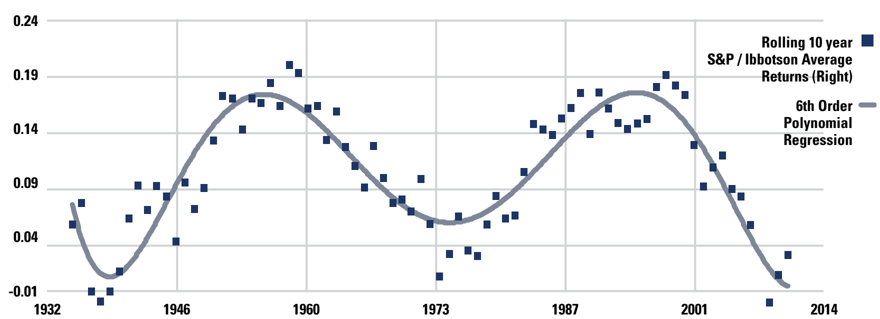
There are many reasons why truly successful investors are terrific at what they do. Foremost is their ability to take the emotion out of investing, which allows them to sell closer to peaks and buy nearer the bottom. One doesn't have to look much further than downtown Baltimore to find famously successful investors—Bill Miller of Legg Mason and Brian Rogers of T. Rowe Price come to mind.

Most individual investors do the opposite, and play entirely to their emotions, as they chase yesterday's winners and dump their losers at precisely the wrong time. One thing I can say with some certainty—by the time the individual investor hears about the next great investment, be it at the cocktail party or networking event, it has already made most of its move. A good piece of advice might be to sell short any investment you hear about socially. We all would like to be involved in an investment mania, whether it is an individual investment or entire asset class, but not after it is well under way.

Over the last 15 years, we have experienced rolling "bubbles" throughout the investment landscape. Each of these "bubbles" burst with rather violent effects on our collective balance sheets. We all remember the Tech Wreck of the late 1990's, the current housing collapse, and $150 oil. The last one into and the last one out of these investments seems to be the average investor. This is mainly due to greed. I can't tell you how many clients would call me when I purchased a non-tech stock in the late 1990's to ask me if I was paying attention. And by the way, they had several stock tips for me if I couldn't come up with some technology stocks to buy. We had clients borrow money from their investment accounts to invest in real estate in 2006 and 2007 because "real estate is the best investment you will ever make… it always goes up."

Although Maryland has been somewhat insulated, today's investment landscape is terrible and most of the calls we are getting are about buying gold. That should probably tell you something about that investment. The European sovereign debt crisis is not going well. The US economic recovery is in jeopardy and the possibility of a double-dip recession is growing. Foreign bank liquidity is being tested, as they have not adequately written down sovereign debt holdings to reflect market realities—more simply put, European banks are afraid to lend to each other. Concerns over the possibility of another Lehman Brothers event occurring abound. China is slowing its growth rate, which could affect world-wide economic growth. These are the main issues of the day confronting investors. It all smells bad. Fear is everywhere… what an excellent opportunity for long-term investors.

Figure 1: Rolling 10 year S&P / Ibbotson Average Returns (Right)



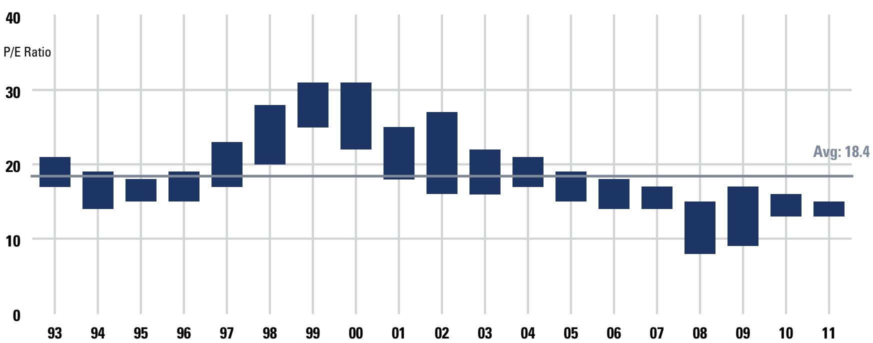
End of Period

Start of Period	1947	1948	1949	1950	1951	1952	1953
1938	9.6%	9.2%	10.0%	11.5%	12.4%	12.8%	11.9%
1939		7.3%	8.3%	10.0%	11.1%	11.6%	10.7%
1940			9.2%	11.0%	12.1%	12.5%	11.5%
1941				13.4%	14.3%	14.6%	13.4%
1942					17.3%	17.4%	15.7%

End of Period

Start of Period	1982	1983	1984	1985	1986	1987	1988
1973	6.7%	8.0%	7.9%	9.6%	10.2%	9.9%	10.3%
1974		10.6%	10.2%	11.9%	12.4%	11.9%	12.2%
1975			14.8%	16.2%	16.4%	15.5%	15.6%
1976				14.3%	14.7%	13.9%	14.1%
1977					13.8%	13.0%	13.3%

Figure 2: S&P 500 P/E Valuation*



**Based on Operating Earnings*

This is precisely when investors should buy stocks. As the accompanying chart shows, stocks tend to follow cyclical patterns and we are currently at the low end of that cycle. The chart measures the compound average annual rate of return over rolling 10-year periods. The period from 2000-2010 marked the worst rolling ten-year period for stocks since 1932.

In the two prior cyclical lows for stocks, outsized returns were experienced, but not right away. In the accompanying table, we show the 10-year compounded average annual returns for the periods at the bottom of the cycle. The outsized returns, in both cases, did not come right away. They came several years after what proved to be the bottom of the market. Of course, we only know the bottom of the market cycle after the fact. The data suggest, however, that perhaps we have seen the bottom. The "sweet spot" to experience those outsized returns seem to be a few years after the low point of the cycle—it appears to be about now.

Beyond the cyclicality of stocks, there are many other data points to suggest stocks are inexpensive. One indicator that is not discussed very often is the fact that the market is yielding more than a 10-year Treasury. The last time this occurred for an extended period of time was in 1958. The problem with many investors is that they demand instant gratification regarding their investments—they are greedy. Investors typically are given choices between asset classes. Their primary choice is deciding whether to buy bonds or stocks. Investing in a 10-year Treasury offers investors a 2% yield with the promise of returning your original investment. Stocks are collectively yielding more than 2%, and the worst outcome in the history of the stock market over a 10-year holding period was -1.4%. Since 1926, there have been only four 10-year holding periods with negative compound returns. They occurred for holding periods ending in 1938, 1939, 2008 and 2009. Two major economic events, The Great Depression and "The Great Recession," highlighted these holding periods.

Another indicator is the Price-Earnings (P/E) multiple. The S&P 500 is trading at just 12 times the current year's estimated earnings. In spite of the economic environment, U.S. corporate profits continue to grow. Companies have done an excellent job of managing their businesses through this difficult backdrop. Corporate profits have exceeded the prior peak level experienced in 2007 and are now at record levels. In spite of this, investors have been driving down the multiple that they are willing to pay for a dollar of earnings. The bar graph shows the recent historical trend for the P/E multiple. The time period selected shows the P/E multiple has been contracting since the bear market of 2000-2002. Single digit P/E multiples are very rare. We experienced them in the market lows of 2008-2009 and during the 1970's, when inflation was running in the double digits. An old valuation adage is you take the number 20 and subtract the current inflation rate to get a "fair" value P/E multiple. If you apply a 3% inflation rate, that method results in a P/E multiple of 17, and we are at 12. Stocks are cheap by valuation and much of the fear is probably in the price.

To find some inexpensive stocks in the market, Maryland investors have to look no further than their own state. Coventry Health (CVH) is a national managed healthcare company trading at just nine times next year's earnings. Lockheed Martin (LMT), a global defense contractor, has seen its share price drop due to uncertainty surrounding defense spending. The stock is now trading at just ten times next year's earnings. Corporate Office Properties (OFC) is a Columbia-based REIT that specializes in properties that service the US Government and the defense technology industry. Shares are trading at over 50% off the 5-year high and yield almost 7%. This is not intended as an endorsement to buy these stocks, but is intended as a starting point to find value in the stock market. Our firm owns a position in LMT.

To be sure, there is a lot to frighten us in the investment landscape. The European Financial Crisis looks unsolvable. The US economy is not growing and unemployment is over 9%. China is trying to slow its growth. Political tensions are high everywhere. So, be greedy when others are fearful. Buy stocks for the long term, as we could be experiencing the buying opportunity of a lifetime.

References:

FactSet, Morningstar

Disclosures:

At the time the article was submitted, Hardesty Capital Management's clients owned shares of Lockheed Martin Common Stock and Corporate Office Properties Preferred but do not hold positions in any of the other companies mentioned. The author does not own any of the companies discussed. This article is not a recommendation or offer to buy or sell any security.

Bank Lending in Maryland under CPP Funding

Michaël Dewally, Ph.D.
Assistant Professor

Susan Flaherty, Ph.D.
Associate Professor

Yingying Shao, Ph.D., CFA
Assistant Professor

Department of Finance,
College of Business and Economics,
Towson University

Historically, real estate has been considered a safe investment for investors and a profit area for both large and small banks. Around 2002, long-term interest rates began to decline worldwide due to the increased globalization of markets and access to large surpluses of global savings. This combined with a weak regulatory structure for mortgage based products, an expanding off balance sheet Mortgage Backed Securities (MBS) market, and controversial mortgage origination methods led to a housing bubble. In Maryland, home price appreciation peaked with an average increase of 19.8% over 2005 as seen in Figure 1.[1] Simply, it had become very profitable for banks to originate mortgages as lending standards were lowered (i.e., the increased issuance of subprime mortgages) and banks could offload the mortgages from their balance sheets to investors in the MBS market. This led to more lending, more price appreciation, and ultimately, a high level of foreclosures and government intervention.

We examine the past and current status of Maryland financial institutions that received relief funding during the financial crisis of 2008. Maryland banks were not immune to the difficulties of the period, and we assess loan activities before and after relief funding.

CPP Funding in Maryland

In 2008, the Federal Reserve Bank initiated the Troubled Asset Relied Program (TARP) under the Emergency Economic Stabilization Act to ensure the stability of the US financial system. Under the TARP umbrella several programs were instituted such as Making Home Affordable and the Term Asset-Backed Securities Loan Facility (TALF). The US Treasury created the Capital Purchase Program (CPP) to provide capital to viable financial institutions of all sizes throughout the nation. Under this voluntary program, the US Treasury purchased senior preferred shares in these institutions, thereby providing the capital and, in exchange, would receive for the first five years a dividend of 5% per year. This process was intended to stabilize balance sheets and capital ratios while encouraging banks to maintain banking activities.

Out of the 8,400 eligible institutions in the country, the US Treasury disbursed a total of $204,894,726,320, almost $205 billion, in CPP funds to 707 institutions, including to twenty Maryland financial institutions during the 2008-2009 period. Of the $205 billion CPP funds, 0.22% ($458 million) of the capital was allotted to Maryland institutions. This level of CPP funding is considerably less than the surrounding states of Pennsylvania (4.81%) and Virginia (2.04%) and on par with New Jersey (0.31%) and Delaware (0.21%). Figure 2 reveals that the Maryland banks were concentrated in Baltimore City and Anne Arundel, Cecil, Charles, Garrett, Montgomery, and Talbot Counties.

Figure 1 – Quarterly Change in MD House Price Index

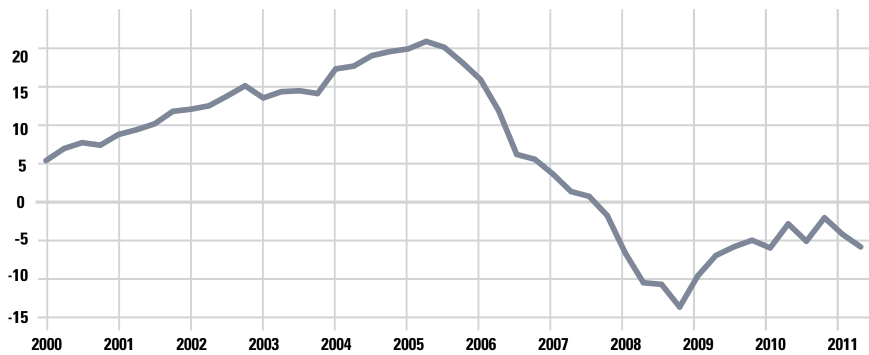
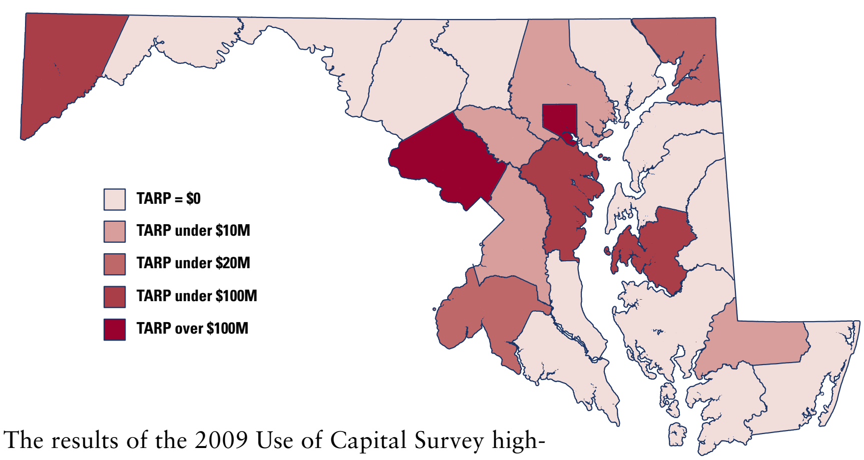


Figure 2 – Disbursement of CPP funds in the state of Maryland



The results of the 2009 Use of Capital Survey highlight the three primary uses of CPP funds: to maintain market/customer confidence, to maintain a capital cushion or liquidity levels, and to maintain or exceed capital requirements. CPP banks were also called to report their use or intended use of the capital infusion.

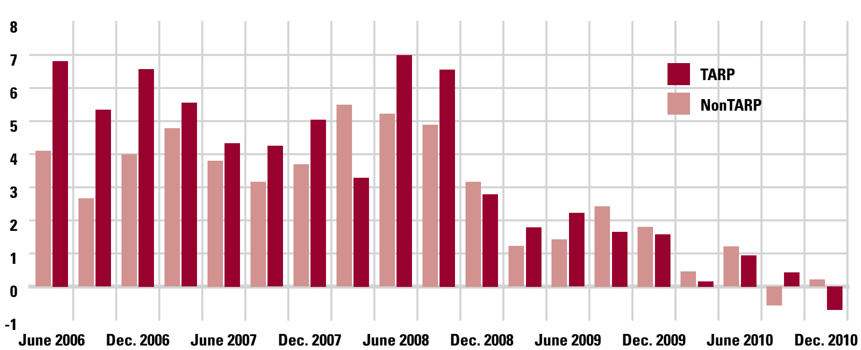
Reason / Use	MD	US
Increase lending or reduce lending less than otherwise	100%	85%
Increase securities purchased (ABS, MBS, etc.)	44%	42%
Make other investments	6%	13%
Increase reserves for non-performing assets	67%	53%
Reduce borrowings	28%	38%
Increase charge-offs	61%	36%
Purchase another or assets from another financial institution	6%	12%
Held as non-leveraged increase to total capital	33%	46%

Every one of the CPP Maryland banks used the funding to increase or maintain lending compared to the national average of 85% for all receiving institutions. Maryland CPP recipients also increased reserves for non-performing loans (67% relative to 53%) and to increase charge-offs (61% relative to 36%). Clearly, Maryland banks which received CPP funding were concerned about maintaining a healthy capital cushion in combination with continued loan growth.

Loan growth was clearly the main priority for Maryland CPP recipients. In their reports, 65% of the Maryland CPP banks indicated the funds were used for commercial and/or residential real estate development. Not only were funds used to increase lending but more significantly, CPP funds prevented the seizing up of the local capital market as some banks "would have had to cease lending" or reported that CPP funds allowed them "to stay actively involved in lending to our targeted small business customers". CPP funding also allowed the financial institutions to avoid or defer undertaking "more costly, direct market capital" raising. Moreover, several banks reported being able to "retain staff" and avoid "severe reduction in lending staff", thereby sustaining the local economy and employment level. In the more dire circumstances, some respondents attributed their survival to the receipt of the CPP funds.

Given the program's rhetoric about facilitating more lending and similar reporting by the recipients, we investigate Maryland CPP banks' actions and use as a benchmark those Maryland institutions that did not receive CPP funding.

Figure 3: Total Loan Growth for TARP and non TARP recipient banks in Maryland



Total Loan Growth for CPP and Non-CPP Recipients

Figure 3 illustrates the total loan growth for CPP and non-CPP recipients in Maryland. In the years prior to the liquidity crisis, lending was aggressively increasing at a combined growth rate of 5% per quarter. This aggressive growth was fueled by a generally easy monetary environment worldwide. The advent of the crisis was sudden and severe. Lending growth rapidly stalled, retrenching to under a 2% quarterly growth rate. The aftermath of the crisis and lingering slow economic environment has pushed loan growth further down with some quarterly instances of negative loan growth in late 2010.

It is evident from the graph that CPP recipients were focused on growing overall loans prior to the crisis. CPP recipients exhibited a loan growth rate that averaged 2.7% higher than non-CPP recipients in 2006. In 2007, this average difference dropped to 0.9%, and further dropped to 0.2% in 2008.[2] CPP recipients continued to grow their overall loan portfolios right up until the crisis impacted the real economy in the second half of 2008. In general, it appears that CPP recipients grew their loan portfolios more aggressively than non-CPP recipients prior to the crisis. After the crisis hit and CPP funds were distributed, CPP recipients reduced overall loan growth for approximately one quarter and then continued to outpace non-CPP recipients until the third quarter of 2009. At that point, historically less exposed banks outpaced CPP banks in terms of loan growth. Figure 2, in conjunction with the evidence from the 2009 Use of Capital Survey, would suggest that CPP funding was pumped immediately back into the ailing Maryland real estate market. These findings are in line with the national evidence. Li (2010)[3] reports that disbursed CPP funds nationally led to an increase in loan supply of 6.43% annually, resulting in $442 billion additional loans from all recipient institutions. Also, she finds that CPP banks dedicated one third of their funds for loan growth and the remaining two thirds to strengthen their balance sheets.

Though created to support "viable institutions", CPP funds were disbursed to a variety of institutions from large banks to community banks whose financial performance varied. The question arises as to which type of banks, failing or healthy, participated in the CPP. Ng et al. (2010)[4] suggests that healthy banks were the main recipients of the CPP. We ask the same question of the Maryland recipients.

Nonperforming Loans: CPP versus Non-CPP Recipients

The Tier 1 capital ratios reveal that CPP banks in Maryland had lower level of funding at the time of the crisis (8.7%) compared to non-CPP banks (12.4%). By late 2010, the average CPP banks capital ratio stood at 8.4% relative to 10.6% for non-CPP banks. It appears that Maryland CPP banks were not as healthy as those not participating in the program and therefore, it is no surprise that they used the funds to recapitalize.

Ng et al. find that, nationally, healthy banks were recipient of funding and measure health with the level of the banks' non-performing loans. Both Maryland CPP and non-CPP banks see an increasing rate of non-performing loans before, during, and after the crisis as seen in Figure 4; however, no clear difference emerges unlike in the national picture where CPP recipients exhibited a lower rate of non-performing loans at the end of the third quarter of 2008 of 2.9% compared to non-recipients (4.0%), reinforcing the healthy recipient picture. It should be noted that Maryland banks in general were faced with overall fewer non-performing loans at a level under 2%.

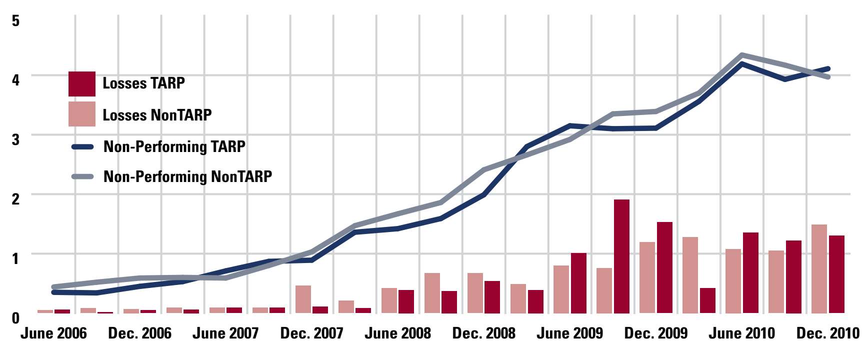
With regard to loan losses, Maryland CPP recipients see a spike in losses right after the onset of the crisis, suggesting that they fueled their loan growth with riskier loans. Given the timing of the disbursement of CPP funds, the majority paid in Maryland from November 2008 to January 2009, it appears that CPP funding allowed CPP banks to recognize the loss faster due to the injection of capital.

CPP funding in Maryland today

Maryland banks were stabilized during the crisis period by the creation of the CPP and the capital was used as intended, allowing Maryland to benefit from reinvigorated lending during the depths of the crisis. Maryland CPP recipients were able to restore their balance sheets and protect their capital ratios as they were unwinding riskier positions resulting from the pre-crisis aggressive growth to their loan portfolios. Today, twelve Maryland CPP recipients have yet to repay the funds to the US Treasury. The most recent institution to repay the capital is Harbor Bancshares Corp. that repaid $11 million, plus $550,000 for preferred shares issued in lieu of warrants in September 2011.

In general, Maryland banks received a relatively small amount of capital from the Treasury Department's Capital Purchase Program. The funding was originally intended to aid undercapitalized banks by providing a capital infusion. Survey results suggest that Maryland banks used the money as intended. While several Maryland banks still have yet to repay the capital, the capital allowed the banks to maintain capital standards and to increase loan development and growth. This will likely lead to future repayment and provides the potential for future economic growth in Maryland.

Figure 4: Losses and Non-Performing Loans for TARP and non TARP recipient banks in Maryland



References:

1 Four-Quarter Percent Change in FHFA State-Level House Price Indexes (Seasonally Adjusted, Purchase-Only Index, 2011Q2), http://www.fhfa.gov/Default.aspx?Page=215&Type=compare&Area1=MD&Area2=&Area3=

2 Data on CPP and non-CPP Maryland recipients, including loan growth, losses and non-performing loan provisions was collected from the banks' Call reports.

3 Lei Li, 2010, TARP Funds Distribution and Bank Loan Supply, Working Paper, Boston College.

4 Jeffrey Ng, Vasvari Florin P., Wittenber-Moerman Regina, 2010, The Participants in the TARP Capital Purchase Program: Failing or Healthy Banks?, Working Paper, Massachusetts Institute of Technology, London Business School and University of Chicago.

The New Economic Development Playbook for Maryland: Focus on Talent, High Growth Companies and Competitive Advantages

Christian S. Johansson

Secretary, Maryland Department of Business and Economic Development

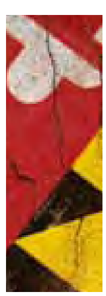
Searching for Answers to an Economic Development Riddle

At the beginning of 1939 with the world on the precipice of war, Winston Churchill famously said, "I cannot forecast to you the action of Russia. It is a riddle, wrapped in a mystery, inside an enigma." What Churchill, nor anyone else at the time could have foreseen were the years of war, suffering, and record economic growth that followed, as well as the role that Russia would inevitably play in changing the course of U.S., and our world's, history.

Today, more than 70 years later, our world faces a different kind of enigma, but one that is equally challenging to forecast – a global economic struggle that is dramatically redefining our collective prosperities as countries, as companies, and as citizens. While we cannot predict with certainty when or how we will emerge from the economic malaise, I believe there are several axioms we can employ that will help Maryland prepare for better days ahead.

- First, talent drives innovation, which then drives economic growth. The single most important economic performance "input" is a smart and talented workforce.
- Second, successful "organic gardening" is the most significant contributor to sustained economic growth. Moreover, small businesses have historically been the key drivers of the vast majority of job creation and investment.
- Third, the speed of globalization is rapidly forcing the need for specialization and a focus on core regional competitive advantages

Investing in education is one of the single most effective ways to lower long-term unemployment, retain companies, and attract new ones.



Following a New Economic Development Playbook for Maryland

After three years as Maryland's chief "jobs" executive, I believe the most important role an economic development agency can play is as convener, coordinator, and collaborator. Having run a number of start-up companies and worked in strategic consulting and regional development prior to government, the strategies put forth in this article originate from proven practices of venture-backed entrepreneurs more so than those traditionally practiced by economic development organizations or officials. A three-pronged strategy focused on talent, high-growth companies, and core competitive advantages is what I call "The new Economic Development Playbook for Maryland."

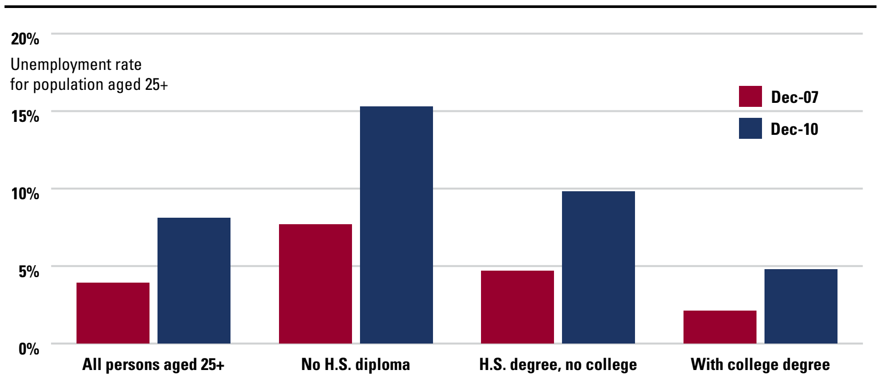
1. Make Attracting, Developing and Retaining Talented People in Maryland is Our Top Economic Development Priority

Investing in education is one of the single most effective ways to lower long-term unemployment, retain companies, and attract new ones. Surveys of corporate executives consistently find that a strong workforce and talent are major factors in site selection. From 2007-2010 (see Chart 1), the gap between education levels and unemployment rates have widened even further.

At the same time, higher education affordability is becoming an issue for many students. Over the past five years, while states' support for higher education has increased an average of 8 percent, tuitions have gone up nearly 50 percent. This trend looks likely to accelerate as, according to the National Conference of

Chart 1: Unemployment rates by education level

Widening gap between education level and unemployment since recession began



Source: Bureau of Labor Statistics, Current Population Survey

State Legislatures, at least half of the states cut funding for higher education in their 2011 legislative sessions.

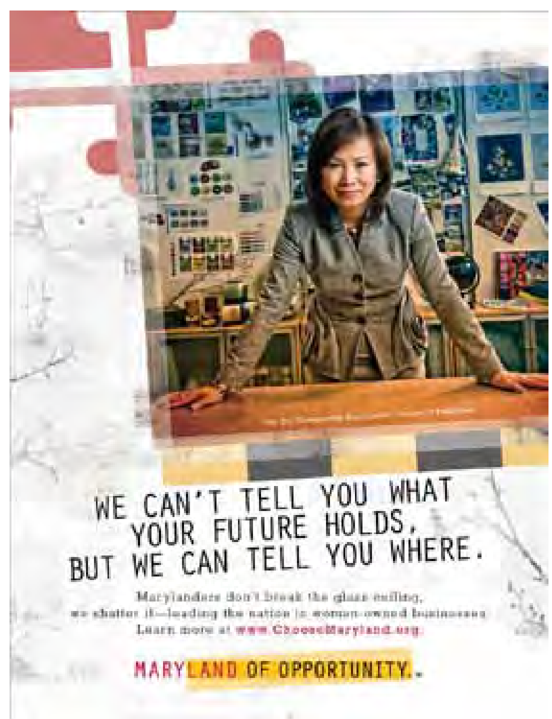
In Maryland, we continue to make public education investments a state budget priority. As a result, Education Week named our public schools the nation's best three years in a row. Maryland also tackled the high cost of getting a college degree by freezing tuition at

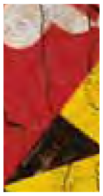
our state colleges and universities four years running. Bearing in mind that not everyone will go to college, states need to have an aggressive plan to focus resources on developing middle skills. With many of today's jobs requiring more than a high school diploma — but less than a bachelor's degree — we launched Skills2Compete to increase Maryland's skilled workforce 20 percent by 2012. We are working with employers to align degree programs to market demand and translate those requirements through our Workforce Investment Boards.

In the end, it is not only about developing talent, it is important to recruit and retain talent. To build successful innovation hubs, states must become attractive destinations for global talent. After all, top talent is infinitely more mobile than companies. Like many states with an extensive network of universities, Maryland exports talent as graduating students pursue opportunities in other states rather than retaining the talent that can generate new entrepreneurial ventures and innovations. Aggressive campaigns to integrate student populations into local communities can have a meaningful impact in retaining them post-graduation. For example, Baltimore's Collegetown Network was founded in 1999 and over the last decade has been successful in increasing the retention rate of students from 19 percent in 2003 to 31.5 percent in 2009.

The flip side of retaining talent is creating relevant marketing campaigns to attract new talent into the state. In a global economy, we need to increasingly market to global talent. *Contact Singapore* and *I Am Young Detroit* are two current campaigns designed to attract global talent to work, invest, and live in Singapore and Detroit respectively. A key component of Detroit's revitalization involves attracting talent from across the nation. As part of this effort the Wayne State's Detroit Fellows Program will recruit and develop up to 25 outstanding mid-level candidates in the nonprofit and economic development spheres to relocate to Detroit for two years of grant-funded professional work. Also contributing to the strategy is I am Young Detroit, a blog that profiles the city's young up-and-comers and growing entrepreneurial ecosystem.

At my agency, we launched the *MaryLand of Opportunity* campaign in January 2010 to profile successful, smart, and savvy entrepreneurs based here. Their base may be Maryland – but their markets are world-wide.





In the end, it is not only about developing talent, it is important to recruit and retain talent.

Today, the award-winning campaign has been viewed by millions and is helping to is educate, inspire and build confidence within Maryland's business community.

2. Focus Resources on High-Impact, In-State Companies for Greatest Job Growth & Business Creation Potential

With recent studies shedding new light on prior assumptions about the source of job gains, we learn that a state's economic performance is driven by how successful it is in building world-class businesses inside its borders, not in importing businesses from elsewhere. Particularly in mature economies, almost all job growth is organic, due to the expansion of existing firms and the birth of new firms. A 2010 study by the Public Policy Institute of California, "Business Relocation and Homegrown Jobs, 1992-2006" found that job relocations at the state level accounted for 1.9 percent of job gains.

Moreover, a small number of firms in every jurisdiction are outsized contributors to economic growth and job creation (see Chart 2). Studies vary in their findings about the size and the age of these businesses. Nevertheless there is clear evidence that successful startups are an important source of jobs. For example, research by the Kauffman Foundation shows that young businesses generate a disproportionate share of new jobs. U.S. Small Business Administration and others shows that it is high-impact "gazelles" that account for the largest share of job growth. Google and Facebook are well-known as outsized contributors to job growth, while in Maryland, industry leaders like Under Armour and Sourcefire are playing a similar role, adding jobs at a rate of 30 percent a year.

Making the Case with Targeted Data & Information

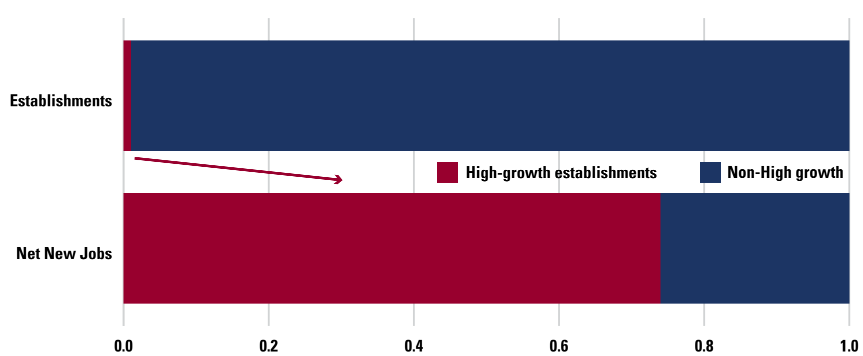
Economic development professionals need targeted strategies to help propel these high-growth firms further, faster. The challenge is that high growth firms are less likely to proactively seek assistance and in many cases have had little interaction with state or local government. States need to develop protocols to identify these rapidly growing firms, proactively develop relationships with their leadership, and provide targeted resources to help them manage expedited growth. States also need better data to target high growth firms.

The Kauffman and Edward Lowe foundations have conducted important research in this arena to help build support for tools that track outsized contributors. We need the continued involvement and thought leadership of these organizations together with state-based labor departments to identify the most promising companies.

Pennsylvania is one state examining the potential of targeting high growth companies. A recent study by Dr. Gary Kunkle for the Team Pennsylvania Foundation shows that less than one percent of a state's companies have the potential to generate more than 70 percent of new jobs annually. Through this research Dr. Kunkle identified the state's fastest growing companies from 2004 to 2009. The Pittsburgh Impact Initiative has implemented an economic development strategy using this data which identified 150 high growth companies in a 10-county region. The Pittsburgh Initiative will help those companies with market research, permitting assistance and other services.

Chart 2: Outsized contributors to the economy

Less than 1% of Establishments responsible for 74% of net new jobs



Source: Outlier LLC for Team Pennsylvania Foundation

Photo by Sam Gordon

Supporting High Performing Gazelles

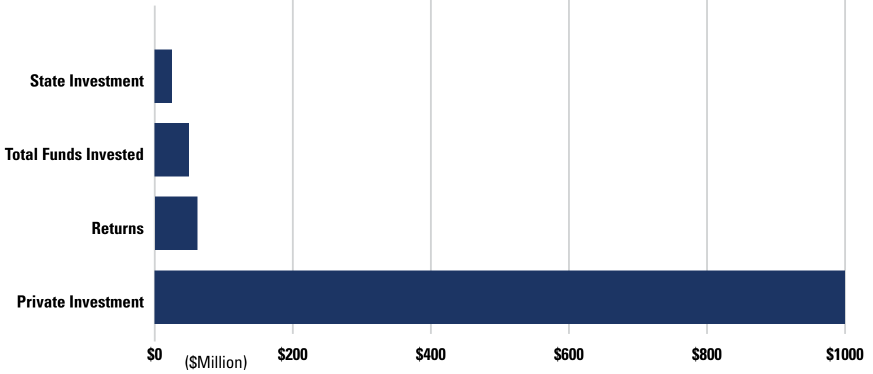
Under Armour, Founded in 1996 by University of Maryland football player Kevin Plank, the company created a line of moisture-wicking athletic apparel. Launched in Plank's mother's basement, the company now employs 4,000 employees world-wide and 1,000 at its Baltimore headquarters – and generated revenues over $1 billion in 2010. Since 2003, Maryland has provided $18 million in tax credits and training funds to help the company expand and upgrade the skills of employees.

Sourcefire, located in Columbia, was founded in 2001 by Martin Roesch, author of open source Snort®, the world's most downloaded intrusion detection and prevention technology with over 3.7 million downloads to date. Sourcefire grew from a venture-backed startup and went public in 2007. Maryland was an early investor in Sourcefire through our state-backed Maryland Venture Fund. The company is consistently recognized as a world leader in network security, protecting thousands of commercial customers. The company's real-time adaptive solutions and open source technologies are deployed in every military branch, more than 50 percent of the Fortune 500 companies, and in the largest civilian government agencies. Sourcefire's federal business almost tripled from $6.2 million in 2007 to $15.8 million in 2008.

Building an Entrepreneurial Infrastructure

Another key tenet to building a better organic growth engine is developing the entrepreneurial infrastructure to generate a more vibrant pipeline of new companies. In 2010, the Kauffman Foundation released The Importance of Startups in Job Creation and Destruction, which concluded that virtually all net job creation in the United States between 1977 and 2005 was driven by startups. The key to a successful entrepreneurial infrastructure is not only the creation of startups, but the nurturing of them as well. Only one in 20 entrepreneurial firms is high growth in terms of adding jobs, but firms that survive the first few years spur jobs and often create innovative goods, services and processes, according to a 2008 U.S. Small Business Administration study.

Chart 3: Maryland Venture Fund Performance over 15 years



Source: Maryland Department of Business and Economic Development

In Maryland, we face a unique challenge as well as an opportunity in that we are the top state for federal sponsored research, rank 2nd in the Milken Institute's State Technology and Science Index, and 3rd in Kauffman's State New Economy Index, but lag behind to 42nd in business starts. This delta between funding and business start-ups is driving us to strategically invest in the 'entrepreneurial infrastructure' to narrow the gap between R&D and commercialization.

To close the gap, Maryland is implementing a program called InvestMaryland, which will infuse a minimum of $70 million through venture capital investments into promising early stage companies. The program emerged from the tremendous success of our state-backed venture fund. Launched in 1994, the Maryland Venture Fund invested $25 million and returned $61 million, which resulted in the creation of 2,000 jobs and more than a billion in private funding invested into the company's we helped to seed (see Chart 3).

The goal of *InvestMaryland* is to not only create jobs and attract billions in follow on capital, but also to support organic growth and commercialize some of the innovative research being conducted at our universities and private companies and move it into the marketplace. The program is structured as a public-private partnership with two-thirds of the funds raised to be invested by private venture capital firms and one-third by the Maryland Venture Fund.

3. Develop Business Plans around Competitive Advantages & Assets

Global markets are changing the very fabric of how business is done. Along with the opportunity to attract billions of customers for American companies, we are at the same time faced with the parallel threat of an increase in global competition. With high speed broadband dramatically improving infrastructure to manufacture and deliver goods to market, and rising skills, China and other developing nations are fundamentally changing the concept of a modern day supply chain. This new interconnectivity of markets and the speed of globalization requires a renewed effort on core competitive advantages. Cities, regions, states, and countries need to prioritize investments that build on strengths and, equally important, have a plan to market those competencies nationally and internationally.

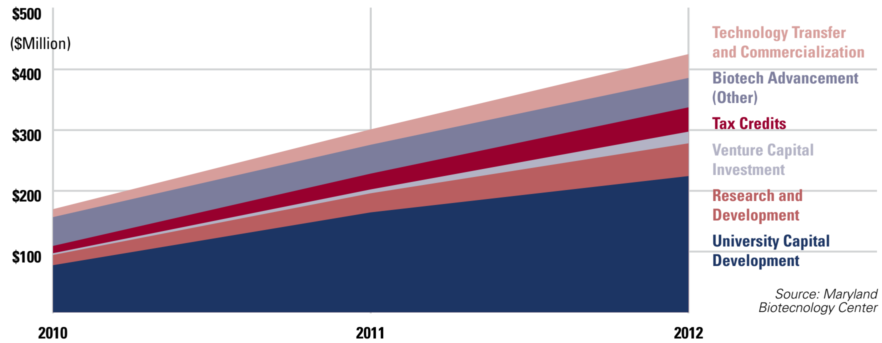
Investing in Maryland's Core Advantages: Cyber, Space & Life Science

In Maryland, we have laid out a plan around our core advantages—focusing on being world leaders in life sciences, cybersecurity, and space/aerospace. In each area, we assessed our assets and developed detailed plans to move forward. Key to each one of these strategies is creating a pipeline of talented workers, promoting commercialization and innovation and making the necessary investment in infrastructure.

Home to flagship federal institutions such as the National Institutes of Health, the Food and Drug Administration, and National Institutes of Standards and Technology, along with premier research institution and top NIH recipient Johns Hopkins, it is no surprise that between 2002 and 2010, one third of all net new jobs in Maryland were created in the life sciences. Coupled with 500+ biotech firms, representing the 5th largest concentration of life sciences establishments in the US, there was a compelling case to have the state significantly invest in this industry.

In 2009, Governor O'Malley proposed a record $1.3 billion, 10-year investment, to propel the life science sector even further, faster. As of July 2011, we have invested well over $300 million in areas such as strategic research like stem cells, provided grants and tax incentives to commercialize and develop biotech companies, and committed dollars to key infrastructure such as bioparks and incubation space next to our flagship universities. Our end objective is to position Maryland to be a leading global region for the discovery and commercialization of life sciences products and services.

Chart 4: Investments in Maryland's Life Sciences Industry 2010-2012



Winning the Race for Talent & Capital

Today, our world is defined by global markets fueled by unconstrained movements of capital and talent. This new world is full of challenges and uncertainty. Although it is impossible to predict tomorrow's economic success story, we identify key trends and as a result make impactful policy decisions.

Economic development professionals in Maryland need to think beyond the realms of our own agencies and build a broader coalition of state and local government to move our economies forward. Our profession is already evolving from simply being driven by attraction and retention of business to a more expansive view. More than ever before, this will require us to serve as conveners, facilitators, and cheerleaders of diverse interests that all play critical roles in propelling our economies forward.

The new Economic Development Playbook for Maryland key tenants- whether it is attracting global talent, building support for entrepreneurship, or making priority investments in a state's most competitive industries - hold amazing promise as our state continues its economic recovery. In the end, Maryland's willingness to lead and win the race for talent and capital will benefit the state and its citizens for decades to come.

Cash Hoarding in Corporations–A Look at Maryland-Based Firms

Joanne Li, Ph.D., CFA

Chair and Professor, Department of Finance,
College of Business and Economics,
Towson University

"The latest flow of funds data from the Fed show holdings of cash and other liquid assets at nonfinancial companies rose to $2.047 trillion in the second quarter, up 4.5% from the first quarter. That was the highest level since the series began in 1945"

– Wall Street Journal, September 16, 2011.

Many U.S. companies continued to accumulate profits instead of spending them according to the Federal Reserve's quarterly snapshot of financial flows. Several recent studies have indicated that U.S. firms tend to hold a significant amount of cash representing a dramatic shift from the cash holding policies of the past. For instance, Bates, Kahle, and Stulz (2009) document a dramatic secular increase in the cash holdings of U.S. firms during the period 1980-2006. They find firms' average cash to assets ratio increase from 10.5% in 1980 to 23.2% in 2006. Firms, in general, hold fewer inventories and receivables but increase in R&D expenses. They provide evidence that firm net debt decreases mainly due to an increase in cash holdings rather than a decrease in debt (with net debt ratio defined as cash subtracted from debt then divided by book assets). The economic significance of this observation is that an average firm can easily retire all debt obligations with its cash holdings. The substantial cash reserve increase in U.S. firms has enticed researchers to examine possible causes of such phenomenon and subsequent impacts on cash management policies and firm value (Opler et al., 1999; Harford 1999; Bates et al., 2006; Dittmar and Mahrt-Smith 2007; Harford et al., 2008, Bates et al., 2009). Significant events such as the Asian currency crisis (1997-1998), Internet bubble collapse (2000-2001), financial sector and real estate collapse (2007-2008) and more recent debt crisis in the U.S. and Europe have further led to credit squeeze, collapse in commercial papers, and dire stock and bond issuance. Essentially, companies are left with little options but to hold cash to anticipate limited access to capital markets. With the increased concern over the macroeconomic situation in the recent two years, policy makers are eager to entice firms to spend their hoarded cash, with the hope that the released cash will rejuvenate the sluggish economy by increased capital expenditure and or stronger demand of labors.

The finance literature, in general, argues firms have four broad motives to hold cash. First, firms need to meet the cash demand for transaction purpose. Converting non-cash assets into cash to make payments incurs transaction costs. Hence, large firms have the advantage of economy of scale and thus hold less cash (see Mulligan (1997) for detailed findings). Second, firms hold cash for precautionary purpose. When access to capital markets becomes costly, firms hold cash to cope with any adversary shocks in capital availability. Opler, Pinkowitz, Stulz and Williamson (1999) provide evidence on firms with high volatility in cash flows and face high barrier to external capital tend to hold more cash than average firms. In addition, firms that have more investment opportunities tend to hold more cash to avoid potential underinvestment. Third, firms hold cash to anticipate tax consequences. Foley, Hartzell, Titman, and Twite (2007) document U.S. firms hold more cash when they incur tax consequences associated with repatriating foreign earnings. This finding implies that multinational firms tend to hold more cash than average. Fourth, firms hold cash because of agency conflicts. Jensen (1986) argues that entrenched managers always have more motives to hold cash for private incentives rather than distributing cash to their shareholders even when firms do not have good investment opportunities. Dittmar, Mahrt-Smith, and Servaes (2003) provide evidence on firms holding above average cash more prevalent in countries with greater agency problems. In addition, entrenched managers also tend to spend excess cash more quickly.

The classic explanations, nevertheless, seem to fall short on justifying the increase in recent cash hoarding in U.S. firms. With the leaping improvement in information technology since the 80s, firms are likely to lower their needs to hold cash for transactional costs. Also, the continuous innovation of financial derivatives equips firms with more effective hedging strategies. Hence, the precautionary purpose of holding cash should diminish. Further, Bates, Kahle, and Stulz (2009) find that firms with no foreign profits also show a secular increase in cash holding, weakening the tax motive used to explain increased cash holding. Finally, it seems plausible that dividend paying firms tend to hold more cash to meet their distributions. However, empirical evidence also points out that non-dividend paying firms have doubled their cash holdings in recent years. Then the logical question is to examine if the increased cash holding in firms is the result of agency problem. Bates et al. provide additional evidence to suggest that firms with entrenched managers experience the smallest increase in cash holdings. Thus, agency problems fall short in explaining the recent cash hoarding phenomenon. However, recent empirical research provides some new evidence to suggest precautionary motive might be an explanation for cash hoarding in non-dividend paying firms. It suggests that firms face with high cash flow volatility tend to build cash buffer against capital shocks. Also firms that tend to increase their cash holdings are the ones that have significant increase in their R&D spending. These firms tend to be young and new to the markets.

In this paper, I provide simple statistics on the cash holdings on some Maryland based firms. I focus on a group of Maryland firms that are identified in the Towson University Index 2011 (See Baltimore Business Review Issue 2). I include all firms on the list except companies in financial and utilities sectors because of their highly regulated environments. All data are obtained from Compustat for the years 2000 to 2010, in which all firm-year observations are required to have positive values for the book value of total assets and sales revenues. I follow a similar method of recent literature to define cash holding ratio (Average Cash Ratio) as the sum of cash and marketable securities divided by total assets. I also present an aggregate cash ratio that is defined as cash divided by total assets. I provide information on capital expenditures (Average Capex) which is defined as the average capital expenditure divided by total assets while Median Capex is the median. Leverage is a ratio defined as the sum of all current liabilities and total long-term debts divided by total assets. R&D is a ratio defined as all research and development expenses divided by total sales.

Table 1: Average and Median Cash, Leverage, Capital Expenditure, and R&D from 2000 to 2010

Year	N	Aggregate Cash Ratio	Average Cash Ratio	Median Cash Ratio	Average Capex	Median Capex	Average Leverage	Median Leverage	Average R&D	Median R&D
2000	23	0.140	0.294	0.081	0.038	0.025	0.206	0.163	1.519	0.012
2001	22	0.106	0.243	0.130	0.027	0.020	0.293	0.233	0.302	0.014
2002	23	0.119	0.266	0.211	0.048	0.026	0.280	0.200	0.093	0.014
2003	24	0.107	0.253	0.173	0.030	0.026	0.225	0.199	0.083	0.016
2004	26	0.117	0.283	0.170	0.030	0.023	0.293	0.156	0.183	0.008
2005	27	0.093	0.276	0.206	0.033	0.021	0.262	0.157	0.210	0.012
2006	27	0.106	0.303	0.236	0.036	0.026	0.188	0.117	0.194	0.009
2007	27	0.125	0.347	0.234	0.042	0.031	0.192	0.077	0.158	0.008
2008	27	0.142	0.341	0.254	0.041	0.020	0.203	0.094	0.320	0.011
2009	27	0.171	0.422	0.365	0.031	0.016	0.199	0.099	0.099	0.015
2010	27	0.172	0.433	0.384	0.032	0.022	0.193	0.130	0.063	0.014

Table 1 presents data on the sample of Maryland firms. The results are consistent with recent literature and confirming the drastic increase in cash holdings in U.S. firms. The average cash for the sample has increased from 29% in 2000 to 42% while the median has increased from 8% in 2000 to 32% in 2010. The aggregate cash remains fairly stable through the studied period. This finding indicates that the cash holding ratio increase mainly is driven by the increase in the holding of marketable securities by the sample firms. Also, I do not find any significant change in capital expenditures in the sample firms while the there is an obvious decrease in R&D spending relative to total sales. While average cash holding has increased during the period, the average leverage ratio has decreased noticeably. Figure 1 presents a comparison between average cash and aggregate cash ratios. Figure 2 gives a visual comparison between average cash ratio and average leverage ratio. Figure 3 presents a comparison of average cash ratio and average capital expenditure while Figure 4 illustrates the one between average cash ratio and average R&D spending.

The cash hoarding phenomenon in U.S. firm has drawn much attention in the past decade. In recent years, the traditional explanations on the motives of firm holding cash seem no longer valid. Many researchers find that firms face with huge cash flow volatility tend to hoard more cash (see Bates et al. (2009)). The economy has gone through many crises for the past decade. Companies hold cash to anticipate capital market shocks or in other words, cash flow volatility, is understandable. Sluggish growth in our economy coupled with reactive regulatory policies might be a possible reason for firms to hoard cash. When face with uncertainties, be it a regulatory restriction or presidential election, it is almost an instinct for firms to hold cash to anticipate difficult access to capital markets somewhere in the future. Until the economic and political environment can provide comfort and certainty, I anticipate firms will continue to hoard cash even it means a cost to firms. Comparing costs with benefits, if the benefit of avoiding cash flow volatility outweighs the cost of hoarding cash, it only makes sense for firms to keep holding their cash and not spending it.

The sample includes all companies listed in the Towson University Index 2011 except companies in financial and utilities sectors. The data include all Compustat firm-year observations from 2000 to 2010 with positive values for the book value of total assets and sales revenue for firms incorporated in the United States. Aggregate cash ratio is defined as cash divided by total assets. Cash ratio is defined as the sum of cash and marketable securities divided by total assets. Average Capex is the average capital expenditure divided by total assets while Median Capex is the median. Leverage is a ratio defined as the sum of all current liabilities and total long-term debts divided by total assets. R&D is a ratio defined as all research and development expenses divided by total sales.

Figure 1: Comparison of Average Cash Ratio with Aggregate Cash Ratio on a group of Maryland firms for the years 2000 to 2010. Average cash ratio is defined as the sum of cash and all marketable securities divided by total assets while aggregate cash ratio is defined as cash divided by total assets. All data are obtained from Compustat North American Database.

Figure 2: Comparison of Average Cash Ratio with Average Leverage Ratio on a group of Maryland firms for the years 2000 to 2010. Average cash ratio is defined as the sum of cash and all marketable securities divided by total assets and average leverage ratio is defined as the sum of all current liabilities and long-term debts divided by total assets. All data are obtained from Compustat North American Database.

Figure 3: Comparison of Average Cash Ratio with Average Capex Ratio on a group of Maryland firms for the years 2000 to 2010. Average cash ratio is defined as the sum of cash and all marketable securities divided by total assets and average capex ratio is defined as total capital expenditures divided by total assets. All data are obtained from Compustat North American Database.

Figure 4: Comparison of Average Cash Ratio with Average R&D Ratio on a group of Maryland firms for the years 2000 to 2010. Average cash ratio is defined as the sum of cash and all marketable securities divided by total assets and average R&D ratio is defined as total research and development expenses divided by total sales. All data are obtained from Compustat North American Database.

Figure 1: Comparison of Average Cash Ratio with Aggregate Cash Ratio

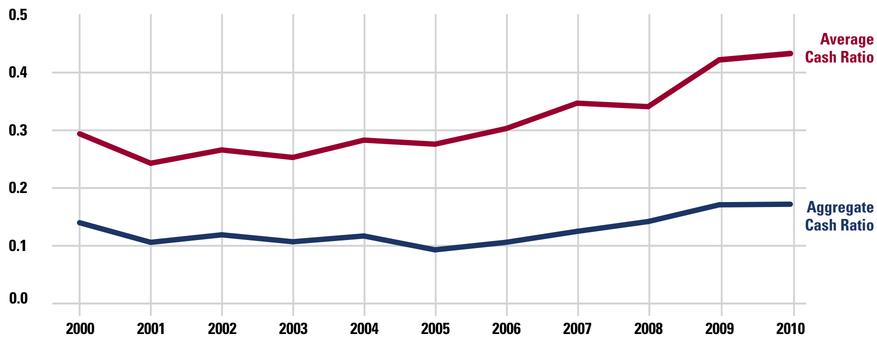


Figure 2: Comparison of Average Cash Ratio with Average Leverage Ratio

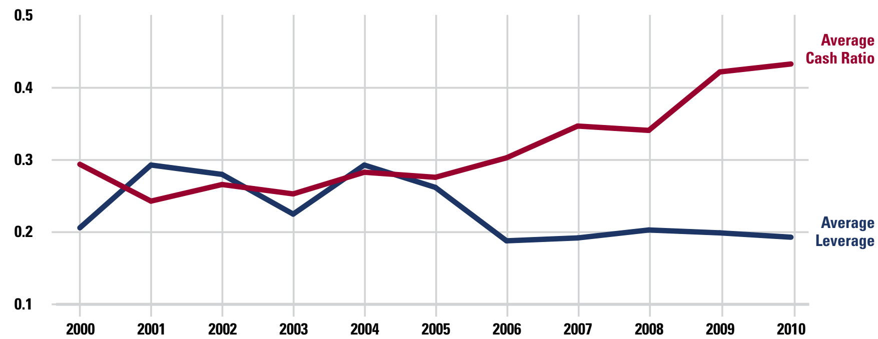


Figure 3: Comparison of Average Cash Ratio with Average Capex Ratio

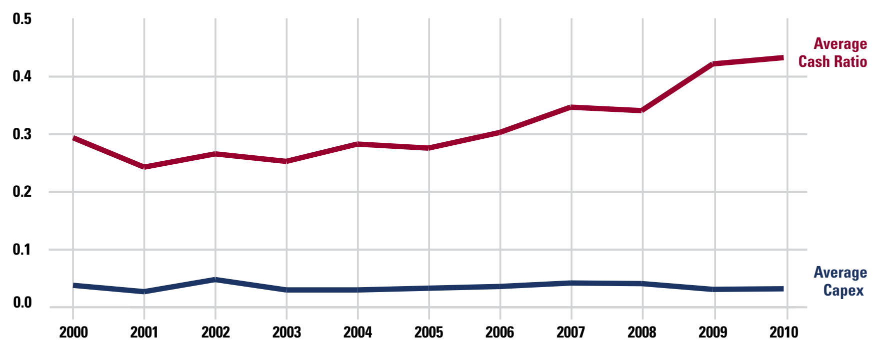
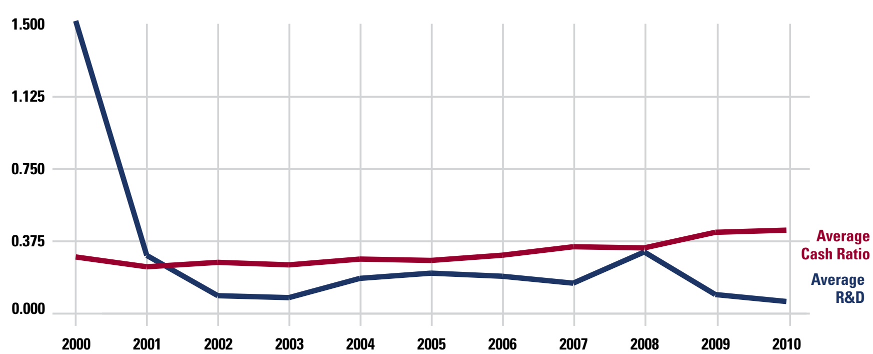


Figure 4: Comparison of Average Cash Ratio with Average R&D Ratio



Appendix – A list of Maryland companies used in the analysis

The sample is obtained from 2010 Baltimore Business Review Towson University Index. Financial and utilities are omitted in the sample due to their highly regulated environment. Companies no longer in Maryland are also deleted from the sample.

Table 1. Companies Based in Maryland based on 2010 data extracted from TU Index

Ticker	Company	Market Cap	Sector	Quarterly Revenue	Employees
ARB	Arbitron Inc	685M	Consumer Discretionary	88.34	1,029
AGX	Argan Inc	142M	Industrials	65.46	947
CHSI	Catalyst Health Solutions Inc	1,546M	Healthcare	890.1	955
CHH	Choice Hotels International Inc	1,792M	Consumer Discretionary	149.9	1,560
CIEN	Ciena Corp	1,186M	Information Technology	253.5	4,214
CSGP	CoStar Group Inc	803M	Industrials	55.84	1,438
CVH	Coventry Health Care Inc	2,624M	Healthcare	2,868	14,400
DISCA	Discovery Holding Co	4,867M	Consumer Discretionary	963	4,400
GPX	GP Strategies Corp	135M	Industrials	66.14	1,780
GVP	GSE Systems Inc	78M	Information Technology	11.77	201
JOSB	Jos A Bank Clothiers Inc	991M	Consumer Discretionary	188.4	3,280
LMT	Lockheed Martin Corp	26,770M	Industrials	11,442	136,000
MAR	Marriott International Inc	10,848M	Consumer Discretionary	2,771	137,000
MKC	McCormick & Co Inc	4,516M	Consumer Staples	794.6	7,500
MED	Medifast Inc	400M	Consumer Discretionary	66.66	365
MCRS	Micros Systems Inc	2,553M	Information Technology	248.2	4,646
OSIR	Osiris Therapeutics Inc	191M	Healthcare	10.3	57
SBGI	Sinclair Broadcast Group Inc	288M	Consumer Discretionary	185.6	2,400
FIRE	Sourcefire Inc	527M	Information Technology	30.61	307
TSYS	TeleCommunication Systems Inc	194M	Information Technology	92.66	1,009
TESS	Tessco Technologies Inc	123M	Information Technology	141.9	918
UA	Under Armour Inc	1,272M	Consumer Discretionary	204.8	3,000
UTHR	United Therapeutics Corp	2,755M	Healthcare	137.5	410
UUU	Universal Security Instruments Inc	14M	Industrials	3.68	18
USU	USEC Inc	544M	Energy	459.7	2,908
GRA	W.R. Grace & Co	1,531M	Materials	685	5,940

References

Baker, M. and P. Gompers (2003), 'The Determinants of Board Structure at the Initial Public Offering', *Journal of Law and Economics,* Vol. 46, pp. 569–98.

Bates, T.W., K.M. Kahle and R.M. Stulz (2009), 'Why Do U.S. Firms Hold So Much More Cash than They Used To?' *Journal of Finance,* Vol. 64, pp. 1985-2021.

Dittmar, A. and J. Mahrt-Smith (2007), 'Corporate Governance and the Value of Cash Holdings', *Journal of Financial Economics,* Vol. 83, pp. 599-634.

Dittmar, A., J. Mahrt-Smith and H. Servaes (2003), 'International Corporate Governance and Corporate Cash Holdings', *Journal of Financial and Quantitative Analysis,* Vol. 38, pp. 111-33.

Engel, E., E. A. Gordon and R. M. Hayes (2002), 'The Roles of Performance Measures and Monitoring in Annual Governance Decisions in Entrepreneurial Firms', *Journal of Accounting Research,* Vol. 40, pp. 485-518.

Gao, N. and B. Jain (2010),' Founder Management and the Market for Corporate Control for IPO Firms: The Moderating Effect of the Power Structure of the Firm', *Journal of Business Venturing.* doi:10.1016/j.jbusvent.2010.06.001

Harford, J. (1999), 'Corporate Cash Reserve and Acquisitions', *Journal of Finance,* Vol. 54, pp. 1969-97.

Harford, J., S.A. Mansi and W.F. Maxwell (2008), 'Corporate Governance and Firm Cash Holding in the US', *Journal of Financial Economics,* Vol. 87, pp. 535-55.

He, L. (2008), 'Do Founders Matter? A study of Executive Compensation, Governance Structure and Firm Performance', *Journal of Business Venturing,* Vol. 23, pp. 257-79.

Jensen, M.C. (1986), 'Agency Costs of Free Cash Flow, Corporate Finance and Takeovers', *American Economic Review,* Vol. 76, pp. 323–39.

Mulligan, C. B. (1997), 'Scale Economies, the Value of Time, and the Demand for Money: Longitudinal Evidence from Firms', *Journal of Political Economy,* Vol. 105, pp. 1061–79.

Opler, T., L. Pinkowitz, R.M. Stulz and R. Williamson (1999), 'The Determinants and Implications of Corporate Cash Holdings', *Journal of Financial Economics,* Vol. 52, pp.3-46.

Pinkowitz, L. and R. Williamson (2004). 'What is a Dollar Worth? The Market Value of Cash Holdings', Unpublished working paper, Georgetown University.

Stulz, R. (1990), 'Managerial discretion and optimal financing policies', *Journal of Financial Economics,* Vol. 26, pp. 3–27.

Rust Belt Rising—
Maryland's Manufacturers Are Rising

Niall H. O'Malley

Portfolio Manager, Managing Director
Blue Point Investment Management, LLC

U.S. and Maryland manufacturing have receded for the past 40 years as cheaper emerging market manufacturing resulted in the wholesale relocation to the emerging markets. Outsourcing has been a persistent buzzword. There is growing evidence that manufacturing in the U.S. and Maryland is on the rise. During the challenges of the past 40 years, the industry was not thrown a lifeline and has been forced to reinvent itself.

What Changed?

The manufacturing industry has quietly but persistently reinvented itself. The single biggest contributor is productivity gains. Monotonous mind numbing tasks are now supported by automation. This in turn has lowered production costs. Between 1987 and 2008 productivity of U.S. manufacturing grew by 103%, almost double the productivity increase of the rest of the business sector. While manufacturing accounted for on average 15% of GDP, it accounted for 22% of overall productivity.

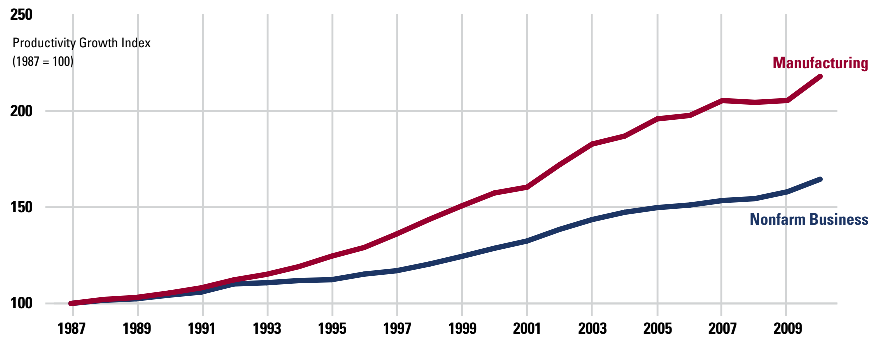
How to Judge Success?

If you measure manufacturing in terms of historic employment levels, the numbers have clearly fallen. The same is true with farming. In 1930 21.5% of the U.S. work force was employed in agriculture. Today 1.9% of the U.S. work force is employed in agriculture. There is little lamenting about the farmer's use of mechanization to complete otherwise backbreaking or monotonous work. While the employment levels in manufacturing and farming have fallen, productivity has significantly improved. Federal Reserve Chairman, Ben Bernanke has observed that productivity growth is «perhaps the single most important determinant of living standards».[1] Higher productivity means more can be produced with less available resources which is the basis for higher wages and living standards.

Historical Perspective

Following World War II the world's manufacturing base - outside North America - had been destroyed or heavily damaged. U.S. manufacturers were the only game in town and the world desperately needed manufactured goods to rebuild. For manufacturers, it was a sellers' market, if there was enough credit. The U.S. government's Marshall Plan (officially the European Recovery Act) and separate aid to Asia helped fuel a period of enormous prosperity for U.S. and Maryland manufacturers. Manufacturing companies had some of the highest profit margins in recorded history and

Figure 1: Growth of Maryland Manufacturing vs. Non-Farm Businesses



Source: U.S. Bureau of Labor Statistics

along with that prosperity came higher incomes and appreciating currency. Wages grew and labor sought greater participation in the prosperity. In 1948 the National Labor Relations Board compelled employers to include pensions in collective bargaining. As pension participation accelerated, collective bargaining sought the expansion of pension benefits. During the 1950's and 1960's, Europe and Asia rebuilt and our customers became our competitors. In many cases the goods produced were of inferior quality, but over time foreign companies moved up the quality curve and gained higher and higher levels of market share.

The extraordinary sellers' market for U.S. manufacturing following World War II was not sustainable. Management and labor agreed to wages and pension benefits that were not sustainable as competitive advantages were lost. At the same time the value of the dollar was appreciating and magnifying growing cost disadvantages. The incremental return on building new production abroad was superior to building new production domestically, since labor, benefits and taxes were cheaper. Through this entire process evolving levels of technology have removed distance and facilitated even greater levels of outsourcing.

In 2011, most defined benefit plans have been closed to new entrants and have been replaced with defined contribution plans e.g. 401Ks. The strength of 401Ks is the participants know what they will actually receive and companies match costs their to the operating period the benefits are given. The importance of pension obligations cannot be over looked. One needs to look no farther than the big three automakers. There are two more silent trends that are of significant importance. The long-term depreciation of the U.S. dollar and rising labor costs in the emerging markets that are favorable to manufacturers in the U.S. and Maryland.

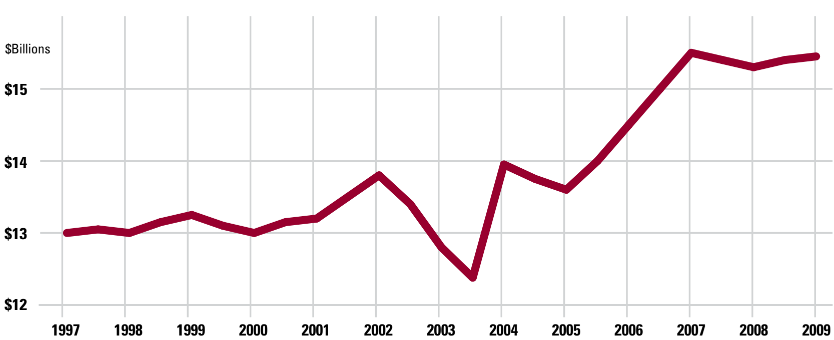
Dollar Depreciation Favors Manufacturing

In 2010, manufacturing's share of exports from Maryland was 90%. Since 1986 the declining value of the dollar on a trade-weighted basis has substantially improved the competitive position of U.S and Maryland manufactured goods. There is no guarantee on the direction of the dollar. A collapse of the Euro would undoubtedly strengthen the dollar.

To date two quantitative easing programs have occurred that expanded the Federal Reserve balance sheet to $2.8 trillion. Federal Reserve Chairman Ben Bernanke has in recent comments and Federal Open Market Committee meeting minutes indicated a willingness to engage in QE3 if market conditions warrant. In January 2012 the terms of the three dissenting members of the Federal Open Market Committee are set to expire. This will likely facilitate even more quantitative easing by the Federal Reserve as it seeks to attain fuller employment with aggressive monetary policy. While positive for manufacturing these changes present inflationary pressures as the money supply grows. Year-over-year import prices in the U.S. increased by 13.4% in September 2011 per the U.S. Department of Labor. Oil imports accounted for 7.9% of that increase.

A metal-cutting laser at Marlin Steel in Baltimore

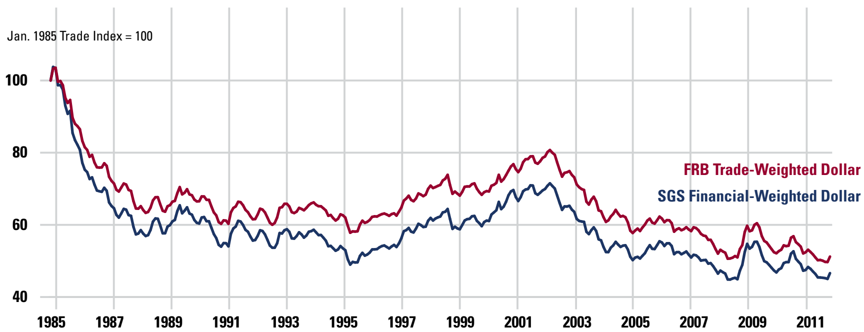
Figure 2: Maryland Manufacturing Output



Falling Unit Labor Cost

Relative to emerging markets where double-digit wage inflation is the norm rather than the exception, U.S. unit labor costs are falling. The primary driver is increasing productivity. The closing of most defined benefit pension plans has reduced pension costs. The 401K defined contribution plans give employee's a level of certainty since the retirement assets are titled in the employees name. Healthcare expenses continue to increase at a double-digit rate which are an ongoing challenge for manufacturers.

Figure 3: Financial- vs. Trade-Weighted Dollar Indicies



Where Do Things Stand?

Historically, Maryland's economy was dominated by manufacturing as proximity to the port and the railroads was a dominate consideration since it granted access to both end markets and natural resources. Today, manufacturing in Maryland accounts for 5.4% of the total output of the state, employing 4.6% of the work force. Total output from manufacturing has been rising the past several years (see Figure 2), and the output of Maryland's manufacturers totaled $15.4 billion in 2009. Manufacturing compensation is almost 54% higher than other nonfarm payrolls in Maryland. The average annual compensation for manufacturing employees in Maryland is $78,781. Maryland has 3,860 manufacturing establishments. Eighty-seven percent of Maryland's exporters are small businesses. Between 2003-2010 the growth in manufactured exports doubled, and now stands at $9 billion annually. The top five export markets for Maryland's manufactured goods in 2010 were Canada (16%), Netherlands (7%), Saudi Arabia (5%), Mexico (5%) and Egypt (4%).

Some Interesting Examples of Maryland's Manufacturing Success

W.R. Grace & Co.(Columbia - NYSE ticker GRA) ships cracking agents that are used in refiners around the world to make gasoline and other fuels. **Millennium Chemicals** (Hunt Valley - private) manufactures titanium dioxide, which puts the white in the color white. **Goetze's Candy Company** (Baltimore- private) manufactures its signature Cow Tales candy. **Marlin Steel** (Baltimore - private) manufactures wire and sheet metal structures for a diverse number of manufactures. **Sensata Technologies** (Cambridge - NYSE ticker ST) manufacturers electrical switches and sensors. **Colfax** (Fulton - NYSE ticker CFX) is a leading manufacturer of a wide range of heavy duty industrial pumps. **Beretta USA** (Accokeek - private) manufacturers pistols on the Eastern Shore that are widely used by police departments around the world. **Allison Transmission** (White Marsh - private) leading manufacturer of medium and heavy-duty transmissions. **CRTL Systems** (Westminster - private) a leading manufacturer of ultrasonic detection devices and sensors used to detect, maintain and inspect complex mechanical systems. **Northrop Grumman** (Linthicum - NYSE ticker NOC) manufactures F-16 radars. **Cambridge International** (Cambridge - private) is a leading manufacturer of metal belts. **Ellicott Dredges** (Baltimore - private) a leading manufacturer of dredges used around the world. Exports represent a significant part of the sales for each of the manufacturers noted above and the prospects for future growth look strong.

Conclusion

The relative strength of manufacturing in the U.S. and Maryland is improving. Given current trends in productivity, relative cost, and dollar depreciation, an often overlooked part of the economy, manufacturing, is quietly rising.

References:

1 Federal Reserve Board Chairman Ben Bernanke's commencement address at MIT, 2006

Bloomberg
Maryland Department of Business and Economic Development
National Association of Manufacturers
Regional Manufacturing Institute
U.S. Bureau of Economic Analysis
U.S. Bureau of Labor Statistics

Disclosures:

At the time the article was submitted Blue Point Investment Management's clients do not own shares in any of the companies discussed. The author does not own shares in any of the companies mentioned. The article is not a recommendation to or offer to buy or sell any security.

Content Versus Distribution: Is the Lead Shifting?

Scott Marchakitus, CFA

Managing Director, Telecommunications, Media and Technology Credit Research Group, Goldman Sachs

and

Towson University, Class of 1992

The war between content and distribution companies has raged for years, but the tension has increased dramatically over the past decade as costs have risen, while revenue opportunities have dwindled. One of the greatest conflicts began more than a decade ago when Apple introduced iTunes to the world. Overnight, the balance of power shifted from the music industry, which produced and recorded the songs, to Apple, which essentially determined the price which each company could charge per song (e.g., in most cases, songs were sold at 99 cents with a 70/30 split between the record producers/Apple).

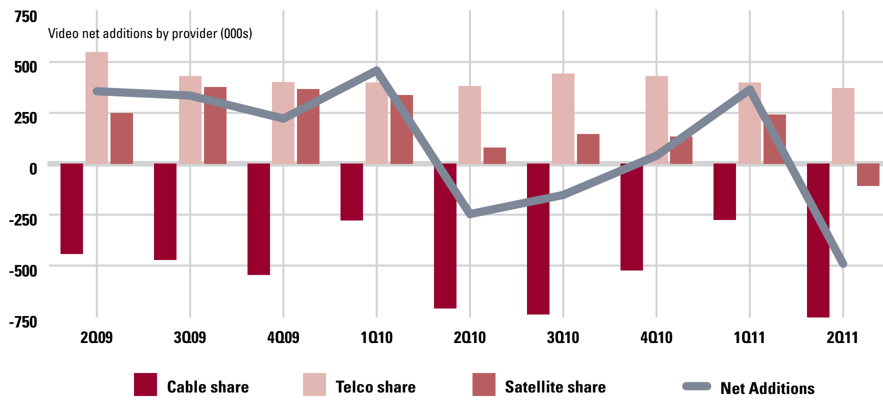
In recent years, the battle ground has shifted to the cable industry where the content providers (e.g., cable networks), such as Time Warner, News Corp. and Disney, have increasingly sought higher fees from the distribution companies, including Comcast, Time Warner Cable (TWC) and Cablevision. One memorable high profile dispute between TWC and Viacom in late-2008 featured an advertisement placed by Viacom in The New York Times with a picture of Dora (the Explorer) with the tagline "Why is Dora crying? Time Warner Cable is taking Dora off the air tonight! Along with 19 of your favorite channels!" While these disputes rarely result in blackouts (i.e., the content providers pulling their channels from the operators) for an extended period of time, it has put increased pressure on programming costs.

We expect programming costs to remain a drag on margins over the intermediate term owing to affiliate fee growth and the demand for retransmission fees from broadcast networks. From a financial perspective, Video ARPU (average revenue per user) remains healthy with average growth in the mid-single digits primarily due to price increases. However, the rate of growth is decelerating, down 70 basis points (bp) quarter-to-quarter in 1st Quarter 2011 and down another 50 bp sequentially in 2nd Quarter 2011 according to published estimates. Furthermore, the increase in programming costs helped contribute to a 105 bp year-to-year decline in video gross margins in 2nd Quarter 2011, which we would expect to continue in the intermediate term.

Though the content companies have long ruled the world, we believe distributors will likely have greater influence in the coming years, as customers increasingly seek the most economical package and faster broadband speeds. Over the past five quarters, we have seen video subscriber losses accelerate (see Exhibit 1), as the primary driver has been economically motivated as opposed to over-the-top (OTT) substitution. To date, the overall video user experience is difficult for OTT platforms to replicate, plus the lack of live sports content on OTT platforms is another meaningful advantage for pay-TV. However, we acknowledge that for a specific subscriber set, OTT platforms can be viable alternatives to pay-TV particularly in the current economic environment. Furthermore, as content availability and technology improves, we believe video subscriber losses could accelerate.

Exhibit 1: Wireline/Cable video flow share

Video losses continue to mount



Source: Company, Goldman Sachs Global Investment Research

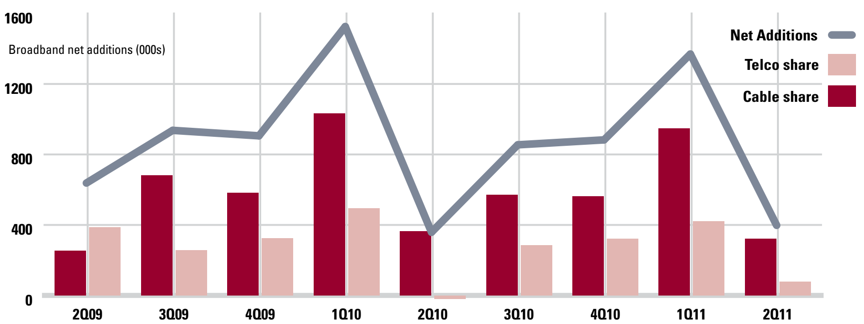
From a distributor's perspective, we believe the most profitable segment of the triple-play bundle is broadband. This makes perfect sense as the cable/telecom operators own the pipe and are charging customers for access, compared to the video business where the distributors try to pass along the bulk of the programming costs to customers, while scratching out a decent margin for themselves. With that in mind, we believe the companies that offer the best broadband networks should be in a good position to deal with potential video losses. In particular, we believe Verizon, Comcast and Time Warner, and to a lesser extent AT&T, providers that offer the fast high-speed broadband service (both wired and wireless) will be in a greater position to negotiate more favorable deals for themselves and their customers.

Over the past several years, it has become painfully obvious that the cable operators are winning the broadband war (outside of Verizon's FiOS footprint). In fact, just in the past nine quarters, the cable companies have garnered nearly 70% of net adds (see Exhibit 2) and will likely continue to take the bulk of new flow share in the coming years owing to their superior networks. In our view, the cable companies are in a relatively good position to deal with video losses via OTT, as they should be able to pick-up incremental customers or charge a higher rate for naked broadband or dual play products based on the strength of their broadband offering.

According to Netflix, which released its latest list of highest-performing ISPs in terms of streaming video performance, the cable companies are in great shape from an operational perspective. Netflix posted a chart on its website (see Exhibit 3) that mapped out Netflix's streaming performance on US ISPs between July 28 and September 25. Verizon (FiOS), Charter Communications, and Comcast, were the top performers, delivering streams of about 2,400 to 2,600 kilobits per second, while Cablevision and Time Warner Cable rounded out the top five at just under 2,400 kilobits per second. Interestingly, the weakest performers were the DSL offerings from all the major telecom operators,

Figure 2: Wireline/Cable Broadband flow share

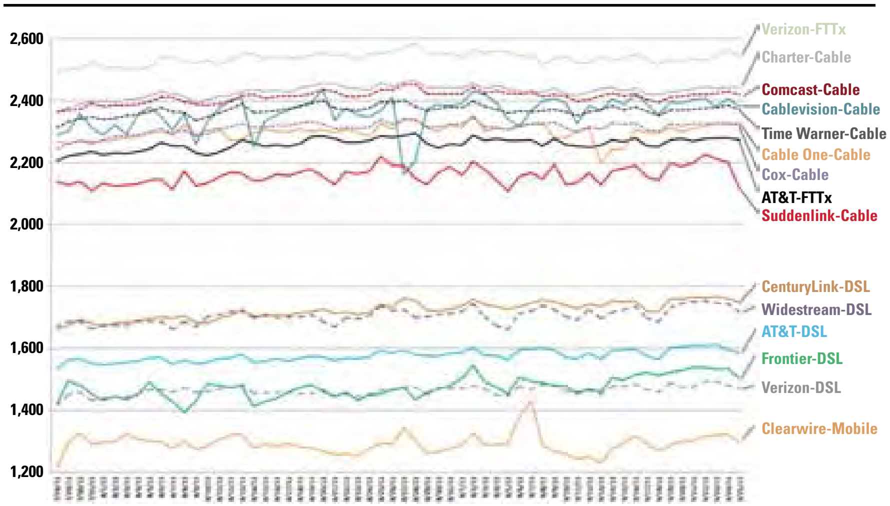
Cable continues to grab market share



Source: Company, Goldman Sachs Global Investment Research.

including CenturyLink, Windstream, AT&T, Frontier and Verizon, all of which delivered speeds that on average were 35% slower, between 1,400 to 1,800 kilobits per second.

Figure 3: Top Network Performance



Source: Netflix Tech Blog, October 12, 2011.

Over the past two years, the media sector has benefitted from the rebound in advertising and the influx of new revenue streams, including retransmission fees and third party distribution deals. Following the 2008/2009 downturn, total US mass media advertising rebounded to 4.2% in 2010, and 4.3% expected for 2011 (estimate), mainly on the improved spending in National TV (broadcast and cable) and online. However, as we fast forward to 2012 (estimate), the advertising forecast has been revised down to 1.4% (see Exhibit 4), according to published estimates, reflecting the weak economic backdrop. The numbers below exclude the expected favorable impact of US political advertising, which is expected to total $2.5-3.0 billion in 2012 (compared to $2.1 bn in 2008), and the London Olympics, which only benefits NBC Universal.

Most media companies have focused on expanding recurring revenue streams for their content such as distribution fees, subscriptions, and reverse retransmission. These fees are an important contributor to the overall profitability of the media names and provide a nice offset to cyclical ad revenue. Over the past 12-18 months, the broadcast networks have begun to receive explicit retransmission fees for the first time, which we believe range from $0.50 to $1.00 per subscriber. These fees, plus reverse retransmission revenue from affiliate local TV stations, totaled less than a couple hundred million in 2010 but are expected to rise to approximately $1.0 billion by 2013 (see Exhibit 5). The biggest beneficiaries in the next few years will likely be the major broadcasters, including Disney (ABC), CBS, News Corp. (Fox) as well as Comcast (NBC).

Finally, many media companies have recently benefited from third-party distribution agreements with the likes of Netflix, Amazon and Hulu. All three online video distributors have signed multiple agreements with major content providers, including CBS, News Corp., Viacom and NBC Universal, to license mainly older library film and TV content (see Exhibit 6). In total, the agreements will add at least $650 million in revenue, all of which will provide a boost to the top-line and profitability of the companies in our coverage universe. Unfortunately, we believe these gains may be short-lived as the content providers need to be careful not to undermine their much more profitable relationships with the large cable/telecom companies.

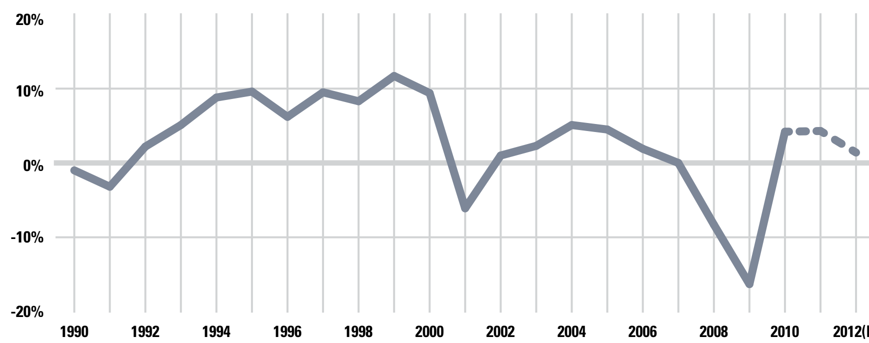
There are several media companies located in the Baltimore/Washington metro area that will likely be affected by prevailing trends. The best positioned is Discovery

Communications, based in Silver Spring, MD, which is a leading provider of non-fiction programming in the US. The company operates more than 130 worldwide TV networks in over 200 countries, led by Discovery Channel, TLC, Animal Planet plus a JV in OWN (Oprah Winfrey Network). Discovery's strong portfolio of original content and ability to leverage its library of shows across the globe should allow it to outperform its peers in the intermediate-term. Furthermore, the company has seen higher advertising growth (in the double-digit range) than the rest of the media sector in 2011, which will likely continue in the coming year.

The next company of note is Sinclair Broadcasting, located in Hunt Valley, MD, which is one of the largest TV broadcast companies in the US with 65 diverse TV stations (including FOX, ABC, CBS, and NBC affiliates) spread across 39 markets. Sinclair should continue to benefit from the rebound in automotive advertising, and will likely see incremental revenue from higher retransmission fees over the next several years. The final firm worth mentioning is Gannett, which is a diverse media player based in McLean, VA. Gannett operates in three primary businesses: broadcast (23 TV stations reaching 21 million households); newspapers (82 daily papers, including USA Today, reaching more than 11 million readers per day); and digital, which includes CareerBuilder, a leading US employment web site. With a focus on local advertising (which has been hit harder in recent years), Gannett has suffered more than its media peers. We believe it will continue to lag the market owing to the drag from its newspaper segment, which is facing the greatest declines in advertising on a yearly basis (down 8% 2011, following declines of 7% and 29% in 2010 and 2009, respectively).

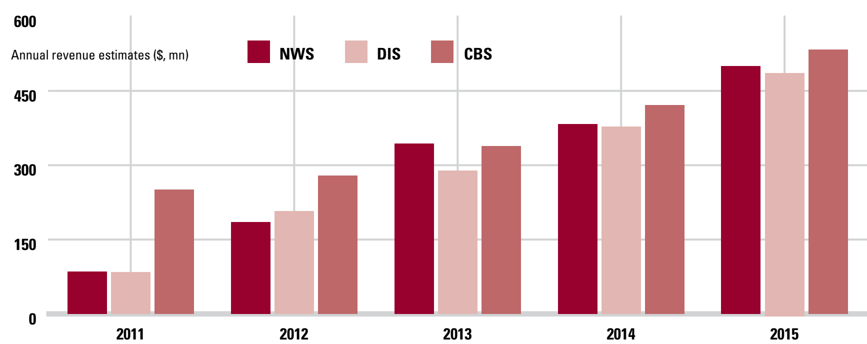
Figure 4: Soft advertising growth expected in 2012

US mass media advertising growth



Source: MAGNA Global, Goldman Sachs Global Investment Research

Figure 5: Retransmission fees growing at a healthy clip



Source: Company data, Goldman Sachs Global Investment Research

Figure 6: Streaming licensing deals adding to the top and bottom line

Recently announced licensing deals for inline streaming film and TV content (revenue in millions)

Anncd Date	Seller	Buyer	Description	Term (months)	Est. Rev (millions)
12/8/10	Disney	Netflix	ABC, Disney TV series, new and old, with 15-day window on new TV episodes.	NA	NA
2/2/11	Viacom	Hulu	Non-exclusive license for new and old TV episodes. Viacom shares in Hulu's advertising and subscription fee (Hulu Plus).	NA	$50
2/22/11	CBS	Netflix	Non-exclusive license for streaming catalog TV episodes in the US.	24	$200
4/1/11	News Corp	Netflix	Extension of 2010 deal that includes past seasons of Glee and Sons of Anarchy as well as deeper catalog TV series.	24	$100
2Q2011	Viacom	Netflix	Extension of 2010 deal that took effect in 2Q2011. $90m in revenue recognized in 2Q2011.	NA	NA
7/13/11	NBC Universal	Netflix	Multi-year renewal for catalog film and TV series.	NA	NA
7/20/11	CBS	Amazon	Non-exclusive license for streaming catalog TV episodes in the US.	18	$100
7/27/11	CBS	Netflix	Non-exclusive license for catalog TV episodes in Canada, Latin America and Caribbean.	24	$75
7/28/11	NBC Universal	Amazon	Up to 1,000 film and TV episodes.	NA	NA
9/1/11	CBS	Hulu	Non-exclusive license for catalog TV episodes in Japan	24	$25
9/21/11	Discovery	Netflix	Renewal and expansion of non-exclusive deal to stream catalog TV episodes (at least 18 months old).	24	NA
9/26/11	News Corp	Amazon	Catalog films and TV series.	NA	$100
9/26/11	DreamWorks Anim.	Netflix	Replaces HBO in pay TV window starting in 2014 (with 2013 theatrical releases).	NA	NA

Source: Company press releases, trade publications, Goldman Sachs Global Investment Research.

Returns on Equity amid the Financial Crisis

David Merkel, CFA

Principal
Aleph Investments, LLC

From 2005-2010, the change in public company returns on book equity [ROE] was wrenching during the financial crisis. The results were uneven by sectors, and even by geography, for stocks traded in US equity markets. This paper looks at the differences, and attempts to explain why there was so much variation by sector and geography. After that, the paper attempts to explain the correlation between changes in ROE and stock returns, by year, sector, and geography.

Introduction

Since 2005, equity markets have seen a boom, a bust, and a tepid recovery. Financial stocks seem to have had the worst of it, but is that really true? This paper attempts to disaggregate the differing effects of geography (US states), and economic sector over time to try to understand how the boom, bust and recovery have affected public companies.

Part 1 – Return on Equity

Method

Over the years 2005-2010, data regarding book equity, net income, market capitalization, market price, share count, and total returns were gathered, and aggregated by state, sector, and year. This study excluded stocks with market capitalizations under $100 million at the end of the study period. It also excluded miscellaneous financial companies such as exchange-traded products, closed-end funds, and special-purpose acquisition companies, because they don't have operating businesses. That left 3,796 companies that trade on US exchanges available for the analysis.

Given the tendency for businesses in states to be concentrated in one or two sectors, a minimum was imposed for states to be analyzed individually. States with fewer than four companies trading on US exchanges were placed in the "other" state category.

Using Ordinary Least Squares Regression, the following relationship was estimated:

$$Net\ Income_{gsy} = Book\ Equity_{gsy-1} * (ROE_g * Geography_g + ROE_s * Sector_s + ROE_y * Year_y) + \epsilon_{gsy}$$

Where:

$Geography_g$ is the set of dummy variables for geography.

$Sector_s$ is the set of dummy variables for sectors.

$Year_y$ is the set of dummy variables for the years 2005-2010.

ROE_g is the contribution to return on equity due to geography.

ROE_s is the contribution to return on equity due to sector.

ROE_y is the contribution to return on equity due to year.

$Net\ Income_{gsy}$ is the net income for a given geographic area, sector, and year.

$Book\ Equity_{gsy-1}$ is the book equity for a given geographic area, sector, at the prior year end.

ϵ_{gsy} is the error term for a given geographic area, sector, and year.

The reasons for using this sort of equation is twofold: first, by using dollar figures rather than earnings per share and book value per share, large companies are given their proper weight versus smaller companies. Second, it allows for the effects of ROE changes by geography, sector and year to be separated.

In an analysis where there are multiple groups of dummy variables, at most one set of dummy variables can be complete if there is no intercept term, and no set can be complete if there is an intercept term. If not, the regression will fail. The choice of what to omit is arbitrary, and does not affect the relative relationships within a set of dummy variables. For the purposes of this paper the sector dummy variables were left complete, and the coefficients on the first geographic area (Argentina) and the first year (2005) were set to zero.

Results

The R-squared of the regression was 55.7%, which has a prob-value of greater than 99.9%.

The results of contribution to ROE by US state are listed in table 1 at right.

Table 1

18.6%	Washington
16.9%	Arkansas
13.0%	District of Columbia
11.3%	Minnesota
10.0%	Connecticut
10.0%	Oregon
8.9%	Rhode Island
8.2%	New Jersey
7.8%	Kentucky
6.7%	Nebraska
6.6%	Indiana
6.2%	California
6.1%	Georgia
5.5%	Wisconsin
5.4%	Missouri
5.1%	Iowa
5.0%	Texas
4.4%	Tennessee
3.2%	Illinois
3.1%	Florida
2.9%	Maryland
2.8%	**US Average**
2.5%	North Carolina
1.2%	New York
1.2%	Pennsylvania
1.1%	South Carolina
0.8%	Other
0.6%	Ohio
-0.4%	Utah
-0.5%	Nevada
-1.3%	Louisiana
-2.3%	Arizona
-3.6%	Colorado
-4.6%	Massachusetts
-5.6%	Alabama
-7.9%	Oklahoma
-10.3%	Virginia
-31.9%	Kansas
-83.6%	Michigan

To some degree, historical accidents help explain why some states have high contributions to returns on equity, and others low contributions. Washington State has Microsoft, Amazon, and Costco, all of which started out there. Michigan has General Motors, Ford, and Chrysler; the automobile industry has long been a big part of the state economy.

The contribution to ROE of Arkansas can be entirely attributed to Wal-Mart. Washington, DC can largely be attributed to Danaher, though Fannie Mae pulled the contribution to ROE down considerably as it failed in 2008.

The results of Kansas are dominated by Sprint Nextel, which has been a weak competitor in wireless telephony, though YRC Worldwide also had some impact on the low contribution to ROE as it was too acquisitive heading into a major recession. Virginia has many strong companies, but Freddie Mac pulled the contribution to ROE down with it failure in 2008.

As for our own state of Maryland, its contribution to return on equity at 2.9% was slightly above the national average of 2.8%.

Companies don't move often, so attributing the differing contributions to ROE to state policies is unlikely. In the extreme cases listed above, all of the companies listed had been headquartered in their respective states for a long time, and most had been started there.

Table 2 shows the results of contribution to ROE by sector.

Table 2

25.91%	Consumer Non-Cyclical
23.31%	Basic Materials
20.20%	Energy
18.10%	Health Care
14.59%	Utilities
14.24%	Capital Goods
14.07%	Technology
10.56%	Services
10.20%	Consumer Cyclical
9.52%	Financial
4.72%	Transportation
-5.58%	Conglomerates

Table 3

0.00%	2005
2.04%	2006
–1.28%	2007
–18.37%	2008
–8.06%	2009
–3.72%	2010

The end of the first decade of the new millennium was characterized by strong development around the world, with many nations clamoring for resources and non-cyclical consumer goods, which why the contribution to ROE by sector was led by Consumer Non-Cyclicals, Basic Materials, and Energy.

Conglomerates are the smallest sector, at 0.3% of total book equity, so it is difficult to draw conclusions about why it had the lowest contribution to ROE. That said, it is difficult to manage disparate enterprises for organic operating returns. Increases in energy costs hurt transportation ROEs, which unlike utilities, have a harder time passing the price increases through.

Financial stocks saw their contribution to ROE drop because of the financial crisis. The contribution to ROE includes two great years 2005-2006, two horrible years 2007-2008, and two years of recovery. The contributions to ROE in the financial sector in 2007-2008 more than erased the gains made earlier in the decade.

Contribution to ROE for Consumer Cyclicals were damaged by bad results in the Automobile industry and slumping demand as the economy went into a recession in 2008, and had a rather weak recovery in 2009-2010.

Table 3 shows the results of contribution to ROE by year. Contribution to return on equity rose 2% over 2005 levels in 2006. In 2007, as the stock market reached new highs and began to fall in the fourth quarter of 2007, partially because the contribution to ROE fell below 2005 and 2006 levels.

In 2008, as the financial crisis arrived, the contribution to ROE plummeted. Much of the effect was concentrated in financial stocks, but the contribution to ROE for the market as a whole fell 17%. In 2009 and 2010, as the recovery from the crisis progressed contribution to ROE rose each year, but still remained below the contribution to ROE that existed during the boom years 2005-2007.

Part 2 – Total Returns

Method

The same stocks as in the first section, and the same methods were used to estimate the following relationship, using Ordinary Least Squares:

$$DVGL_{gsy} = Mkt\ Cap_{gsy\text{-}1} * (TR_g * Geography_g + TR_s * Sector_s + TR_y * Year_y) + \epsilon_{gsy}$$

Where:

$Geography_g$ is the set of dummy variables for geography.

$Sector_s$ is the set of dummy variables for sectors.

$Year_y$ is the set of dummy variables for the years 2005-2010.

TR_g is the contribution to total return due to geography.

TR_s is the contribution to total return due to sector.

TR_y is the contribution to total return due to year.

$DVGL_{gsy}$ is the dollar value of gains or losses for a given geographic area, sector, and year.

$Mkt\ Cap_{gsy\text{-}1}$ is the market capitalization for a given geographic area, sector, at the prior year end.

ϵ_{gsy} is the error term for a given geographic area, sector, and year.

The dollar value of gains or losses is calculated by the change in market capitalization, plus dividends, less the proceeds of shares issued, plus the cost of shares bought back.

Results

The R-squared of the regression was 76.7%, which has a prob-value of greater than 99.9%.

Table 4 at right shows the results of contribution to total return by US state.

Oregon's contribution to total return was high because of Nike and Precision Castparts. Both have been based in Oregon since their founding. The same can be said of Yum! Brands, Humana, and Brown Forman in Kentucky. Yum Brands began with Pepsi's purchase of Kentucky Fried Chicken, which was founded by Colonel Sanders out of home in Corbin, Kentucky in 1930. Brown Forman was started in Kentucky in 1870 by George Garvin Brown.

Terra Nitrogen, LP was an Iowa firm from its founding until its parent company was acquired by CF industries in mid-2010. It is counted as an Iowa firm for this study, but is now based in Illinois.

DC and Virginia have the lowest contributions to total returns because of Fannie Mae and Freddie Mac, respectively. Georgia had a low contribution to total returns, largely due to SunTrust Banks, which holds the dubious distinction of receiving four installments of bailout cash. Nevada had a low contribution to total returns because of their high exposure to the casino/gaming industry, which did poorly during and after the financial crisis.

The states with high and low contributions to total return had these results because of companies that settled there a long time ago. The excess returns come from historical accidents, and not from any state policy decisions.

As for our own state of Maryland, its contribution to total return at 2.6% was slightly above the national average of 1.3%.

Table 4

19.12%	Oregon
15.18%	Kentucky
13.85%	Iowa
13.28%	Michigan
12.77%	Nebraska
12.53%	Arizona
11.52%	Rhode Island
9.35%	Colorado
9.24%	Texas
8.10%	Alabama
7.18%	Louisiana
7.02%	Oklahoma
6.26%	Illinois
5.58%	California
5.01%	New Jersey
4.58%	Massachusetts
3.49%	Missouri
2.62%	Maryland
2.21%	South Carolina
2.17%	Minnesota
1.56%	Utah
1.40%	Washington
1.30%	**US Average**
-0.02%	Wisconsin
-0.49%	Connecticut
-1.11%	New York
-1.39%	Arkansas
-2.02%	Indiana
-3.13%	Pennsylvania
-4.49%	Florida
-5.21%	Ohio
-7.04%	Tennessee
-7.76%	North Carolina
-8.19%	Kansas
-8.42%	Nevada
-12.06%	Georgia
-19.45%	Other
-21.02%	Virginia
-33.73%	District of Columbia

The state lists on contribution to ROE and contribution to total return across are not similar. The correlation of the two sets of coefficients is -10.68% -- statistically indistinguishable from zero. The rank correlation of the two sets is 26.68%, which is also not significantly greater than zero with 95% certainty.

It seems there is no relationship at the state level between contribution to ROE and contribution to total return.

Table 5 shows the results of contribution to total return by Sector.

The lists between contribution to ROE and contribution to total return by sector are different. The correlation coefficient between them is -0.50%, which is virtually zero. But excluding the two smallest sectors, Conglomerates and Transportation, which have noisy data with only 2% of the total market capitalization, the correlation would be 71.51%, which would be statistically different from zero with 95% probability. Thus it seems that contribution to ROE and contribution to total return are related across sectors.

The low contributors to total return by sector are led by Financials and Capital Goods, both of which did poorly in the recent crisis and the aftermath. Basic Materials and Consumer Non-Cyclicals led the high contributors to total return by sector, as a growing global middle class created demand for commodities and staple consumer goods.

Table 6 shows the results of contribution to total return by year.

Table 5

34.22%	Basic Materials
33.86%	Consumer Non-Cyclical
33.13%	Conglomerates
30.87%	Transportation
27.49%	Utilities
24.38%	Technology
23.69%	Consumer Cyclical
22.88%	Services
21.94%	Energy
19.80%	Health Care
19.51%	Capital Goods
15.49%	Financial

Table 6

0.00%	2005
–5.35%	2006
–11.15%	2007
–67.18%	2008
5.51%	2009
–12.47%	2010

The contributions to ROE and contributions to total return by year are very similar, though the contribution to total return is far more volatile. Also, total return anticipates changes in ROE, exacerbating the fall in 2007 and 2008, and anticipating tougher market conditions in 2011 in the results of 2010.

Without adjustment for leading effects, the correlation of the two series is 80.83%, which is different from zero with greater than 95% probability. Thus it seems that contribution to ROE and contribution to total return are related across years.

In a regression of the two series, total returns were levered 2.86 times to changes in ROE. This should surprise no one. Markets anticipate, and change disproportionately, because they can't tell whether changes are temporary or permanent, and so a multiple near 3 splits the difference.

Conclusion

The markets during 2005-2010 rewarded companies that served the growing global middle class, and aided the growth of the developing world. It punished financial companies, and cyclical companies that did not have significant markets in the developing world.

In general, US state policies did not directly affect the financial results. The best and worst companies by state were generally long term residents of the state in question. Historical accidents dominate over companies that choose to move to other jurisdictions.

In general, contributions to ROE and total returns are related, but contributions to total returns lead contributions to ROE. Markets anticipate changes in future profits. When the conditions for earning returns on equity shift in the present, investors extrapolate future changes, and that leads investors to adjust the prices of stocks before the changes in ROE are realized.

Reference

Market Guide

Disclosure

David Merkel and clients of Aleph Investments own shares of Wal-Mart as of the date this was originally written.

Business students trading stocks, managing portfolios, and monitoring markets in real-time— without ever leaving the classroom

Concept photo courtesy of University of Delaware

The T. Rowe Price Finance Laboratory at Towson University's College of Business and Economics will replicate the functionality of Wall Street's top trading firms, providing an advanced teaching and research environment. Driven by industry-standard technologies and resources, the T. Rowe Price Finance Laboratory will provide Towson University students with the ability to value and price complex securities and investments in a simulated trading environment in real-time. With the aid of up-to-date financial data and technology, the lab addresses cutting-edge issues in financial institutions, financial engineering, corporate finance, and international finance. Scheduled to open in fall 2012, the lab will not only provide huge benefits to the participating financial institutions and Towson University but the state of Maryland.

You can help be a part of this exciting new investment.

To learn more about the lab or pledge your support, contact Tracey Ford, (410) 704-3729, tford@towson.edu or visit www.towson.edu/support.

TOWSON UNIVERSITY

Thinking Outside

Residential Real Estate in the Baltimore Region and Policy: Reversing the Trend with Affordability and a Twist

Matthew Chambers, Ph.D.

Associate Professor
Department of Economics
College of Business and Economics
Towson University

The last three months have generated mixed signals for home prices. The S&P Case-Shiller seasonally adjusted 20-City Home Price Index has reported price change in May(-0.01%), June (0.04%), and July (0.05%). Over the same time horizon, the Federal Housing Finance Agency's (FHFA) seasonally-adjusted purchase-only house price index (HPI), showed stronger price appreciation with changes in May (0.29%), June (0.70%), and July (0.80%). Given this pattern and a sluggish economy, many people are concerned of continued deterioration in the housing market.

Residential Housing Prices

Given the MSA level indexes available through the FHFA, we can study how home prices in the Baltimore market have done relative to others during the financial crisis. From the peak of the housing bubble in the 1st quarter of 2007 to the 2nd quarter of 2011, average housing prices in Baltimore have dropped 21.3% and 6.4% over the last year. This is greater than the national reading that shows a 20.0% drop from the peak with a 5.9% drop over the last 12 months. Baltimore has also fared worse than Washington DC where house prices have dropped 19.3% from the peak and are basically unchanged over the last year. When compared with 1992 levels, Baltimore housing prices have risen 105% which is lower than Washington DC which has seen a 124% increase. Both cities are substantially higher than the US average of 75.6%.

Many economists believe that the only way to reduce mortgage rates from already historically low levels is to lower long term interest rates.

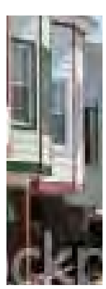
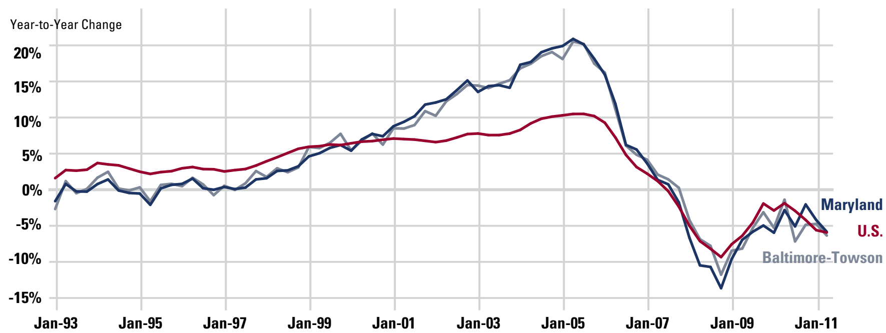


Figure 1: 12 Month Average Price Change



National Comparison

Figure 1 compares housing price changes in the Baltimore-Towson MSA, Maryland, and the US.

The figure shows two distinct trends for Baltimore and Maryland versus the US. Between 1992 and 1997 house prices were mildly appreciating nationally, but were pretty much flat in Baltimore and Maryland as a whole. This indicates that Maryland was a late entry in the housing bubble. After 2001, the Baltimore area entered a period of price inflation that exceeded national levels. In early 2005, the annualized percentage change in home prices peaked out at over 20%, more than double the national rate. As of the 2nd quarter of 2011 home prices were decreasing at a 6% annualized pace.

State Comparison

We can look across Maryland by using MSA level house price indexes from the FHFA. There are four MSA level home price indexes calculated in Maryland since 1992: the Baltimore-Towson index, the Bethesda-Frederick-Rockville index, the Hagerstown-Martinsburg index, and the Salisbury index. The Bethesda index captures more of the DC effect in Maryland home prices. Meanwhile the Hagerstown and Salisbury indexes are the more rural of the MSAs and may help shed some light on potential differences between urban and rural home price movements.

Figure 2: Maryland Cities: 12 Month Home Price Changes

The empirical evidence suggests that the three cities have experienced very similar price movements during most of the housing bubble. However, over the last year or so we have seen a marked difference between the Hagerstown and Salisbury areas and the more urban areas. Prices appear to be deflating much faster in the more rural western and eastern sections of Maryland. The FHFA tracks 12 month price changes for 308 MSAs in the US.[1] Only 24 of these areas, led by Bismark, ND at +6.09%, displayed positive price changes. The following table shows the ranking of Maryland MSAs.

Area	Rank	12 Month Price Change
Bismark, ND	1	6.09%
Washington-Arlington, VA-MD	87	-2.3%
Bethesda-Rockville-Frederick, MD	98	-2.38%
Baltimore-Towson, MD	202	-5.04%
Hagerstown, MD	298	-11.87%
Boise, ID	308	-16.13%

The table combined with the previous graph presents the case that the price deflation in Maryland areas away from Washington DC is almost as severe as any time during the entire housing bust.

Extreme Comparison

Given the continued weakness in Maryland it could be important to compare Baltimore against places such as Las Vegas and Fort Lauderdale as these areas represent some of the extreme examples of the housing bubble. The following graph compares some of these cities with Baltimore.

When compared to these extreme locations, we find a mixture of positive and negative news. On the positive side it appeared that the rate of price deflation was slowing until 2010. On the negative side, the year-to-year price changes are still negative and it appears that the rate of deflation is accelerating. The similarities between these three cities suggest that the current deterioration in house prices might be a macroeconomic issue and not tied to city specific shocks.

Where is the housing market going from here?

When will we see a solid rebound in the housing market? Stability in home prices depends on economic forces generating a strong demand for housing while maintaining a controlled supply of housing. The macroeconomic forces come mostly from financial markets and government policy. The microeconomic forces come from the labor and construction markets.

- **Mortgage Rates:** Home mortgage rates remain at or near historical lows. Freddie Mac reported that for the week of October 20th, the average interest rate on a 30-year fixed rate mortgage was 4.11% which is nearly the lowest level ever reported. However, this rate is only about 0.1% lower than 12 months earlier. These rates definitely reduce the effective price of housing and thus should serve to aid potential homebuyers.
- **Federal Reserve:** The uncertainty in mortgage market interest rates is centered primarily on actions by the Federal Reserve. The implementation of "Operation Twist" may put further downward pressure on bond rates, which could lead to a further reduction in mortgage rates. This would only serve to spur on the housing market through both purchases and refinancing.

Figure 3: Extreme Comparison

- **Foreclosures:** In August, there were 78,880 foreclosures filed which is a nine month high and a 33 percent increase from July. According to RealtyTrac, the rate of foreclosures in Maryland is 1 in every 1864 housing units. This rate is higher than in July, but substantially lower than last year. The highest rate of foreclosures in Maryland is occurring in Prince George's county where 400 foreclosures were filed in September 2011 which equates to a rate of 1 in every 805 housing units. Although the state's foreclosure rate is below the national average, there are areas that suffer from the added supply generated by foreclosures.

- **Unemployment:** The unemployment rate in Baltimore and Maryland as a whole is below the national average, but just as with the rest of the country, this rate is not falling. This puts both demand and supply side pressures on the housing market. The lack of job opportunities will slow job migration into the Baltimore area limiting the demand for housing. Job losses also increase the possibility of further foreclosures that increases the supply of housing creating further downward pressure on home prices.

- **Housing Construction:** The National Association of Home Builders is reporting a persistent number of building permits and housing starts in the vicinity of 600,000 annualized. Although low, the numbers do appear to have stabilized.

Policy Initiatives

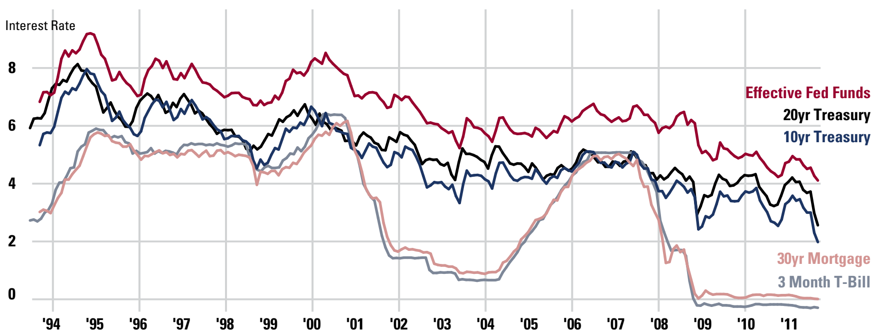
Given the persist problems facing the housing market both fiscal and monetary policies have been initiated in hopes of stabilizing the market. Two of the largest policies are the Making Home Affordable Program and Operation Twist.

Making Home Affordable (MHA) Program

This program, run in cooperation between the Department of the Treasury and the US Department of Housing and Urban Development, has been adopted to stabilize the housing market by helping homeowners get mortgage relief. The MHA program is made up of several smaller programs that allow for the modification or refinancing of mortgages in the face of falling home values, unemployment, or foreclosure[2].

The main criticisms of the program are not with its intended effects, it is mostly in the execution of the program. In March 2011, congress introduced a bill, HR 839, which proposed to terminate the HAMP program. The main reason for the bill is the lack of use of the program given the difficulty for homeowners to get approval into the program. As of March 2011, only 500,000 homeowners had made it into a permanent modification of their loans. This is far less than the intended goal of helping 3 to 4 million homeowners. When considering the latest estimates that as many as 25% of all mortgages in the US are underwater and the millions unemployed, this program is only scratching the surface of the problems in the mortgage market.

Figure 4: Time Series of Various Interest Rates



Operation Twist

On September 21, 2011, the Federal Reserve announced the plan to lengthen the maturity of the balance sheet of the Fed. By June 2012, the Federal Reserve will buy an additional $400 billion of US Treasuries with maturities between 6 and 30 years which will be offset by sales of the same amount of treasuries with maturities of 3 years or less. The goal is to make the financial markets more accommodating. In the context of the housing market, the most likely goal is to lower mortgage rates. Many economists believe that the only way to reduce mortgage rates from already historically low levels is to lower long term interest rates. Although the average mortgage rate is correlated to most every other interest rate in the economy, the current belief is that the 10 year treasury rate is most closely tied to mortgage rates. The following table presents the correlation between the average 30 year mortgage rate and other key interest rates since late 1993.

Interest Rate	Correlation with Average 30-Year Mortgage Rate
Effective Fed Funds	0.814
3 Month T-Bill	0.838
10 Year Treasury	0.967
20 Year Treasury	0.952

The table indicates that the highest correlation to the 30 year mortgage rate is with the 10 year US Treasury. Figure 4 depicts the differing behavior between short term and long term interest rates. The average 30 year mortgage rate closely follows the pattern of the long term interest rates. So, if operation twist does reduce the yield on the 10 year US Treasury bond, we should find lower mortgage rates. The next obvious question is how much lower? Using a back of the envelope experiment we can simply fit a linear trend between the 10 year Treasury yield as the independent variable and the 30 year mortgage rate as the dependent variable. We find the predicted 30 year mortgage rate = 2.25 + 0.8825*(10 year rate). The fit of this line is such that the R^2 is 0.9356. This experiment predicts that every 0.01% drop in the 10 year yield we should find a 0.008825% drop in the 30 year mortgage rate. Given a 10 year yield of 2.00% we would forecast the 30 year mortgage rate at 4.015%. If we believe the goal of the Federal Reserve is to drop the 10 year yield to 1.75%, we would predict mortgage rates to be 3.79%. How much of an effect would this have on the housing market? Consider the payments on a $250,000, 30 year mortgage. With mortgage rates at 4.015% that would imply a monthly payment of $1,195.70, excluding tax and escrow. At 3.79% the payment would drop to $1,163.47 or a monthly savings of only $32.23. To generate sizeable reductions in the mortgage payments at these low interest rates, the Federal Reserve will need to aggressively reduce long term interest rates. On the positive side, a substantial drop in long term rates would increase loan affordability, however, this will lead to a flattening yield curve and the negative macroeconomic signals brought on by such a situation.

References:

1 Price changes for all 308 areas are calculated using the FHFAs All-Transaction index which includes purchases and refinancing. The Purchase Only index is only available for States, Census Regions, and large cities.

2 The main parts of the program are the Home Affordable Modification Program (HAMP), the Second Lien Modification Program (2MP), the Home Affordable Refinance Program (HARP), Help for Unemployed Homeowners, Help for Underwater Homeowners, and Home Affordable Foreclosure Alternatives. Details can be found at http://www.makinghomeaffordable.gov/pages/default.aspx

Towson University Index—Towson University Investment Group

Matt Stavros

Director of Communications, Towson University Investment Group

While economic and market conditions continue to modestly improve, employment opportunities are opening up as Maryland-based employers hire educated and skilled individuals. The Towson University Index (TUI) was first created as a way to measure the performance of publicly traded companies that have a history of hiring Towson University students, are thought to be possible hirers of Towson students, or have some other connection to the University or the state of Maryland. The index is comprised of only a sample of companies in the area that might fit the description and is not meant to be all-encompassing.

For 2011, the modified list has been expanded to 50 publicly traded companies with 35 based in Maryland

Disclosure:

This year's TUI was based on last year's TUI and was updated with assistance from the Internship and Career Services program at Towson University. Historical prices obtained from Google Finance, employee figures obtained from MSN Money, sectors of the companies and their respective quarterly revenues were obtained from NetAdvantage, a Standard and Poor's service. Sector performance was measured by iShares' ETFs of the S&P Sectors. To obtain the market caps as of October 15, 2011, the most recent price as of the writing of this article was divided by the most recent market cap and then multiplied by the closing price on October 15, 2011; the effects of changes due to share issuances are expected to be minimal.

Figure 1

and 15 non-Maryland companies from an original list of 30. We use an equally weighted approach to create the index with the goal of creating a regional index comparable to the S&P 500.

Figure 1 illustrates the performance of the Towson University Index relative to the S&P 500, a parallel comparison of two indexes. The graph tracks and compares the total performances of the two indices over a 4-year period between July 2007 and October 2011. Between July 2010 to July 2011, the TUI outperformed the S&P 500 by 5%, comparing to a 9.29% outperformance from last year. The change in performance is attributable to mid-cap companies that rebounded following the 2008 financial crisis. The beneficial growth of mid-cap companies in Maryland is directly attributable to a higher risk to return ratio. During the toughest quarter of the most recent recession, Q4 of 2008, the TUI underperformed the S&P 500 by 3.04% as many investors favored larger 'too big to fail' companies.

The four most represented sectors in the TUI using an equally weighted system are Financials at 30%, Industrials at 20%, Consumer Discretionary at 18%, and Information Technology at 12%. The Industrials sector is the best performer during the studied period; Healthcare and the Financials sectors are slightly below that of the overall market while the Consumer Discretionary and Information Technology sectors underperformed. The fact that TUI outperformed despite its heavy exposure to underperforming sectors (Financials and Consumer Discretionary) indicates that, on average, the individual companies in the TUI outperform their respective sectors as a whole.

When looking at the TUI, it is important to remember there are a large number of private companies and government organizations in Maryland that contribute to growth and job opportunities. The TUI highlights the job opportunities available to Towson students and emphasizes the relative performance of publicly traded companies connected to the University.

MATT STAVROS, from Frederick, Md., is a senior at Towson State University double majoring in Economics and Political Science with an expected graduation date of May 2012. Since the summer of 2011, Matt has served as the Director of Communications for the Towson University Investment Group prior to which he served as Treasurer. He brings three years of personal investing experience and three years of management experience managing multiple departments for the world's largest retailer. Currently, Matt is an Equity Research Intern at Blue Point Investment Management.

Table 1. Companies Based in Maryland

Ticker	Company	Market Cap	Sector	Quarterly Rev.	Employees
ADX	Adams Express Co	883M	Financials	9,351.0	30
ARB	Arbitron Inc	1,000M	Consumer Discretionary	100,869.00	1,113
AGX	Argan Inc	139M	Industrials	53,046.00	188
CSE	CapitalSource Inc	2,000M	Financials	172,194.0	625
CHSI	Catalyst Health Solutions Inc	2,700M	Healthcare	1,116,617.0	1,036
CHH	Choice Hotels International Inc	1,980M	Consumer Discretionary	114,448.0	1,524
CIEN	Ciena Corp	1,200M	Information Technology	165,833.0	4,339
CEG	Constellation Energy Group Inc	7,760M	Utilities	3,570,200	7,600
OFC	Corporate Office Properties Trust	1,620M	Financials	143,395.0	411
CSGP	CoStar Group Inc	1,410M	Industrials	59,618.00	1,389
CVH	Coventry Health Care Inc	2,624M	Healthcare	3,048,938	14,000
DISCA	Discovery Holding Co	16,870M	Consumer Discretionary	678,000	4,200
FMAR	First Mariner Bancorp	5M	Financials	15,250.00	509
CFX	Colfax Corp	941M	Industrials	158,558	2,160
GPX	GP Strategies Corp	216M	Industrials	64,293.00	1,892
GVP	GSE Systems Inc	30M	Information Technology	12,322.00	248
JOSB	Jos A Bank Clothiers Inc	1,410M	Consumer Discretionary	193,058.0	3,728
LM	Legg Mason Inc	3,810M	Financials	713,430.0	3,395
LMT	Lockheed Martin Corp	25,320M	Industrials	10,633,000	132,000
MAR	Marriott International Inc	1,027M	Consumer Discretionary	2,778	129,000
MKC	McCormick & Co Inc	6,300M	Consumer Staples	782.8	7,500
MED	Medifast Inc	246M	Consumer Discretionary	74.30	507
MCRS	Micros Systems Inc	3,900M	Information Technology	253.2	4,953
OHI	Omega Healthcare Investors Inc	1,770M	Financials	70.48	24
OSIR	Osiris Therapeutics Inc	169M	Healthcare	10.4	56
SBGI	Sinclair Broadcast Group Inc	73M	Consumer Discretionary	179.5	2,350
FIRE	Sourcefire Inc	820M	Information Technology	30.78	350
TROW	T Rowe Price Group Inc	13,740M	Financials	682.4	5,162
TSYS	TeleCommunication Systems Inc	213M	Information Technology	90.37	1,189
TESS	Tessco Technologies Inc	108M	Information Technology	130.3	874
UA	Under Armour Inc	3,850M	Consumer Discretionary	312.7	2,000
UTHR	United Therapeutics Corp	2,340M	Healthcare	165.6	520
UUU	Universal Security Instruments Inc	13M	Industrials	3.30	18
USU	USEC Inc	249M	Energy	380.0	2,422
GRA	W.R. Grace & Co	2,970M	Materials	695	5,970

Table 2. Companies Based Elsewhere

Ticker	Company	Market Cap	Sector	Quarterly Rev.	Employees
BBT	BB&T Corp	15,717M	Financials	2,858	31,400
BBY	Best BUY Co Inc	9,308M	Consumer Discretionary	11,339	180,000
C	Citigroup Inc	82,870M	Financials	16,542	263,000
COF	Capital One Financial Corp	19,170M	Financials	4,694	25,700
LUV	Southwest Airlines Co	6,920M	Industrials	3,103.0	43,805
MTB	M&T Bank Corp	9,518M	Financials	981.0	15,357
PG	Procter & Gamble Co	178,300M	Consumer Staples	20,230	129,000
PNC	PNC Financial Services Group Inc	26,928M	Financials	4,038	44,817
SHW	Sherwin-Williams Co	8,518M	Materials	1,855	32,228
WFC	Wells Fargo & Co	140,814M	Financials	22,150	266,600
MS	Morgan Stanley	29,348M	Financials	7,635	62,964
KIM	Kimco Realty Corp	6,398M	Financials	224	687
NOC	Northrop Grumman Corp	15,172M	Industrials	6,734	117,100
SWK	Stanley Black & Decker Inc	9,776M	Industrials	2,380	36,700
UPS	United Parcel Service Inc	67,649M	Industrials	12,582	400,600

**numbers expressed inmillions*

TOWSON UNIVERSITY

Thinking Outside

Towson University Investment Group

The Towson University Investment Group (TUIG), which was formerly known as the Wall Street Investors' Investment Club, was founded to bring together highly motivated students that are seeking a hands-on experience with equity investments and research. The group routinely prepares stock research reports to analyze equities for inclusion in the actively managed portfolio that is the core of the group. The organization is completely student-run and depends on the efforts of members while offering valuable professional development opportunities.

TUIG offers a unique form of student involvement that fills the gap between the classroom and real-world investment management. As part of the learning experience, the group travels to various locations, both domestically and internationally, to meet with financial and economic professionals or attend investment forums. In March 2011, the group travelled to Hamden, Connecticut to attend the inaugural Quinnipiac Global Asset Management Education (G.A.M.E) Forum, presented by keynote speakers at Quinnipiac University. Keynote panelists discussed the economy, stock markets, alternative investments and corporate governance. Past events include golf outings to support local charities.

TUIG is affiliated with the Towson University College of Business and Economics and the Department of Finance. Members work closely with faculty and other students to advance the college's mission and to promote the academic success and education of students.

Towson University Investment Group
will host its

4th Annual Markets Summit

Tuesday, April 17th, 2012
6 p.m.–8 p.m.

For further information about TUIG or the Markets Summit, please visit: www.towson.edu/tuig

Contributors

YINGYING SHAO,PH.D., CFA, joined the finance department at the College of Business and Economics in August 2010. She worked as a banker in China for nine years before earning an MBA from the University of Arkansas. She completed a Master of Science in Finance from the University of Tulsa in 2006, and, in July 2010, a Ph.D. in Finance from the University of Arkansas. Her research interests include banking, risk management, corporate governance and emerging markets. She holds the CFA designation and is also a member of Financial Management Association.

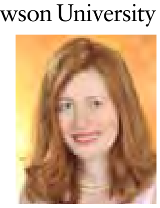
MATTHEW CHAMBERS, PH.D., is an Associate Professor of Economics in the College of Business and Economics at Towson University. He received his PhD in Economics from Florida State University in 2003. He completed his undergraduate work at Wabash College in Crawfordsville, Indiana. His research interests are in the areas of macroeconomics, computational economics, and housing. His current research agenda focuses on analyzing the role of mortgage innovation on the current financial crisis. His published works appear in such journals as International Economic Review, and the Journal of Monetary Economics. His work has also been financially supported through the National Science Foundation.

DAVID J. MERKEL, CFA, FSA is Principal of the equity asset management firm Aleph Investments, LLC, and writes The Aleph Blog. Previously, he was the Director of Research for Finacorp Securities, Senior Investment Analyst at Hovde Capital, and a leading commentator at RealMoney.com. Before that, he managed corporate bonds for Dwight Asset Management, mortgage bonds and investment risk at Mount Washington Investment Group, after working with Provident Mutual, AIG and Pacific Standard Life. He holds Bachelor's and Master's degrees from Johns Hopkins. In his spare time, he takes care of his eight children with his wonderful wife Ruth.

MICHAËL DEWALLY, PH.D. assistant professor in the Finance department, holds a MS in Chemical Engineering from France and a MBA and Ph.D. from the University of Oklahoma. Upon graduation with his doctoral degree, he accepted a position at Marquette University in Milwaukee from where he joins us this semester. Michaël's research interests are in the fields of Investments and Corporate Governance. His research areas span from the link between corporate governance structure and firm performance to the profits of market participants in the crude oil futures market.

NIALL H. O'MALLEY, MBA, is the Managing Director, Portfolio Manager for Blue Point Investment Management. He founded the private investment company over five years ago. Mr. O'Malley has an MBA from George Washington University in Finance and Investments with minors in Business Law and Taxation. Prior to starting Blue Point, he was a Vice President of Credit & Risk Management at SunTrust Bank. His professional experience includes working for buy-side firms, and consulting. He has served as President of the Baltimore CFA Society and currently serves on the Program Committee. He passed Level II of the CFA examination in 2005. Niall has taught Investments and Equity Security Analysis as an adjunct professor at Towson University.

SUSAN FLAHERTY, PH.D., joined Towson University in 2006. She holds an MA in economics from the University of Delaware and earned a PhD in finance from the Florida State University. Prior to graduate school, she worked professionally for JPMorgan, MBNA, and as an economic consultant. Her teaching and research interests focus on corporate governance as well as market regulation, policy, and international finance issues.



Contributors

CHRISTIAN S. JOHANSSON, MBA is the Secretary, Maryland Department of Business and Economic Development. Since being appointed in early 2009, DBED Secretary Christian Johansson has helped Governor O'Malley craft strategic plans and form councils targeting Maryland's competitive business strengths in rapidly growing industries such as biotech, cybersecurity, IT and foreign direct investment. Highlights under his watch include the Job Creation & Recovery Tax Credit; assisting with federal legislation for the Small Business Jobs Act; Maryland Made Easy and FastTrack programs to streamline regulations; and InvestMaryland, a $70 million initiative to fuel venture capital investment. An entrepreneur and management consultant, he previously served as CEO of the Economic Alliance of Greater Baltimore and on President Obama's transition team. Johansson was recognized as a 2010 Innovator of the Year by The Daily Record and earned an MBA from Harvard University.

JOANNE LI, PH.D., CFA, co-editor for the Baltimore Business Review and the associate editor for the Financial Analysts Journal, graduated with a Ph.D. concentration in Finance from Florida State University and received her CFA designation in 2001. She is the Chair and Professor of Finance at Towson University. She loves teaching Corporate Finance, Research Methods and Financial Policy at both graduate and undergraduate levels. Her research focus is corporate governance, specializing in board of directors. Her publications appear in many top tier journals, such as the Journal of Banking and Finance, Corporate Governance – An International Review, Journal of Financial Research, and The Financial Review. She was the curriculum director for Stalla Review for the CFA Exams in 2008-2009. Dr. Li established the CFA mentoring program both at Loyola University in Maryland and Towson University. She is a selected speaker for the CFA Institute and CFA Institute Asia-Pacific and had presented on the value of corporate governance at many international and national CFA societies including the Thailand Stock Exchange (TSE).

DAVE STEPHERSON, CFA is Chief Investment Officer, Portfolio Manager and Partner at Hardesty Capital Management. Dave joined the firm in February of 1999, following nearly a decade of work in the Personal Trust Department of the Mercantile Safe Deposit and Trust Company. Stepherson received a BA in government from the University of Texas at Austin. He successfully completed the Chartered Financial Analyst program in 1997. In addition to his business activities, Dave is a member of the CFA Institute and the President of the Baltimore CFA Society. He is a resident of Dayton in Howard County. Stepherson's expertise includes investment performance, personal and business software for finance, and commerce related to technology (hardware and semiconductors).

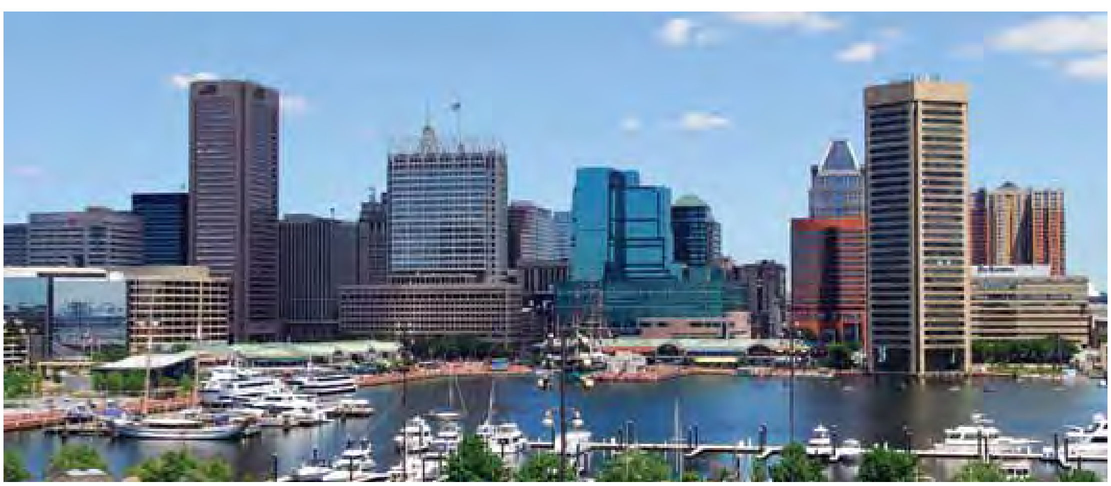
SCOTT MARCHAKITUS, CFA is in charge of the Telecommunications, Media and Technology Credit Research Group in the US. Scott joined Goldman Sachs in 2004 and was named managing director in 2006. Previously, Scott worked at J.P. Morgan in NY/London from 1994 to 2004 and was a financial analyst at Citibank from 1993 to 1994. In 2011, Scott placed first in telecom for the third consecutive year and placed second in media and entertainment in Institutional Investor's (II) survey of top credit analysts for investment grade. Scott earned an MS in Finance from the University of Baltimore in 1994 and a BS from Towson University in 1992. He became a CFA charterholder in 1999. Scott and his wife, Rebecca, have three children and live in New Jersey.

TOWSON UNIVERSITY

About Towson University

Founded in 1866, Towson University is recognized among the nation's best regional public universities, offering more than 100 bachelor's, master's and doctoral degree programs in the liberal arts, sciences and applied professional fields on its 328-acre campus. Serving more than 21,000 students, Towson University is the second largest public university in Maryland. The university provides innovative graduate courses and programs that respond to specific state, regional and national work force demands. As a metropolitan university, Towson plays a key role in the educational, economic and cultural life of its surrounding communities, the Baltimore metropolitan area and the state of Maryland.

About The Baltimore CFA Society



The Baltimore CFA Society's mission is to provide the financial community with information and knowledge, while advocating ethical conduct with regard to investments and financial management. The Baltimore CFA Society also seeks to encourage and aid the education of persons engaged in the investment profession, and to provide members of the society with opportunities to exchange ideas and information amongst their peers.

The Baltimore CFA Society is an affiliate of the CFA Institute, which has over 100,000 members globally. BCFAS membership, 600 members strong, draws from a diverse cross section of local investment firms, financial and educational institutions, and government agencies.

College of Business
and Economics

Towson University
8000 York Road
Towson, MD 21252-0001

TOWSON UNIVERSITY

TowsonGlobal
Bridging Global Markets

TowsonGlobal is Towson University's business incubator that helps both domestic and foreign entrepreneurial ventures learn how to compete in the global economy, both at home and abroad. TowsonGlobal provides businesses a wide range of support, including high-quality, affordable office facilities; business counseling; mentoring; network assistance; workshops and other educational forums. Members also draw from the experience of an active advisory board comprised of executives in technology, financial and legal services, logistics, manufacturing, contracting and venture capital fields. Tap into TowsonGlobal's resources today!

For more information contact:
Clay Hickson, Director
TowsonGlobal
Towson University
7801 York Road, Suite 342
Towson, MD 21204

Tel: 410-769-6449
Fax: 410-769-6477

Email: info@TowsonGlobal.com
www.TowsonGlobal.com