AER ANDOVER ECONOMIC REVIEW

INAUGURAL ISSUE - VOL. 1, NO. 1

AER
WINTER 2015

From left to right: Miles Neumann, Kailash Sundaram, Tennyson Teece, Eric Lawrence, Aneesh Ashutosh at Philips Academy, Andover, MA

AER TEAM

AER ANDOVER ECONOMIC REVIEW

Volume 1, No. 1

TABLE OF CONTENTS

STATEMENT OF PURPOSE

The Andover Economic Review seeks to cultivate a greater understanding of economic, investing, and political issues within the Andover community and high school students around the world. Through frequent online postings along with printed issues, the AER seeks to be both invigorating and informative.

The Andover Economic Review is an editorially independent journal co-founded and edited by four Phillips Academy students: Tennyson Teece, Kailash Sundaram, Miles Neumann, and Eric Lawrence. AER articles are written by high school students, though we strive to attract experienced and high-profile leaders as well. The AER has three sections: business and investing, economics, and politics, which we bring to readers in print and online. Through our unique and sometimes controversial perspectives, we hope to reach a young audience more effectively than established economics publications.

Please visit us at andovereconomicreview.com.

American "culture" seems like a nebulous concept. Some say America doesn't really have a "culture." I disagree. Americans may not have many of the rich traditions of the old world, but we have something else: the American Dream. No matter who you are or where you come from, you can ¨make it¨ in America. Through hard work, you can create a better life for yourself and your family. If "America" had a dictionary definition, that would be it.

But many Americans no longer believe in this idea, and rightly so. For many, the American dream is an abstract fantasy, not a reachable goal. America has less socioeconomic mobility than our neighbor Canada, the United Kingdom - the nation we fought for independence from on the idea of liberty - and in fact most any other developed nation. Only four percent of the poorest Americans born in the bottom income quintile end up in the top income quintile. Just four percent. This is a tragedy, but it does not have to be so.

Many of the daunting challenges facing America and the American Dream, from ballooning national debt to climate change, are not insurmountable. With political will we can tackle these problems, and as citizens we can use our voices to steer the country in a different direction. This change does not just come from Washington; it also comes from our homes, our cities, and our state capitols. As a member of the next generation, I want the American Dream to be alive for all my peers.

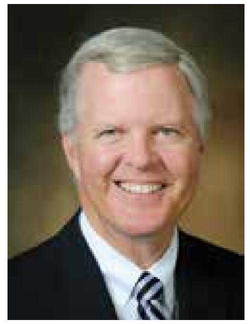
Achieving this requires understanding hard questions: how can we improve social mobility if a zip code determines the quality of a child's education? How can we get Americans back to work if we do not understand how the regulatory and tax climate often drives businesses away or deters their creation? How can we address climate change without understanding how the energy market works? All of these questions will require hard-to-find but effective solutions. Fundamentally, if we want to create an America we want to live in, we have got to have a good grasp of economics. As James Carville, Bill Clinton's Campaign Manager, famously coined, "It's the economy, stupid!"

With high quality articles written for a young audience by high school students and current economic, business, and political leaders, the Andover Economic Review aims to help revitalize economics as a core issue for my generation. We hope economic ideas will become as much of a source of discourse on high school campuses as the most galvanizing social issues. Only then can we, the youth of our country, begin to prepare ourselves for leadership.

Enjoy the inaugural issue,
Sincerely,

Editor in Chief

ADVISORY BOARD



TOM CAMPBELL is dean of the Fowler School of Law School and professor of Economics at Chapman University in Orange, California. He has published in the fields of law and economics, with specialization in antitrust, regulated industries, and employment law.

Dr. Campbell holds a Ph.D. in economics from the University of Chicago and a J.D. from Harvard Law School. His positions in academics have included professor of Law, Stanford University and dean of the Haas School of Business, U.C. Berkeley.

His volunteer teaching has included Ashesi University in Accra, Ghana; the School of Banking and Finance and the Kigali Institute of Science and Technology in Kigali, Rwanda; and the University of Asmara in Asmara, Eritrea. He has also taught statistical inference at the Federal Judicial Center's school for federal judges.

Dr. Campbell served on the corporate boards of Visa, Inc., Formfactor, and SPS. He also served on the boards of the American Institute of CPAs, American Academy of Ophthalmology, and World Affairs Council of Northern California, where he served as chairman.

Dr. Campbell was director of Finance for the State of California from 2004 to 2005. From 1981 until 1983, he was director of the Bureau of Competition at the Federal Trade Commission (in charge of antitrust enforcement). He was also a United States Congressman for five terms, serving on the Banking and Financial Institutions committee, Judiciary committee, International Relations committee, and Joint Economic committee of the U.S. House and U.S. Senate.

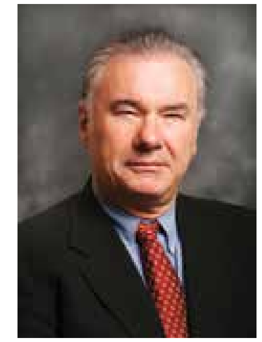
LAURA D'ANDREA TYSON is a professor at the Haas School of Business at the University of California Berkeley. She served as dean of London Business School from 2002 to 2006, and as dean of the Berkeley Haas School of Business from 1998 to 2001.

Dr. Tyson is a member of the U.S. Department of State Foreign Affairs Policy Board. From 2011 to 2013, she served as a member of President Barack Obama's Council of Jobs and Competitiveness; and from 2009 to 2011, she was member of the President's Economic Recovery Advisory Board. She served in the Clinton Administration and was the chair of the Council of Economic Advisers (1993–1995) and the President's National Economic Adviser (1995–1996).

Dr. Tyson is currently a senior advisor at the McKinsey Global Institute, Credit Suisse Research Institute, and The Rock Creek Group. She is a senior fellow at the Center for American Progress and is on the Advisory Council of the Brookings Institution Hamilton Project. She is an advisor to the Alliance for Competitive Taxation and a commissioner at the Committee for Responsible Federal Budget.

Dr. Tyson is also a member of the Committee on Capital Markets Regulation, the Henry Jackson Initiative Task Force for Inclusive Capitalism, and the Economic Advisory Board of the International Finance Corporation. She serves on the National Academies' Board on Science, Technology and Economic Policy and is a member of its Innovation Policy Forum. She is the co-chair of the World Economic Forum Global Agenda Council on Women's Empowerment. She serves on the boards of directors of Morgan Stanley, AT&T, CBRE Group Inc., and Silver Spring Networks.

Dr. Tyson has written books and articles on industrial competitiveness and trade. She has also written opinion columns for many publications including BusinessWeek, the New York Times, and the Financial Times; and she has made numerous television appearances on economic issues. She is on the editorial board of the International Economy. She contributes to the New York Times' Economix blog, Project Syndicate, and the Financial Times' A-list.



DAVID J. TEECE is an authority on matters of industrial organization, technological change, and innovation, particularly as it relates to antitrust and competition policy and intellectual property. Teece has worked on matters in industries ranging from music recording to DRAMS, software, lumber, and petroleum, and has testified in both state and federal court, before Congress, and before the Federal Trade Commission, as well as in international jurisdictions. In 2012, Teece provided expert testimony regarding damages in Apple Inc. v. Samsung Electronics Co., Ltd case. Dr. Teece is co-founder and Principal Executive Officer of the Berkeley Research, a consultancy.

Teece is the Professor in Global Business and director of the Tusher Center on Intellectual Capital at the Haas School of Business at the University of California, Berkeley. Dr. Teece has a Ph.D. in economics from the University of Pennsylvania and has held teaching and research positions at Stanford University and Oxford University. He has received four honorary doctorates.

He is the author of more than 200 books and articles, and is the co-editor of Industrial & Corporate Change (Oxford University Press). According to Science Watch (November/December 2005), he is the lead author on the most cited article in economics and business worldwide from 1995 to 2005. He is also one of the top-10 cited scholars for the last decade and has been recognized by Accenture as one of the world's top-50 business intellectuals. In addition, he is among the "A-List of Management Academics 2011," an honorary group of 30 accomplished and distinguished U.S. business professors. In the 2013 New Years Royal Honours, Teece was made a Companion of the New Zealand Order of Merit, for services to New Zealand–United States relations. He also received the Academy of International Business Eminent Scholar Award in Istanbul in July 2013.

A Professor of Economics at Harvard University, **ANDREI SHLEIFER** holds an undergraduate degree from Harvard and a Ph.D. from MIT. Before coming to Harvard in 1991, he taught at Princeton and the Chicago Business School. Shleifer has worked in the areas of comparative corporate governance, law and finance, behavioral finance, as well as institutional economics.

He served as editor of the Quarterly Journal of Economics between 1989 and 1999, and as associate editor of both the Journal of Finance and the Journal of Financial Economics. He is currently editor of the Journal of Economic Perspectives and an advisory editor of the Journal of Financial Economics.

Schleifer is a fellow of the Econometric Society and of the American Academy of Arts and Sciences. In 1999, Shleifer was awarded the John Bates Clark Medal, awarded every two years to the most promising US economist under 40, for his seminal works on corporate finance (corporate governance, law and finance), the economics of financial markets (deviations from efficient markets), and the economics of transition.

He has published six books, including The Grabbing Hand (with Robert Vishny), and Inefficient Markets: An Introduction to Behavioral Finance, as well as over a hundred articles. Shleifer is an Editor of the Quarterly Journal of Economics, and a fellow of the Econometric Society, the American Academy of Arts and Sciences, and the American Finance Association. In 1999, Shleifer won the John Bates Clark medal of the American Economic Association. According to RePEc, Shleifer is the most cited economist in the world.

An alumnus of Phillips Academy, **NOBUHISA ISHIZUKA** is a partner and the head of Skadden, Arps, Slate, Meagher & Flom's Tokyo office. He represents U.S. and international clients in a broad range of corporate and financial matters, including mergers and acquisitions and investment and corporate finance transactions. Mr. Ishizuka has extensive experience representing public and private companies on cross-border acquisitions and transactions in the U.S. and across numerous jurisdictions in Asia and Europe.

He represents manufacturing and service companies, financial institutions, private investment funds and major international investment banks. His clients include NTT DOCOMO, Marubeni Corporation, Sumitomo Mitsui Financial Group, Fast Retailing (the Japan-based operator of the UNIQLO retail clothing brand) and Xerox Corporation. Several of his transactions have been cited by leading financial and business law publications for their innovation or as "Deals of the Year".

Mr. Ishizuka is recognized as a leading individual in Chambers Asia-Pacific and Chambers Global, and as a leading lawyer in IFLR1000: The Guide to the World's Leading Financial Law Firms, Asia Pacific Legal 500 and Best Lawyers in Japan. He has published in *Columbia Law Review*, Commercial Law Review, and other legal publications.

Mr. Ishizuka has a B.A. from Columbia College and a J.D. from the Columbia University School of Law, where he served as Senior Editor of the Columbia Law Review. He is a member of the International Advisory Board at Columbia Law School and is a past member of the Board of Directors of the Japanese American Association of New York.

A New Age of Investing: Crowdfunding 101

Eric Lawrence, *Managing Editor*

Introduction

The world is at the dawn of a new era of investing, an age where the crowd, through online platforms, can fund brilliant ideas. Touted as the next big thing since the internet stock trading of the early nineties, online equity crowdfunding offers significant upside potential for investors around the world. What makes crowdfunding so special is its inherent capability to connect people internationally to invest in a single idea. This new industry lies at the crossroads of social networking and investing, which is ideal for the modern-day audience.

Brief Background Information

Although online crowdfunding platforms have only recently been implemented, the concept of crowdfunding is more than a century old.[1] In fact, back in 1884, when the American Committee for the Statue of Liberty ran out of funds for Lady Liberty's pedestal, newspaper publisher Joseph Pulitzer successfully crowdfunded the $100,000 required for the pedestal.[2] In his cogent 1885 New York World article (below), Pulitzer successfully convinced roughly 125,000 people to donate to the pedestal fund:

> *"We must raise the money! The World is the people's paper, and now it appeals to the people to come forward and raise the money. The $250,000 that the making of the Statue cost was paid in by the masses of the French people- by the working men, the tradesmen, the shop girls, the artisans- by all, irrespective of class or condition. Let us respond in like manner. Let us not wait for the millionaires to give us this money. It is not a gift from the millionaires of France to the millionaires of America, but a gift of the whole people of France to the whole people of America.[3]"*

Pulitzer's efforts in the late 1800s marked a revolution in the way capital is raised. His persuasive article also brings up an important concept that applies directly to modern day crowdfunding: you don't have to be a millionaire to invest. Thus, crowdfunding in the United States seemed like a viable option for raising capital—until 1933.

Signed into law in the United States, the 1933 Securities Act imposed a ban on "general solicitation" (advertising an investment opportunity to the public).[4] The Securities Act proved to be advantageous to investors. It protected them from fraud that had been a product of the popular but unsecure 1930s radio communication system; however, this ban brought on a new set of challenges for the small business owner. Mainly, they were no longer allowed to advertise investments to the crowd.[5] Consequently, this slowed down the rate of growth during an already depressed economy.

Title II and III of The JOBS Act

On April 4th, 2012, the JOBS (Jumpstart Our Business Startups) Act was signed. The act includes two sections of particular importance—Title II and Title III—that aim to benefit the crowdfunding industry.[6] On September 23rd, 2013, Title II of the act went into effect, lifting the 1933 ban on general solicitation.[7] Rule 506(c) of the JOBS act allows general solicitation, provided that the investor is accredited.[8] An accredited investor, as defined by the Securities & Exchange Commission (SEC), is a person who either has "individual net worth, or joint net worth with the person's spouse, that exceeds $1 million at the time of the purchase, excluding the value of the primary residence of such person," or a person "with income exceeding $200,000 in each of the two most recent years or joint income with a spouse exceeding $300,000 for those years and a reasonable expectation of the same income level in the current year."[9] An unaccredited investor is someone who does not meet these requirements.

Title III of the JOBS act essentially allows non-accredited investors (the general public) access to similar investment opportunities as accredited investors; however, Title III is not yet in effect, as there is much controversy regarding the limitations that the SEC has proposed, namely the high fees that an issuer would need to spend in order to comply with the reporting requirements mandated by Title III.[10]

Crowdfunding Platforms

The JOBS Act is considered the critical component that kicked off the entire equity crowdfunding industry, but it's important to understand that there are four main types of crowdfunding platforms: Donations-based, rewards-based, lending-based, and equity-based.[11] Donations-based crowdfunding platforms, as the name implies, raise money to help people in need. For example, they may fund relief efforts after disaster or an individual's costly medical treatment. The money is raised through the crowd, and the cause is usually posted to a platform or social media website with a brief summary of the person(s) in need. Charity-based crowdfunding has been around for years (the ban on general solicitation didn't affect fundraising for charity)—think of the Red Cross and donating to political parties—but moving this online has been a major advancement in how money is raised for charity, by connecting the contributor directly to the recipient.[12]

Rewards-based crowdfunding platforms are the most popular, and they include companies like Kickstarter and Indiegogo. These companies attract an audience through the promise of "rewards" when "backers" support an idea or cause; for example, a supporter may receive free t-shirts by contributing to an up-and-coming graphic design artist, or discounts at a crowdfunded restaurant.[13] Rewards-based crowdfunding does not offer return on capital.

Lending-based crowdfunding platforms, such as Lending Club, serve investors who are interesting in loaning money, with the intent that their money will be repaid with interest.[14] Lending Club utilizes "peer lending", which transfers the lender's money to the borrower without the need for a middleman.[15] This dramatically reduces interest rates and, according to Lending Club, can save borrowers an average of 29% on their loans.[16]

Lastly, equity-based crowdfunding serves investors who would like to invest in a company for a share in that business or asset. Unlike other types of crowdfunding, equity-based crowdfunding is more complex and could not exist without the JOBS act. It involves more due diligence, and until Title III is implemented, investors must be accredited. Platforms need to make sure that the deals they are presenting are credible and their clients are high quality issuers (businesses who want to raise money), as there is a lot of concern to protect investors from being scammed. Equity-based crowdfunding marries capital with the issuer, without the need for a middleman (broker).[17] Since equity-based crowdfunding has the most potential for transforming capital markets, I conducted an interview with Joanna Schwartz, the CEO of Earlyshares.com, an equity-based crowdfunding platform, to give the Andover Economic Review insight into the rising crowdfunding market. ■

Eric Lawrence is a three-year upper at Phillips Academy from Sands Point, New York. He is currently Managing Editor of the Andover Economic Review.

Interview with Joanna Schwartz, CEO of EarlyShares

Interview conducted
by Eric Lawrence,
Managing Editor

Joanna Schwartz is currently the CEO of Miami-based EarlyShares. EarlyShares is an equity-based crowdfunding platform that connects accredited investors to private investing opportunities.[19] Prior to EarlyShares, Schwartz served in numerous senior positions, including as the Executive Vice President of the North America Division for Corpac Steel Products and Managing Director of Silver Hill Financial, where she led the commercial lender from "inception to over $1 Billion in annual volume."[20] Schwartz also served as Miami's chapter chair for the Young Presidents' Organization (YPO).[21] YPO is a global organization that connects over 20,000 young chief executives around the shared mission of education and idea exchange.[22] She has a BA in Political Science from the University of Vermont and an MBA from Harvard Business School.

Photo Courtesy of Joanna Schwartz

Q: ***What is the business model for an online crowdfunding platform like Earlyshares?***

A: In general, the business model is that we help issuers (anyone looking to raise money) use their offering materials to put a compelling story together and raise money. After they pass a stringent due diligence and vetting process, we help them by marketing their offering, and sourcing and vetting the investors for their investment opportunity. We use the power of general solicitation to its fullest potential to facilitate the fundraising process for our issuers. We get paid in two different ways. Some of our issuers just want to use our technology or marketing services and pay us a flat fee for our services. Others don't want to have so many different investors coming directly into their deal, so we create a separate legal entity that we call an "EarlyFund", which we then use to gather and aggregate the investors, and then we make the investment for them into the issuer, and in those deals we actually get paid based upon the success of the transaction.

Q: ***What are the benefits of equity-based crowdfunding?***

A: There are tremendous benefits for both issuers and investors. In a nutshell, for the issuers we simplify the fundraising process by providing them with tools and transaction management services, and we amplify their messaging by marketing their offer to our registered investors and to the broader market of interested potential accredited investors.

For accredited investors, we provide direct access to a curate collection of vetted investment opportunities that were never available to them before.

Q: ***Why should investors feel comfortable investing online? How secure is it?***

A: We take what we call a "compliance first approach," and we have due diligence checks at every step of the process that protects both issuers and investors. Before a deal gets posted, the issuers must go through a lot of due diligence that focuses on regulatory compliance and the strength and quality of the investment opportunity. We contract with a 3rd party called CrowdCheck who completes this work on our behalf. In addition, we perform a lot of due diligence on the investors. We check them through the Terrorist Watch List and the Patriot Act, and we make sure that they meet the accredited investor qualifications that are needed in order to be an investor in these deals. All that said, we are very clear that all participants must do their own due diligence to make sure they are comfortable with their decision. As a platform we do not specifically endorse transactions as "good investments," we simply present the information as accurately as possible. It's up to the investors to make those decisions for themselves.

Q: ***What are the initial stages in creating a crowdfunding startup like Earlyshares?***

A: It's not that different from anyone starting any company. We have to have a business model, plan, goals and objectives. Then we have to put a team together that we think can fulfill that vision. Then, you just start building it—and you find investors who are interested. Right now, starting a company like EarlyShares is harder to start than you would think. I always like to say that we're much more than a pretty website. We are in a very regulated industry and we are dealing with financial transactions. So everything we do has to have a very high-bar for quality and compliance which by definition takes a lot of time and costs a lot of money—two things that are challenging for new companies!

Q: ***What are your biggest expenses?***

A: People, technology, and marketing.

Q: ***What have you learned so far in your role at EarlyShares?***

A: How to navigate a brand new industry—which is very challenging—and how to rise above all of the other platforms in an area that is extremely competitive. Dozens of people are entering every month. Staying on the top of the list and creating partnerships to enhance our credibility has been a great challenge and learning experience.

Q: ***Last month, you explained in a CNBC Worldwide Exchange interview that many investors had doubts when online stock trading emerged twenty years ago, and now we have over four trillion dollars sitting in those self-managed accounts.[23] What predictions do you have on the scope of the new, online crowdfunding industry, and how will it compare to that of the online stock trading industry?***

A: That's a very good question. There are about \$2 trillion of private capital raising transactions that close every year that happen outside of the stock market. Originally, people thought that \$300 billion of the \$2 trillion could be the market size for our business. I actually think it could be bigger. As the law is being implemented and as people and companies like EarlyShares are getting more comfortable with our role in how we react and target the market, I think, over time, the market will be much bigger than that. How big I don't know. At this point we'd be thrilled if it were \$300 billion because it just started, but I think the opportunity is enormous.

Q: ***What industries will have the most upside potential for crowdfunding?***

A: For us, what we're seeing is that the most opportunity is in real estate deals, and high-growth companies.

Q: ***How do you determine the value of a crowdfunding platform like EarlyShares?***

A: Every time we raise capital for our own growth, the valuation is set. It's more art than science. Since all the other equity-based platforms are just getting started, at this stage it's mostly about future potential. It's about what you've done so far; the traction you've built; the market penetration; how successful you've been; what's happening in the future; and, because of our market economy, what are investors willing to pay to own a piece of your company? It's much more about all of that than it is the more traditional 'here-are-the-economic-numbers, so therefore put a multiple on that'. It doesn't work like that. Financial technology companies in our sector are expensive to build—particularly to do them right—and it's really about building the right business model and going forward.

Q: ***What advice would you give to Andover students who would like to pursue a career in crowdfunding?***

A: I love that question because it's a whole new industry, and the idea of pursuing a career in it is a brand new concept. I would say that the same would be for any career or industry: really research it, understand it, and understand why you're passionate about it. Learn as much as you can. Maybe even come up with a project that you can crowdfund and see how it goes. Also, try to get an internship at a crowdfunding company. They're dozens of platforms out there, and everyone needs a lot of help. ■

The Flaws of Popular Stock Indicators

Part One

Miles Neumann, *Executive Editor*

To many, the world of investing seems like a vast jungle full of mystery and complexity; a world of infinite reward as well as total loss and failure. Still, there are those who decide to put aside these initial fears and dive in, trying to reap the rewards available in the market. Many of these amateur investors are misguided by easy-access information that they believe will tell them if a stock is going to go up or down. Most rely on the info found right under the stock's symbol, or ticker, on Google or Yahoo Finance. While some of this information is indeed valuable, many metrics are heavily flawed. Even stock indicators as revered and common as Earnings, EPS, Dividends, Earnings Growth, Trading Volume, and Market Capital have significant limitations when it comes to gauging the value of a stock.

A company's earnings are widely regarded as a critical factor in deciding the upward potential of a stock, but the reported earnings of many companies are plagued by accounting tricks that inflate the number. Three commonly used tricks include using FIFO instead of LIFO, not amortizing goodwill, and adding the value of various reserves to earnings.[1] However, what is important to understand is that, even though they increase the earnings number, these tricks do not necessarily help the company. First, the artificially high number paints a false picture of the company by saying that it is performing far better than it really is. In other words, some investors, relying only on earnings, may be tricked into investing in this company believing that it is healthy even though its apparent health is only the result of an artificially inflated earnings number.

These accounting tricks used to increase earnings generally end up decreasing the free cash flow of the company (FCF=Operating Income—Capital Expenditures),[2] which in turn decreases the share price.[3] This decrease occurs because free cash flow is much less susceptible to accounting tricks (the reasons for this are also complicated) and is thus widely regarded as a better indicator of the company's value.[4] Therefore, if a company chooses to abandon these accounting tricks to maximize the free cash flow while taking a slight hit to earnings, it will most likely see an increase in share price even though earnings are decreased.[5] This example shows that a decrease in earnings, which is supposed to signal a downward trend in share prices, can sometimes result in an increased stock price, thereby illustrating the flaw of this stock metric. Of course, lower earnings do not always mean that a company is superior or that its cash flow is increasing, but this case stands as an important exception and shows why focusing purely on earnings can lead to investing mistakes and losses.

Despite its status as one of the most revered indicators, EPS is deeply flawed.[6] While it's true that EPS is one of the most well known indicators, because of its relation to earnings, it too suffers from similar problems. Firstly, EPS stands for Earnings Per Share, so, to calculate it, one takes the earnings of the company and divides them by the number of outstanding shares. This means that EPS already suffers from the problems associated with the earnings number right off the bat (i.e. the accountings gimmicks to inflate earnings also inflate EPS). But the prepositional phrase, "per share," ushers in a whole new dimension of error.

This phrase obviously implies that EPS is heavily dependent upon the number of outstanding shares of the company. To be more specific, EPS is inversely proportional to the number of outstanding shares, so if the number of shares increases, EPS decreases. Although the number of shares of companies fluctuates daily due to complex options trades, these small permutations are negligible with regard to EPS.[7] But there are various cases where the most logical and beneficial business decision for a company can end up causing a lower EPS. One such decision is a dilutive follow-on offering.[8] This is when a company that is already public issues more shares to raise equity capital. So, at the end of the follow-on offering, the number of outstanding shares is increased while the earnings have not changed, leading to a decrease in EPS.[9] While some may see this decreased EPS as a sign of bad management and a bad stock, they do not realize the long-term benefits of raising the equity capital.[10] If this extra money, raised by the follow-on offering, is invested in a project with a high return, the company as a whole will benefit from increased free cash flow and, in turn, a higher share price.[11] However, if one relied solely on the decreased EPS of the company, they might have sold their shares and missed out on this opportunity to make money on their investment.

The flaws of EPS are also made apparent when one company purchases another.[12] To illustrate the flaw, let's envision two different companies, Company Hi and Company Lo.[13] Company Hi and Lo each have 2000 shares outstanding and $2000 in earnings, but Company Hi has a share price of $4 whereas Company Lo's shares are only worth $2. This means that the market value (share price multiplied by the number of outstanding shares) of Company Hi is twice that of Company Lo's. Now, the problem arises when Company Lo decides to buy Company Hi to add value and increase its P/E (price to earnings) multiple.[14] Initially adding value and increasing the premium that the market pays to earnings seem like valid reasons to purchase Company Hi, but many companies shy away from similar acquisitions because they fear the negative effect of a decreased EPS.[15] This decrease is caused because when Lo buys Hi it must issue 4000 shares at $2 per share to retire all 2000 of Hi's outstanding $4 shares. This issuance of new shares would dilute the EPS and cause its value to decline by one-third before the acquisition took place. But the fallacy becomes apparent when one envisions Company Hi purchasing Company Lo. In this case, the EPS would actually increase while the final P/E multiple as well as the total market value would be identical to the values that would occur if Lo purchased Hi.[16] The fact that the market value and P/E ratio stays the same regardless of the direction of the acquisition (i.e. Hi buys Lo or Lo buys Hi) while EPS fluctuates demonstrates that EPS can be meaningless.[17] Obviously, the creation of value that would occur if Lo buys Hi will drive the stock price upwards despite the artificial dilution of EPS.[18] Therefore, if one relied only on the decrease in EPS, they would be making the wrong investment decision in this case. These two examples, a dilutive follow-on offering[19] as well as Company Lo purchasing Company Hi[20] clearly show the major flaw of EPS: if EPS was an adequate indicator of the health of a company, why would EPS decrease when the company makes investments that will increase its overall value as well as its share price?

Although changes in earnings and EPS have significant correlations with the share price of a company, there are many important exceptions to this trend. These exceptions may not occur often, but they represent instances where the value added to a company is inverse to the change in earnings or EPS. If one disregards value and focuses on EPS and earnings, then one could easily make incorrect investing decisions and thereby forfeit capital gains. In my next article, I reinforce the importance of focusing on the overall "value" of a company rather than concentrating on certain metrics when I demonstrate the problems with earnings growth percentages and dividends. ■

Miles Neumann is a three-year senior at Phillips Academy from Point Clear, Alabama. He is Co-President of Andover Economics Society and an Executive Editor of the Andover Economic Review.

The Flaws of Popular Stock Indicators

Part Two

Miles Neumann, *Executive Editor*

In my previous article, I discussed various flaws associated with two common stock metrics: Earnings and EPS. Unfortunately, these two indicators are not the only ones that suffer from weaknesses. Earnings Growth as well as Dividends also suffer from major shortcomings. Although their deficiencies come from different places, these two metrics can be just as ineffective as EPS and Earnings when it comes to deciding whether to invest in a company.

Earnings growth is a popular indicator that has to do with how fast a company is expanding. More specifically, it is the percent change of the earnings number, positive or negative, that occurs over a given time period (typically a year or a quarter) when compared to the previous time period.[1] For example if Company X has earnings of $100 million in Q3 2012 and then has earnings of $150 million in Q4 2012, then it's earnings growth is 50 percent for Q4. While earnings growth is important for all companies, it does not correlate exactly with a high share price and still has significant flaws. The main problem with the earnings growth percentage is that it disregards the rate of return on capital.[2] I will illustrate this issue using an example involving Company X and Company Y. Company X and Y both have identical growth rates, but Company X only invests 70 percent of its earnings in new capital while Company Y must invest 110 percent of its earnings to sustain its growth rate. Because Company X does not have to invest as much money in capital while still achieving an equal rate of return as Company Y, it is achieving a higher rate of return on its capital investment (i.e. it makes more money off of its capital investments than Company Y. This is why it can sustain an equal earnings rate at a lower cost). Since Company X sees higher rates of return on capital, it is clearly a better managed company and will therefore sell for a higher P/E ratio than Company Y, meaning that investors are paying a higher "premium" for Company X's shares.[3] However, based on the two companies' identical earnings growth rates, one would assume that they would sell for the same P/E multiples.[4] Therefore comparing the earnings growth of different companies can lead to an inaccurate picture of the health of these companies, which can lead to bad investment decisions.

In addition, the earnings growth percentage does not take into account the methods used to finance the capital investment that produces the earnings.[5] Some companies feel that earnings growth is so important that they must keep it steady at all costs. This can lead to companies taking on dangerous amounts debt in order to pay for new capital to sustain their earnings growth rates. This practice will make the company look healthy on the surface when in reality the company is digging its own grave. For example, the department store chain W.T. Grant began a rapid expansion program in the 1960s which caused them to increase their earnings growth rate.[6] However, soon their return on invested capital decreased, so they had to spend more money on capital to sustain their earnings growth rate. Soon they had to finance this spending with debt which resulted in negative cash flows for seven years in a row. Finally in 1975, W.T. Grant had reached the end of the road, and it was liquidated because of its poor business decisions.[7] G. Bennett Stewart masterfully summarizes the shortcomings of earnings growth rate in his book, The Quest for Value:

> *...rapid growth can be a misleading indicator of added value because it can be generated simply by pouring capital into a business. Earning an acceptable rate of return is essential to creating value. Growth adds to value only when it is accompanied by an adequate rate of return If returns are low, growth actually reduces value.*[8]

In other words, most successful companies that sell for high P/E ratios have high earnings growth rates because growth is undeniably important for businesses.[9] However, due to the simplicity of the earnings growth measurement, it does not take into account the amount of capital required to maintain the growth or the financing methods for the growth. Therefore, relying only on the earnings growth rate of a company without researching its return on capital or free cash flows can lead to making bad trades.[10]

Now I am going to attack one of the most widely used stock indicators for many investors, amateur or experienced: dividends. First a disclaimer: dividends can be helpful for investors who need a guaranteed periodical cash payout during the course of their investment. But, although the above statement is true, dividends as well as the dividend yield are not good indicators of a company's health.[11] Firstly, what are dividends? Dividends are payout that companies give to shareholders periodically, usually each quarter.[12] Dividends can be structured in a number of ways: they can be fixed at a percentage of earnings.[13] share price, or vary based on a number of factors from quarter to quarter.[14] The dividend yield is defined as the annual dividend payout divided by the share price multiplied by 100. Therefore it is expressed as a percentage of the company's individual share price. However the very idea of periodically redistributing earnings to shareholders in a cash payout (i.e. dividends) highlights a problem with the company: why isn't the company instead investing this money in rewarding capital projects with high rates of return that will increase cash flows of the company as well as its intrinsic value? Paying out dividends implies that the company has no more rewarding capital projects to invest in, which, on the most basic and qualitative level, is a not the best sign for shareholders.[15]

However, there is little concrete evidence to suggest that a company that pays a dividend will outperform a company that pays no dividend.[16] In an article published in the Journal of Financial Economics in 1974, Professors Fischer Black and Myron Scholes researched whether dividend payouts affected share price from the years 1936 to 1966.[17] In their study, they selected a very diverse portfolio of stocks, with differing levels of risk, price, and dividend payouts, but, in the end, they concluded that it was the risk of the investment that affected the share price, not the dividends.[18] Therefore, whether or not a company pays a dividend has no long term effect on its share price.[19] What matters instead is the intrinsic value of the company as well as its rate of return on capital.[20]

Another important, yet often overlooked, aspect with regard to dividends and dividend yield numbers is that these numbers do not tell the investor anything about where the company got the money to pay for the dividends.[21] Sometimes these dividends are paid to shareholders only to make the company look healthy on the surface. Again I will use W.T. Grant as the scapegoat. As this company began hemorrhaging money in the late 60s and early 70s on capital to sustain its high earnings growth rate, it maintained a dividend at 30 percent of earnings.[22] Therefore, it began losing more and more cash to dividend payments as it grew because it believed investors would see the company as healthy even though it was suffering internally.[23] Essentially, just because a company is paying a dividend does not necessarily mean that it has an appropriate amount of excess cash to pay one.[24] In W.T. Grant's case its rapid growth sustainment as well as its high dividend payment forced it to take on more and more debt until everything came crashing down in 1975 when the company was dissolved.[25]

Dividends and dividend yield do not affect the company's share price over the long term, and they as well as earnings growth are misleading indicators of a company's health. Therefore, one should not rely on any one of these metrics individually when making an investment decision. Instead, one should focus on the risk of their investment, the cash flows of the company, its rate of return on capital, as well as its intrinsic value.[26] ■

Miles Neumann is a three-year senior at Phillips Academy from Point Clear, Alabama. He is a President of Andover Economics Society and an Executive Editor of the Andover Economic Review.

How General Motors Got Away With Murder

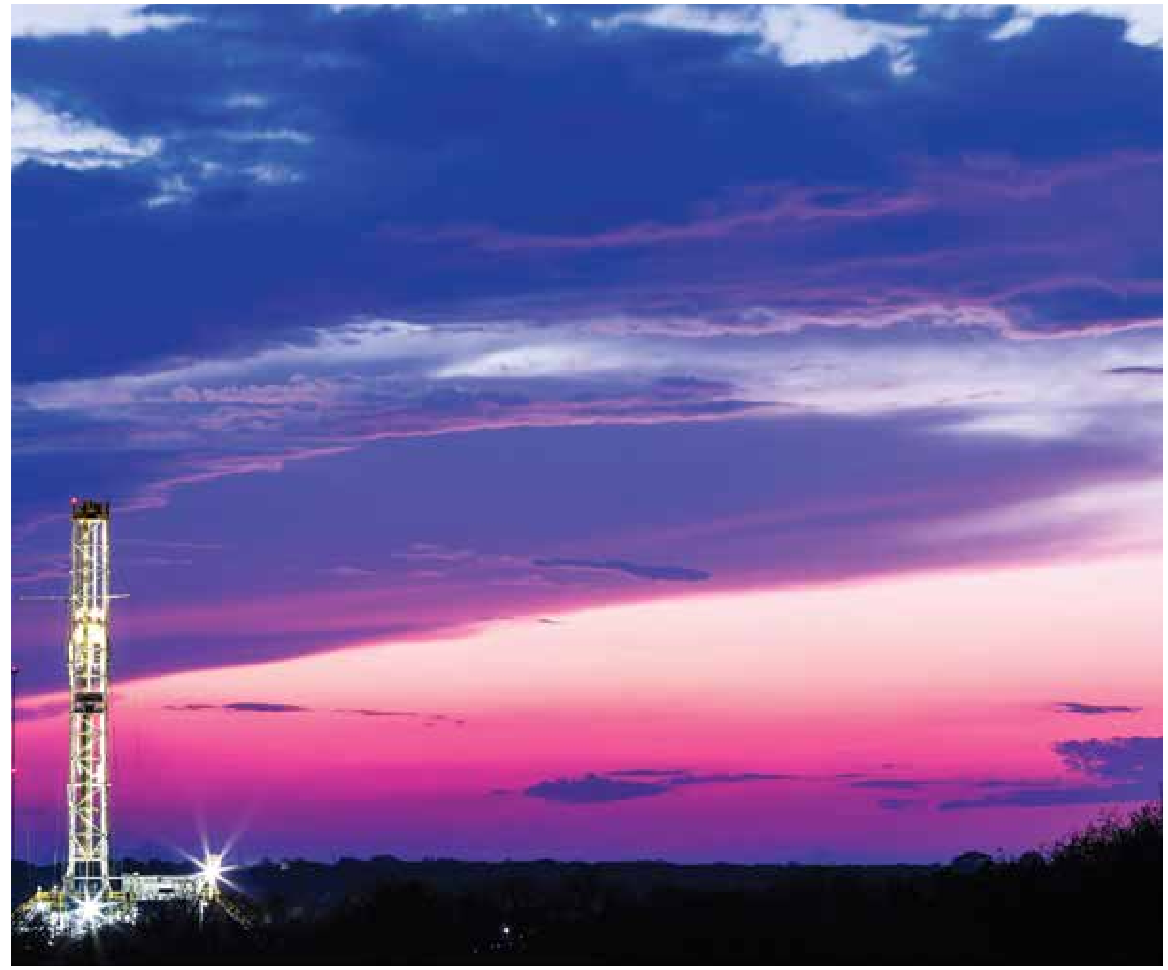
Natalia Suarez, *Writer*

William Durant founded General Motors (GM) because he had a dream of revolutionizing the automotive industry. The chief executive officers and board members that followed in his place have endlessly strove to accomplish this, but recently they have become so consumed with GM's bottom line that they have lost sight of that dream. General Motors has recently undergone heavy public scrutiny for amassing a record recall in 2014 of 34 million cars totaling more than $2.5 billion in repair costs.[1] More worryingly, however, is the fact that GM kept the existence of faulty car parts hidden from the public's eye.[2] The most notable recall has been the faulty key ignition switch which required 14.7 million vehicles to be repaired at a cost of $1 billion.[3] The defective ignition triggers a loss of the vehicle's electrical power, causing the air bags to fail in the event of an accident. In June 2014, GM acknowledged that 13 deaths were due to the defective switch.[4] Since then, the number has increased to 30 fatalities and 31 injuries but will likely keep climbing as to date a total of 1,580 claims have been filed.[5]

The extensive media attention surrounding the ignition switch began because of the size of the recall, but a scandal ensued when the press learned that GM knew they were producing faulty cars. GM first discovered the fault in 2001 and it appeared again in 2004, but no actions were believed necessary as the proposal to fix the defect was deemed too costly and time consuming.[6] However, in December of 2005, they did send a bulletin to dealers stating, "If the driver is short and has a large and/or heavy key chain ... the customer should be advised of this potential and should ... [remove] unessential items from their key chain," thus proving GM was aware of the defect.[7] Information has now surfaced confirming that GM was aware of formal investigations linking at least two deaths to the switches, yet even with this knowledge and 29 other formal complaints no recall was made.[8] In 2012, GM acknowledged ten crashes with four fatalities and six injuries attributable to the defective ignition switch, but never issued a recall because its executives calculated that the costs of a recall outweighed that of a few lives.[9] A GM engineer stated at a deposition that the company made a "business decision not to fix this problem."[10]

No one at GM has been held personally responsible for the deaths and cover up, and almost certainly no one will, but why does our society not perceive this as an issue? GM did pay a $35 million fine and a billion dollars in recall costs, but what does this say about our society: a world in which corporate executives can write off any crime, including murder, with the signing of a check.[11] Ambrose Bierce, a famous journalist, once defined a coproration as, "Corporation: An ingenious device for obtaining profit without individual responsibility," and Howard Scott, an American engineer and founder, once said, "A criminal is a person with predatory instincts who has not sufficient capital to form a corporation." ■

Natalia Suarez is a two-year lower at Phillips Academy from Andover, Massachusetts. She is an Associate Board member of the Andover Economic Society.



The North American Energy Renaissance

This is part one of a two part series on North American competitiveness

Tennyson Teece, *Editor in Chief*

There is a revolution happening in North American energy. Over the last several years, massive new reserves of oil and gas trapped in shale rock formations have been unleashed, thanks to the commercialization of a drilling technique called hydraulic fracturing or "fracking." Oil sands in Canada are helping to ensure regional energy security, as billions of barrels of untapped oil are unearthed. And Mexico's ambitious new President, Enrique Peña Nieto, has allowed foreign investment in the national oil company, Petróleos Mexicanos (PEMEX).[1] This energy boom, accompanied by existing trade and geopolitical advantages, will drive growth in North American manufacturing and economic power.

The shale gas bonanza in the United States has been as swift and far-reaching as it has been unexpected. Prior to the shale boom, which began in 2007, American companies invested $100 billion in facilities designed to handle the importation of liquefied natural gas (LNG).[2] Many of these plants, like the Sabine Pass LNG plant, have actually been converted into LNG export terminals, with ample access to the US pipeline system and geographic proximity to the massive unconventional gas sources, like the Eagle Ford shale formation in Texas. Since 2008, total US gas production has increased by 25 percent to an all time high, driven by a more than fourfold increase in shale gas production.[3] This has resulted in natural gas prices plummeting from $13 per million British thermal units (mmBtu) to around $4.50 per mmBtu.[4] American factories now pay roughly a third of the German gas price, and a quarter of the Korean and Japanese prices, with a similar energy price advantage over China. According to the International Energy Agency (IEA), the US has the second lowest natural gas prices for industry in the developed world, behind Canada.[5] The petrochemicals industry, which supplies some of the raw materials necessary for the automobile industry, for agriculture, and in household goods and construction, will be one of the biggest beneficiaries, as will other energy intensive industries.

Some companies are already reaping the advantages of cheap natural gas. Methanex, the world's largest methanol producer, is moving a plant from Chile to Louisiana.[6] In the gulf, Chevron Phillips, Dow Chemical, Formosa Plastics, Occidental Petroleum and Williams are all expanding existing chemical plants, moving them there, or building new ones.[7] Since 2011, 128 new energy intensive industrial plants have been announced in the Gulf, representing a combined value of $114 billion.[8] Near the 600-mile long Marcellus shale formation in the Appalachians, investment in the steel industry has boomed. A French firm, Vallourec has just spent $650 million on a new mill to make steel pipes, creating 350 jobs. Likewise, Allegheny Technologies recently invested $1.1 billion in a factory to produce specialty metals, like stainless steel.[9] A total of 19 new or expanded metallurgy plants have been announced by US Steel, Alcoa, and ArcelorMittal.[10]

Just as impressive has been the explosion in American oil output as a result of fracking. Massive reserves of oil that were previously unattainable are now being brought to the surface. The Bakken shale formation in North Dakota, for example, is now producing over a million barrels of oil per day.[11] Just this year, the US leapfrogged Russia and Saudi Arabia to become the world's largest oil producer, at 11 million barrels per day. US oil production will peak in 2019 at 13.1 million barrels per day and plateau thereafter, ensuring America remains the top producer through 2030.[12] This new oil supply has been a key factor the oil price tumbling by 50 percent since June's price of $115 per barrel.[13] Brent crude sold for just above $60 a barrel as of early December, the lowest since July 2009.[14]

Total energy independence now seems within reach. According to The Economist, in 2008 America produced 70 percent of the energy it consumed. In 2013, that number was 89 percent,[15] and will continue to rise to 96 percent by 2040.[16] The benefits are not limited to industry; the average American's utility bill will drop by about $900 annually as a result of cheap natural gas[17] while the typical motorist should save $800 per year at the pump.[18] The energy boom will also add at least three percent to U.S. GDP over the next decade, as well as close to four million direct and indirect jobs, the majority of which will be high paying.[19] And that ignores the obvious benefits to the US trade balance. Shale oil and gas, along with growth in the manufacturing sector, has helped push the US's current account deficit from a massive 6.2 percent to a much more sustainable 2.2 percent.[20] As domestic energy production rises, imports will continue to fall and the US may begin exporting oil and LNG, further improving our balance of payments.

Canada and Mexico are also enjoying increasingly bountiful energy prospects. The oil sands in Alberta contain the world's third largest proven reserves and pump millions of barrels of oil to North American and overseas markets daily.[21] Meanwhile, Mexico's new president has pushed for reform in the Mexican oil industry. Mexico's shale gas reserves are the fourth largest in the world. Yet the notoriously inefficient and corrupt national oil corporation (PEMEX) lacks that capital and expertise to properly develop Mexico's bountiful energy resources. However, in December 2013, the legislature passed a bill allowing private investment in PEMEX for the first time in 75 years, a momentous decision which should result in greatly increased oil and gas production over the long run.

However, many critics of fracking cite environmental risks, as rumors of earthquakes, methane emissions, and groundwater contamination abound. Many fear efforts to promote renewable energy resources will suffer as oil and gas production increase. But the critics fail to take into account the larger US energy context. While not as environmentally friendly as some sources, like nuclear power and renewable energy, natural gas is still far cleaner than coal. According to the Energy Information Agency, in 2012, 40 percent of energy-related carbon dioxide emission resulted from electricity generation, and three quarters of electricity generation emissions were from coal power plants.[22] But thanks to fracking, many power plants that ran on coal are switching over to natural gas. In 2013 coal power generation represented 36.7 percent of the US total, the smallest share since records began in 1949, and is projected to fall to 32 percent by 2040. This steep decline has largely occurred amidst the shale boom of the last several years.[23] Crucially, natural gas is not displacing renewables; electricity generation from renewable sources should grow by 69 percent between 2012 and 2040, representing the highest annual growth rate of any energy source, including natural gas.[24] The displacement of coal by natural gas, and, to a lesser extent, renewables, should help the US curb its carbon dioxide emissions. In fact, it has already begun to do so: between 2007 and 2012 the United States witnessed a fall in energy-related carbon emissions of more than 12.5 percent,[25] a larger reduction than any other nation.[26]

Fracking won't just reduce carbon emissions; it should save lives. Pollution from coal fired power plants accounts for 13,000 premature deaths and 20,000 heart attacks every year in the US. The total cost of these health impacts is a staggering $100 billion annually.[27] The primary cause of these deaths are soot, which can cause lung damage, as well as nitrogen oxides and sulfur dioxide, which contribute to smog and acid rain.[28] Burning natural gas produces no soot, negligible amounts of sulfur dioxide, and much lower amounts of nitrogen oxide than burning coal.[29] Thus, fracking is not only reducing the number of unnecessary deaths by helping to put coal out of business, it is taking pressure off our health system that's forced to deal with the consequences.

Furthermore, concerns over earthquakes, ground water contamination, and methane emissions seem to be overblown. A report by the National Research Council on energy and seismic activity, despite the fracking bonanza, recorded only one instance of an earthquake associated with fracking.[30] Regulations have kept wells safe from groundwater contamination; a 2011 report for the Secretary of Energy could not confirm any instances of groundwater contamination from fracking.[31] The EPA has reported one instance of contamination in Wyoming, at a depth of 7,000 feet below the ground, though the vast majority of drinking water suitable aquifers are hundreds of feet below the ground, not thousands where the shale formations reside. Though methane emissions are harder to measure, it is unlikely to cause significant environmental damage. A new method called "green completion" is now in place on most wells, which avoids venting or flaring methane.[32]

Lastly, there will be very positive geopolitical ramifications from the North American oil and gas boom. North America will have a degree of insulation from global oil shocks and will be less inclined to have US military assets securing oil resources in the Middle East. Perhaps counties like Japan and China, the biggest benefactors of US protection of shipping lanes, will come to shoulder some of the costs of keeping Middle Eastern oil secure. Additionally, US LNG exports, though not likely to be massive, will also potentially improve the US' geostrategic situation as East Asia becomes imports more US LNG and America is able to help wean Europe off of Russian gas.

Despite receiving ardent criticism from environmentalists, the North American energy renaissance, powered by fracking, is a tremendously positive force. With unprecedented swiftness our economic, geopolitical, environmental prospects have been transformed. The dangers of not following this path are clear. European countries have steadfastly opposed fracking for environmental reasons, and ironically, they are now facing the consequences of increasing pollution thanks to a resilient coal industry. Europe's industries are becoming less competitive in the face of high energy costs and its nations are being geopolitically undermined by dependence on Russian gas. North Americans, then, should applaud the energy renaissance, as it continues to be one of the key factors in boosting competitiveness and fighting pollution in an ever more globalized world. ■

Tennyson Teece is a four-year senior at Phillips Academy from Berkeley, California. He is the CEO of Andover Economics Society and Editor in Chief of the Andover Economic Review.

Factory North America

This is part two of a two part series on North American competitiveness

Tennyson Teece, *Editor in Chief*

North America will see improving prospects as a manufacturing powerhouse moving forward, thanks to increasing economic competitiveness. This will stem not just from an ongoing energy boom, as I discussed in the first part of this article series, but also due to an unparalleled level of economic integration thanks to the North American Free Trade Agreement (NAFTA), strong intellectual property protections, favorable demographics, and increasing efficiencies and productivity gains in manufacturing. Furthermore, opportunities for economic integration with countries outside the continent present potential for added economic benefits amidst the backdrop of increasingly expensive Chinese labor.

While NAFTA has no shortage of critics, all the evidence points to a history of strong economic gains for North America. NAFTA eliminated all duties on goods flowing between the United States, Canada, and Mexico, allows free flow of investment between those countries, and ensures effective protection of intellectual property rights. NAFTA is the world's largest free trade area creating a unified $19 trillion market and 470 million consumers.[1] According to the US Department of Commerce, last year about thirty four percent of US exports went to Canada and Mexico, more than twice the value that went to all the BRIC countries combined. Intraregional trade has increased fourfold since NAFTA's introduction in 1994. NAFTA has also boosted cross border investment. Since the signing of the treaty, the US has invested over $300 billion in Canada, and Canada has returned the favor to the tune of $200 billion. Mexico has also invested in major US industries, like cement, bread, dairy, and retail sectors while US companies have poured money into Mexican manufacturing.[2] Perhaps even more impressive than the growth in the outright value of goods is the level of integration. When we read "made in Mexico" on a product, we tend to think that it means none of the benefits accrue to the US. Because of the level of integration afforded by NAFTA, this is not the case. According to the Council on Foreign Relations, for every dollar of goods that Mexico or Canada exports to the United States, there are 40 cents of American inputs on the Mexican made good and 25 cents worth on the Canadian good. For Chinese goods, there are just four cents of American inputs and two cents for Japanese goods. Better yet, for every dollar Mexico earns on its exports abroad, it spends 50 cents on US goods. All of NAFTA's provisions make doing business in North America more appealing, as proved by the economic dividends reaped by all countries involved.

Demographics and intellectual property rules also point to stronger North American competitiveness going forward. Between 2000 and 2030, the Boston Consulting Group (BCG) predicts that Mexico's workforce will grow by 58 percent and the US' by 18 percent, while China's will decrease by three percent.[4] Further, the respect for intellectual property rights in North American countries, partly ensured by NAFTA's rules, makes investment appealing compared with countries that struggle with intellectual property theft, like China. However, this advantage has not held companies from shipping jobs overseas in the past, so it will need to be coupled with increasing productivity, efficiency, and more competitive wages.

Lastly, increasing efficiency and productivity in manufacturing will be necessary for North America to hold its own against East Asian countries. BCG calculates that Mexico is already becoming cheaper than China, something highly beneficial to the US remembering that for every dollar of Mexican goods we buy, there are 40 of US inputs compared with four cents for China. BCG found that if Mexico's higher manufacturing productivity is factored in, this year Chinese labor costs were 13 percent higher than those of Mexico.[5] By 2015, Mexico should have a cost advantage of close to 30 percent.[6] The United States is also seeing a reinvigorated manufacturing sector, not just due to falling energy costs. The Great Recession has quietly spurred greater efficiencies in the US manufacturing sector, with unit production costs down eleven percent between 2002 and 2012, while many other developed countries saw their costs increase. US labor costs, again when factoring in productivity, are also increasingly competitive with those of China and other competitors; according to BCG's manufacturing cost index, on average manufacturing in the United States is barely more expensive than in China, about the same cost as Russia and Poland, and a whopping 20 percent cheaper than Brazil.[7]

More opportunities, especially in trade, would continue to boost North American economic prospects. Further integration of NAFTA countries infrastructure and more efficient border crossings, particularly between Mexico and the United States, would help. The NAFTA countries are already involved in trade negotiations for the Trans Pacific Partnership (TPP), which would also include Australia, New Zealand, Brunei, Malaysia, Singapore, Vietnam, Japan, Chile, and Peru, with South Korea and Taiwan also indicating interest in joining the agreement. It would be the largest Trade Agreement in history, that is if the Transatlantic Trade and Investment Partnership (TTIP) isn't signed first. That trade agreement would be between the European Union nations and the United States, connecting the two biggest economies in the world. According to The Economist, together TTIP and TPP could increase global GDP by $600 billion, equivalent to adding another Saudi Arabia. America would reap $200 billion of that annual gain.[8] In fact, TPP and TTIP may be even more ambitious than NAFTA in that they will strive to do more on labor standards, environmental safeguards, government procurement and the treatment of state-owned companies, and regulations (especially in the automotive sector). If even one of these deals were successful, it would represent a significant economic boost to North America and its trading partners.

In 2007 as the world was entering a Great Recession, North American's had little to be optimistic about. Just six years later, our energy prospects are transformed, a manufacturing revival is beginning, and new trade opportunities lie on the horizon. These, on top of existing advantages, like NAFTA and strong demographics, means North America has the potential to prosper more than ever before, but only if Washington is able to get its long term fiscal house in order. ■

Tennyson Teece is a four-year senior at Phillips Academy from Berkeley, California. He is the CEO of Andover Economics Society and Editor in Chief of the Andover Economic Review.

The Federal Reserve and Quantitative Easing

Miles Neumann, *Executive Editor*

In 2008, the United States found itself in the midst of an economic crisis. The housing market had collapsed, unemployment rates soared, stock markets tanked, and two of the largest financial corporations on Wall Street, Bear Stearns and Lehman Brothers, had gone bankrupt. The economy could no longer rely on the invisible hand to repair itself quickly; someone had to intervene. Because of the lag-time associated with discretionary monetary policy, all eyes turned to the Federal Reserve and its chairman, Ben Bernanke. With interest rates already at the lower bound, the Fed decided to conduct unconventional monetary policy in the form of a large-scale buyback of various types of securities from across the market. This attempt to jumpstart the economy was collectively known as Quantitative Easing (QE), and it consisted of four major phases in which different strategies were implemented to combat the recession.[1] Although Quantitative Easing achieved many of its principal goals such as lowering long-term interest rates and reinvigorating the American economy, it also had many unpredicted and negative effects such as creating market bubbles and increasing income inequality.

In order to understand the objectives and effectiveness of QE, it is necessary to be familiar with the structure and purpose of the United States Federal Reserve. The Fed was founded in 1913 after President Woodrow Wilson signed the eponymous Federal Reserve Act.[2] It was formed in response to various "economic panics" of the 19th century where the U.S. government found itself relying on wealthy individuals and corporations to meet its debt obligations.[3, 4] With the creation of the Fed, the United States was able to establish a stronger economy and did not have to worry as much about the financial collapses, which had devastated Europe in the late 19th and early 20th century.[5] The Fed was first established as the "lender of last resort." Acting as the central bank of the United States, it would lend money regardless of the economic situation of the company in need.[6,7] This was meant to prevent bank runs and market collapses by allowing banks to receive emergency funds.[8]

The Fed still serves this function, but, over time, its structure and duties have changed. Today, the Fed operates under a "dual mandate": to ensure full employment and reasonable inflation. To accomplish this task, the heads of five of the twelve Fed banks across the nation, along with the seven appointed members of the Fed's Board of Governors (including the Chairman), meet at least eight times a year (known as the Federal Open Market Committee) to determine the Fed's upcoming objectives regarding monetary policy.[9] The implementation of this monetary policy usually takes three forms: changes to the discount rate, changes in reserve requirements of banks, or changes in the targeted Federal Funds Rate.[10] The discount rate refers to the interest rate that the Fed charges when it acts as the "lender of last resort" to struggling financial institutions while the reserve requirement refers to the amount of cash that banks must have in reserve each day (this number is currently around 10 percent of deposits).[11] However, the most important tool of the Fed is arguably the Federal Funds Rate, which serves as the basis for all short-term interest rates in the United States. By manipulating these three different rates, the Fed can shift the supply of money in the economy and thus can shift interest rates and aggregate demand.

Up until 2008, the Fed had been able to rely on these three tools to boost the economy during crises, and, just after the housing bubble burst, the Fed lowered the Fed Funds Rate all the way to the lower bound of 0-0.25 percent.[12] However, this still did not have the desired effect of jumpstarting the economy, so Ben Bernanke and the other members of the Fed had to devise a new plan to boost employment and GDP. Thus, they turned to unconventional monetary policy: Quantitative Easing.[13]

QE was a series of large-scale asset purchases made by the Fed in an attempt to lower long-term interest rates and thereby stimulate lending, which would in turn boost the economy.[14, 15] The predecessor of the recent QE in the United States was the Bank of Japan's program from 2001 to 2006.[16] However, during a speech at the London School of Economics in 2009, Bernanke illustrated how American QE was very different from Japan's.[17] First, the Bank of Japan focused heavily on buying various assets with the goal of controlling the excess reserves of banks.[18] Due to reserve requirements, the Bank of Japan hoped to free up capital for banks to lend by increasing banks' reserves. The Bank of Japan, then, was less concerned about the types of securities they purchased than they were about these purchases' effects on the banks' reserves.[19] On the other hand, the Fed's QE policy was more of a "credit easing" method.[20] Rather than worrying too much about bank reserves, the Fed would base the quantities of different assets purchased on the objective of increasing the demand for loanable funds.[21] The U.S. program was more concerned with the interest rate that the borrower received rather than the amount of excess funds in the banks' reserves. According to Bernanke, this contrast in ideology was a result of "differing financial and economic conditions between the two episodes," but perhaps the Fed also realized that the banks did not necessarily "have" to loan out these extra reserves.[22] Therefore, it would be futile to base asset purchases on the assumption that banks were going to lend some predetermined amount of money as a result of a specific reserve increase when, in reality, the banks' lending habits were somewhat unpredictable.[23, 24]

Nonetheless, the central idea behind QE was quite simple: as the Fed bought more long-term assets, it would pump more money into the banks, prompting them to lend at a lower long-term rate. Other effects of these purchases included boosting the stock market, increasing consumer confidence, and returning more liquidity to other risky markets.[26, 27] However, the complicated questions regarding the implementation of this policy were which assets to buy and how many.

The answer to these questions actually changed somewhat during the different versions of QE, but, overall, the most important asset classes were U.S. Treasury notes, mortgage-backed securities (MBSs), and agency debt.[28] The purchase and sale of U.S. Treasury notes, government debt that pays an interest rate to the lender, had long been a popular tool of the Fed, but, during QE, rather than buying short-term notes, it invested in long-term notes (i.e. 5 and 10 year notes) in order to lower long-term interest rates.[29, 30] On the other hand, MBSs are far more complicated. This example illustrates the basic ideas behind these assets. If John Doe wanted to buy a house, he could take out a loan for $400,000 with an interest rate of 4 percent.[31] This loan could then be repaid over, perhaps 20 years. Before MBSs, the bank who lent John Doe the funds would have to keep this loan on its balance sheets for the next 20 years, which made the bank itself less liquid since its loans could not be easily converted into cash.[32] However, in 1968, regional banks were allowed to sell these loans to larger investment banks or government-associated corporations such as Fannie Mae and Freddie Mac.[33] Thus, they were able to create a liquid asset from a loan, prompting them to make more loans and riskier loans over time since they could just continue to sell them to larger corporations in return for cash.[34] The investment banks then combined and repackaged these loans into assets called MBSs that paid a periodic interest rate and sold them to investors.[35] The sharp drop in the value of many MBSs was a major factor in causing the financial crisis.[36] Therefore, in order to help struggling corporations as well as the toxic MBS market, the Fed had to remove these MBSs from the companies' books and replace them with cash.[37, 38] Lastly, the Fed bought billions of dollars of agency debt. This debt is a type of government debt that is not issued by the U.S. Treasury but instead by other government agencies like Fannie Mae, Freddie Mac, and the Tennessee Valley Authority to raise money.[39] These debts are generally issued in the form of bonds, and, since they are not "guaranteed" (they do not "have" to be paid back like Treasury Securities), they usually offer slightly higher rates of return.[40] By purchasing this type of debt, the Fed pumped more funding into struggling government affiliated companies.[41]

After the Fed finalized a plan of the distribution of asset purchases, Ben Bernanke, on November 25th 2008, announced the first round of Quantitative Easing. This amounted to purchases of $300 billion in long-term Treasury bonds, $1.25 trillion in MBSs, and $175 billion in agency debt by the time QE1 ended on March 31st 2010.[42] Soon after came QE2, during which the Fed decided to buy $600 billion more of long-term U.S. Treasury notes in addition to using returns generated by QE1 to buy other securities.[43] QE2 was smaller than QE1 with regards to both its duration and the amount of assets purchased.[44] After it was finished on June 31, 2011, there was a brief period where the Fed did not announce any new Quantitative Easing policies.[45] However, in September of that year, they began "Operation Twist."[46] This policy's objective was to help revive the housing market that had been decimated by the recession.[47] To achieve this goal, the Fed changed two things. First, they reinvested the earnings from short-term Treasury notes that had reached maturity into long-term ones.[48] In addition they poured more funds into MBSs.[49] Nearly a year after "Operation Twist" was started, on September 13, 2012, Bernanke began a new round of QE, creatively named QE3.[50] For the implementation of this policy, the Fed stated that it would purchase an additional $40 billion in MBSs each month until the economy had reached full employment and reasonable inflation.[51] On top of this, they continued to reinvest the earnings from short-term Treasury bonds into long-term bonds, and they promised to keep short-term interest rates at the zero bound until "mid-2015."[52] Finally, when QE3 ended on December 18th, 2013, the Fed announced that it would "taper" its asset purchases, decreasing its current monthly expenditures of $85 billion by $10 billion each month.[53] "The Taper" continued until October 29th, 2015, when the Federal Open Market Committee, headed by the new Chairman, Janet Yellen, announced that the Fed would "conclude its asset purchase program this month," marking the end of the era of Quantitative Easing, which had added over $4.5 trillion to the Fed's balance sheet.[54, 55]

During six years of aggressive and unprecedented levels of asset purchases, the Fed was able to have some positive impacts on the American economy, but the extent to which QE helped to jumpstart the U.S. after the housing crisis is still being debated. To understand the benefits and drawbacks of QE, it is important to first understand why the money that the Fed injected into the economy affected markets.

In 2010, the Fed of New York published a comprehensive report analyzing QE1.[56] Their overarching conclusion was that the purchase of longer-term assets reduced the supply of these assets and thus the risk associated with holding them.[57] In other words, the price of the assets increased while their yield, which corresponds with long-term interest rates, decreased. This effect is known as a decrease in the "term premium" of the assets.[58] In addition to the decrease in supply, yields lowered further because investors became more confident as the Fed purchased more of these assets because these investors knew that the Fed would buy the assets from them if they needed to get rid of them.[59] Thus, because the liquidity of the assets increased, the resultant risk associated with them decreased, causing lower yields and lower long-term interest rates.

Overall the authors of this Fed report expressed favorable opinions of the effectiveness of QE1. For example, they allege that this policy had a total effect of decreasing 10-year "term premiums" of Treasury bonds by 0.30 percent to one percent over the year-and-a-half time period.[60] A separate article showed that the interest rate on a 30-year fixed-rate mortgage dropped by more than two percent after QE began: down to 4.50 percent by the end of 2010.[61] In addition to decreasing these rates, QE1 helped to mitigate the dangerous risk levels present in the MBS and agency debt markets, and it even had the unintended consequences of boosting the corporate bond, interest-rate swap, and stock markets.[62, 63]

Another important benefit of QE was a boost in government spending.[64] Interest rates in the U.S. correspond to the amount of interest that the government has to pay on its own debt. Thus, when interest rates were lowered by QE, the U.S. Government saved approximately $900 billion.[65] Also, the Fed was able to earn a return of $145 billion on its asset purchases, which complemented the government savings from lower interest rates.[66] Therefore, these combined cost reductions of over $1 trillion enabled the government to decrease taxes and increase spending to help the economy. These government savings were also coupled with $310 billion in savings for non-financial corporations and $150 billion for banks, once again a result of lower interest rates.[67] Without these increases in expenditure caused by QE, the recession would have undoubtedly caused a far greater drop in GDP.[68]

The benefits of QE are also present if one looks at the relative upward trend in the baseline indicators for economic performance such as GDP growth, unemployment rate, and inflation rate since 2008. As of November 2014, unemployment is at a healthy 5.8 percent compared to the 10 percent unemployment rate only five years earlier during the depths of the recession.[69] This statistic clearly attests to the Fed's ability to eliminate the recessionary gap by boosting aggregate demand through their aggressive asset purchases. With regard to GDP growth, the Gross Domestic Product of the U.S. contracted by 2.8 percent in 2009, however, as a result of QE and other government measures to help the economy, it has grown by roughly two percent each year over the past four years.[70] Also, in 2009, the U.S. inflation rate hit a dangerously low 0.03 percent, yet QE has been able to increase this number to 1.66 percent for 2014, just below the Fed target rate of two to three percent.[71, 72] Overall QE has been beneficial with respect to the market, GDP, inflation, and unemployment. Also, the QE policy implemented by the Fed as well as similar policies enacted in England and the Eurozone have helped to save the world economy from an even deeper recession.[73] However, there is still disagreement about whether QE was a waste of money; whether it had any negative impacts; and what future effects it will bring about.

Opponents of Quantitative Easing argue that it has increased income inequality and created bubbles in various markets.[74, 75] Many also say that it will cause interest rates to spike, cause reckless behavior by financial institutions, and cause future inflation.[76, 77] For example, QE1-QE3 expanded the balance sheet of the Fed from approximately $1 trillion to over $4 trillion.[78] This means that one day, the Fed is going to have to sell these assets in order to normalize its books. However, one problem with offloading trillions of dollars of assets, however, is that it could cause interest rates in the economy to spike because, whenever the Fed sells assets, it decreases the money supply, which increases interest rates in accordance with the liquidity preference model.[79]

If the interest rate increases too quickly too soon, economic growth could come grinding to a halt, and the U.S. could be thrown back into another recession with no easy escape.[80] Another fear has to do with the original culprits of the crisis: financial institutions. Some claim that the increase in the money supply caused by QE incentivizes these companies to partake in reckless behavior such as investing in volatile and risky assets because, if their investments go wrong, they can just fall back on the Fed for help. [81, 82]

Initially many economists also feared that QE would cause a harmful jump in the inflation rate of the U.S.[83] If aggregate demand increases too much as a result of the rapid boost of the money supply, then an inflationary gap forms, which is bad for the economy. Luckily, this has not happened yet since inflation rates have remained in the healthy[84] range of 1 percent to 3 percent since 2010.[85] Nonetheless, some believe that the effects of QE on inflation will not become apparent for years.[86]

Another interesting, negative effect of QE is that it has ironically created bubbles (the very problem it sought to fix) by artificially increasing asset prices in various markets such as gold.[87, 88] For example, the price for one ounce of gold rose rapidly from $869.75 in 2008 to $1,895 in 2011, but it has since fallen steadily to $1,162 as of November 10th, 2014, because the bubble has deflated.[89, 90] Some even fear that QE has created other bubbles that have not yet been detected and that could have potentially catastrophic economic effects.[91]

Finally, one of the most relevant criticisms of QE is that it has led to an increase in income inequality in the United States, which was already at problematic levels before the crisis.[92, 93] First off, when the Fed bought assets such as MBSs, agency debt, and Treasury bonds, the money that they paid went directly to banks and thus some went to the salaries of bankers, who are generally in higher earnings brackets.[94] In addition, QE caused a rapid increase in the stock market over the past five years, and, since the pool of investors in the markets is disproportionately composed of wealthy individuals, this rise in asset prices has only increased the gap between the poor and the rich because the income levels of the poor have remained somewhat stationary during the recovery while the wealthy have been thriving in the bullish market.[95, 96] For example, a study done by Emmanuel Saez of UC Berkeley estimated that 95 percent of increases in income between 2009 and 2013 were made by the top 1 percent of Americans.[97] The extent to which QE contributed to these striking numbers is under debate, but it is highly probable that the Fed's asset purchases played a part in widening this gap.[98]

The Quantitative Easing program of the Fed was able to continuously morph over the past six years in order to help the economy recover from the recession. Undoubtedly, this program had various positive effects such as lowering long-term interest rates and boosting aggregate demand. However, Quantitative Easing also had both unintended and harmful effects on the economy, for instance increasing income inequality and creating bubbles in commodities markets. Although the immediate benefits of QE seem to outweigh the short-term negative consequences, the long-term effects of the policy are yet to be known. ■

Miles Neumann is a four-year senior from Point Clear, Alabama. He is a President of Andover Economics Society and an Executive Editor of the Andover Economic Review.

Self-Inflicted Harm

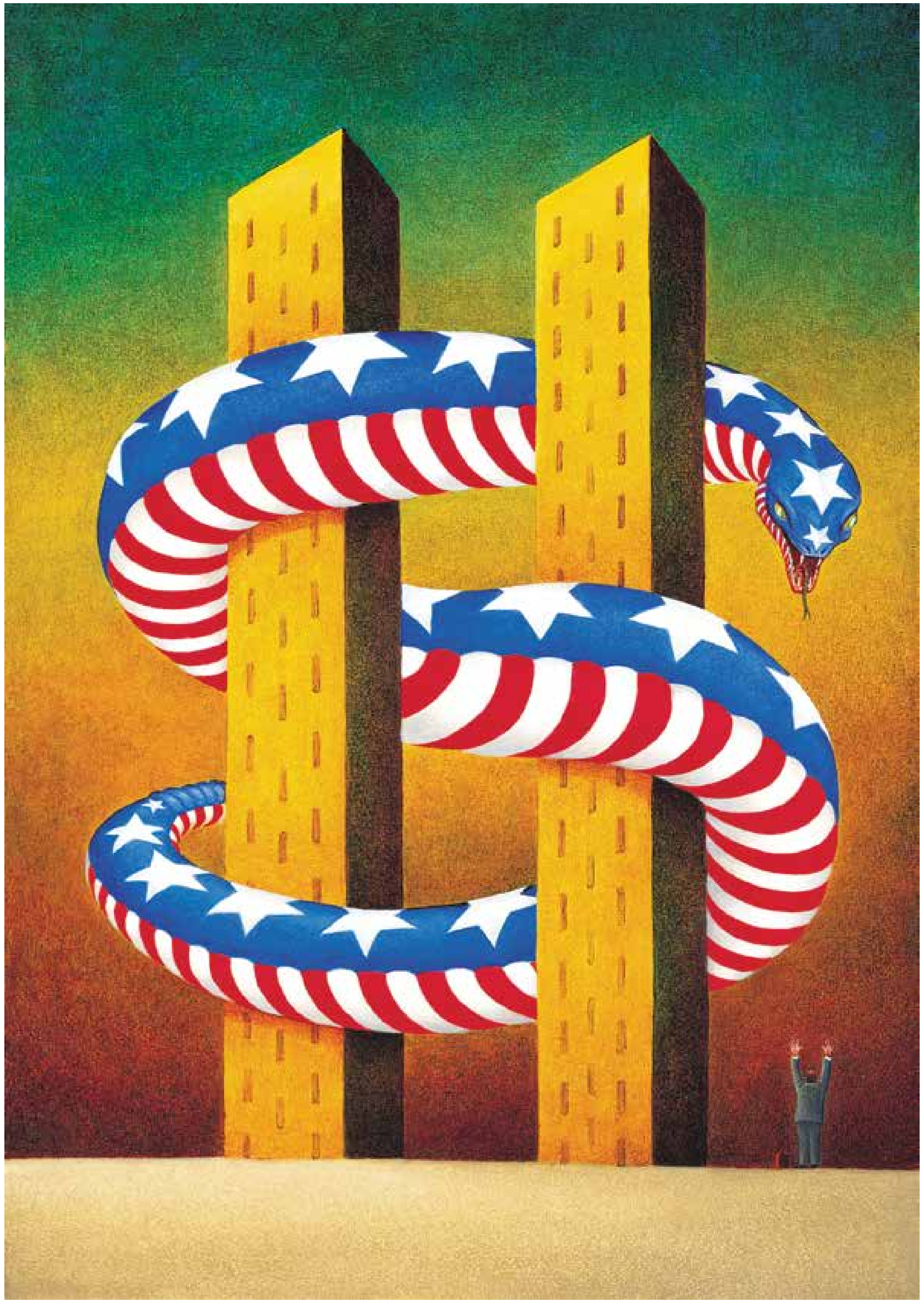
How a Broken Corporate Tax System Has Hindered The United States' Success

Carson Wardell, *Writer*

A tax inversion or a corporate inversion is when a company re-incorporates out of its founding country to avoid paying tax on foreign revenues. Tax inversions with American companies typically happen when a smaller foreign company buys out a larger American one, allowing the American corporation to change its address and subsequently lower its tax rate. Company operations usually continue with the only changes being legal technicalities and the official company headquarters. The United States, on the other hand, loses a large chunk of tax revenue which could be used, for example, to reduce the deficit or invest in American infrastructure. But the United States must not only address the problem of inversions in and of themselves, it must reform the corporate tax code in order to deal with the underlying problem of why companies choose to invert at all.

The current United States corporate tax system taxes companies, on income from all sources, at a rate of 39.1 percent, which is the highest in the Organization for Economic Co-operation and Development (OECD). Corporate income tax in America is around 60 percent higher than the OECD simple average and is around triple that of some competitors', like Ireland's.[1] With this type of disparity in taxation between the United States and the average OECD nation, the wave of tax inversions in 2014 should come as no surprise. Instead, the wave is merely a predictable response to a broken system. Tax inversions are a warning and a wake-up call for extensive corporate tax reform.

The Wall Street Journal estimated that inversions over the next decade would cost America $19.46 billion in lost tax revenues. This number does not include the one to two trillion dollars sitting in corporate offshore accounts so as not to fall in the grasps



of the American Corporate Tax System.[2] If our current tax system is left unchanged, America stands to lose more tax revenue and domestic investment than if the tax system was altered to be more competitive.

The most glaring problem with the current tax system in America is its uncompetitive tax rate. In late July, President Barack Obama, however, refused to address this issue and instead labeled tax inversions as ¨unpatriotic" and ¨technically legal." Unfortunately, dismissing inversions as simply the result of a lack of "economic patriotism" hardly addresses the true problem: America has an uncompetitive tax rate. The facts are as listed: businesses operate under a free market, focus on productivity and profitability, and are generally fairly amoral and patriotic. When businesses fail to practice these values, their competitors undercut them. Each board member has a fiduciary duty to act with the interests of the shareholders and the company; thus, they are obligated to do what is best for the company. Staying in the United States and paying up to 39 percent, when a corporation could pay a third of that following inversions, is hardly in a company's best interest. The United States cannot expect the supposed moral abhorrence of inversions to deter companies from moving abroad. Instead, it needs to create a business climate in which companies want to reside.

Take Abbott Labs (ABT), for example, the sister company of the recently inverted AbbVie Pharmaceuticals (ABBV). Abbott currently has around 70 percent of their sales abroad with most growth projected to be overseas. As of December 31, 2013, Abbott had $3.5 billion held overseas; the company only brings money back to the United States when absolutely necessary.[3] How can one expect companies like Abbott, which hold billions of dollars abroad and make most of its sales outside of the country, to remain in an America with an uncompetitive tax system? We cannot expect morals to stop companies from inverting. Morals do not stop market forces. Rather, America needs tax reform.

The first step to prevent tax inversions should be to reform the regulation regarding company buyouts. Current laws require that at least 20 percent of an American company to be bought in order for an inversion to occur; raising the minimum percentage for a company buyout to 50 percent would reduce the number of tax inversions. The more expensive cost of a buyout would nullify the company's gains from a tax inversion. Since regulating buyouts simply prevents tax inversions, more comprehensive tax reform is required to bring companies, revenue, and most importantly, jobs back to America.

In addition to having an abnormally high tax rate, the United States tax system has global reach; income from all sources, even international, is taxed. Additionally, the American corporate tax system is convoluted, full of loopholes, and grants tax breaks from NASCAR races to machinery. As a result, the United States raises less revenue through corporate taxes as a percent of GDP than the OECD average, despite its high marginal rate.[4]

Comprehensive corporate tax reform in the United States must begin with closing loopholes, a lower tax rate, and a tax system with a territorial focus rather than global reach. It seems there is some political will for a lower tax rate considering President Obama's recent proposal to cut the rate to 28 percent, right around the OECD weighted corporate tax rate average of 29 percent.[5] Closing loopholes, however, will pose a problem. While the Obama administration has lobbied to close loopholes, some of its Democratic allies and many of its Republican counterparts in Congress have been reluctant to act; special-interest groups that receive tax breaks are often the ones than fund current-day multi-million dollar campaigns. In order to effectively close loopholes, a large and idealistic goal of campaign finance reform will likely have to be met. The third priority, which involves reigning in the outreach of the United States corporate tax system from an international one to a national one, has been proposed by Republican Congressman and Chairman of the Ways and Means Committee David Camp. The proposal would ensure that only sales within the United States would be taxed, rather than all revenue across the world.[6] According to the Berkeley Research Group, a consultancy, a proposal like Mr. Camp's would directly collect over $60 billion in additional tax revenue and result in the repatriation of about $1 trillion currently held abroad. This influx of money would increase overall tax revenue, boost U.S. GDP by at least $208 billion, and create 1.46 million new jobs.[7]

As I mentioned above, the economic impact of lowering tax rates goes well beyond simply preventing tax inversions; it creates increased domestic investment, more good-paying jobs, and a higher standard of living for all Americans. S&P Capital IQ estimates that if the effective corporate tax rate is lowered to 22.4 percent, Switzerland's corporate tax rate, as many as ten million jobs would be created in the next five years as capital stored off shore is brought back to the United States. In turn, GDP growth would spike to as high as four percent per annum, nearly double that of 2013.[8] Combining a switch to lower rates with a territorial tax system, then, would provide a massive economic stimulus.

The issue of reforming corporate tax rates is not a Democratic issue or a Republican issue; it is a bipartisan issue. When we reform the corporate tax rate to be more competitive, we keep businesses in the United States, bring in more tax revenue more evenly, and, above all, build a stronger middle class. These are goals that all Americans should applaud. Let's make corporate tax reform a reality. ■

Carson Wardell is a three-year Upper from Lake Forest, Illinois. He is President of the Andover Finance Club and an Associate Board Member of Andover Economics Society.

FATCA

A Damaging Effort to Tax Foreign Accounts

Frank Geng, *Writer*

Since its implementation in March of 2010 as part of America's new tax evasion policy, the Foreign Account Tax Compliance Act (FATCA) has fallen out of grace with many of its supporters. Passed as part of the Hiring Incentives to Restore Employment Act, FATCA ensures that all foreign financial institutions, mostly banks, accurately and faithfully report the assets of their American clients. If these institutions fail to do so, they face a steep 30 percent withholding tax. At first glance, this new enforcement power of the US seems to address the tax evasion issue in a straightforward manner. Though upon closer inspection, FATCA may open more holes than it tries to close.

A primary concern among many opponents, mainly Republicans, is the apparent extraterritorial nature of the law. A recent issue of *The Economist* noted, "In essence, FATCA turns foreign banks and other financial institutions into enforcement arms of America's Internal Revenue Service".[1] And it's true; given the weakening and flight of American capital over these past years, it looks more like diplomatic whiplash than an attempt at domestic stabilization. The issue of extraterritoriality is not, however, the chief drawback of the law. Rather, FATCA faces the most problems when viewed from a technical standpoint.

Though 77,000 financial firms and 80 countries have already agreed to comply, the legislation will encounter a huge implementation issue: the categorization of firms and people. Lawmakers are still struggling with how to define these "financial institutions" given the vast amount and array of trusts, firms, banks, and other entities that exist. Similarly, the current definition of American or "US person" remains ambiguous. It will include as expected: citizens, current and former residents of the US, but also people with considerable "economic ties" to the nation.[2] What that will mean for the roughly 7 million "US persons" abroad is a slew of complications with their current banking situations, and even the possibility of being wrongly affected.

This new hassle will prompt logical challenges. In years before the implementation of the new law, only a few hundred people a year renounced American citizenship. In 2013, nearly 3,000 people gave up their American citizenship or green card, while almost 1,000 have done so in only the first quarter of this year.[3] Other strategies that some companies have used over these years to avoid American taxes include overseas mergers and corporate inversion. As many companies operate both in the country of their incorporation and in the countries of operation, they will often look towards countries with lower tax rates and more flexible corporate governance. In 1998, for example, years of millions of dollars of losses, Fruit of the Loom's CEO Bill Farley, restructured the clothing company into an offshore entity in the Cayman Islands, reducing their 28 percent corporate tax rate to only 11 percent.[4] Similarly, American food franchise Burger King has just this summer proposed a buyout of Canada's Tim Horton's who enjoys Canada's gentler 26.5 percent tax rate compared to the U.S.'s 35 percent.[5]

On the other hand, foreign banks may just become reluctant to do business with Americans for fear of nausea-inducing paperwork or tax penalties. Even more severe is the decision by many big European financial institutions to divest from the United States as a whole. And even if these institutions comply with the law, the IRS will certainly face issues processing the enormous amount of information it will soon be gathering, especially after recently trimming their workforce.[6]

The IRS perhaps faces its largest challenge in trying to generate enough revenue to cover the massive implementation fees, compliance costs, and capital flight. Reports by Congress estimate that over a ten year period, FATCA will bring in about $8.7 billion, while the long-term implementation and enforcement costs will sum to roughly $40 billion. And given the fact that cracking down on tax evasion and tax-havens will usually require more than just asking for the names of American clients (who almost always will cover their tracks with layer after layer of shell corporations), the longer-term benefits may never recover the costs.

Still, the intention behind FATCA is one of renewed focus in what President Obama calls, "economic patriotism". After all, the US loses about $100 billion every year from hidden overseas taxable assets; further leniency on fat-cats who hide in Geneva or Zurich will only embolden those thinking about Swiss bank accounts.[7] What is needed is something more like the HIRE Act, FATCA's parent legislation, which incentivizes the growth of the American economy by providing tax breaks to corporations that hire more workers. FATCA will, in the end, draw much attention to the fact that the U.S. itself isn't particularly compliant with the wishes of other countries searching for hidden assets. For instance, overseas companies such as Taiwan's Acer or France's Alcatel-Lucent have flocked to the U.S. and taken refuge in Wyoming or Texas (both of which boast across-the-board low tax rates and a zero-percent corporate income tax).[8] Perhaps, then, the U.S. should start rewarding those who keep their money within borders, instead of trying to beat-up those who didn't. ■

Frank Geng is a four-year senior at Phillips Academy from Andover, Massachusetts. He is a student in History-521: Microeconomics.

"We're the Party of Ideas"

Paul Ryan on How to Make the Budget Sexy

Interview conducted by Tennyson Teece, Eric Lawrence, and Kailash Sundaram

Born and raised in the community of Janesville, Congressman Paul Ryan is a fifth-generation Wisconsin native who has served Wisconsin's 1st District since 1999. Congressman Ryan was the Republican Party nominee for Vice President in the 2012 Presidential Election.

He is currently the Chairman of the House Budget Committee, where he advocates for fiscal discipline and small government.

Beginning January 3rd, 2015, Ryan will become chair of the House Ways and Means Committee, which has jurisdiction over tax policy, Social Security, health care and trade laws.

Congressman Ryan has put forward a specific plan to tackle the looming US fiscal crisis, driven by the explosion of entitlement spending. "The Path to Prosperity" aims to spur job creation, reduce borrowing, and thus lift the crushing burden of debt.

Congressman Ryan is a graduate of Joseph A. Craig High School in Janesville and earned a degree in economics and political science from Miami University in Ohio.

Transcript:

Tennyson Teece: **Given the recent reduction in the deficit, there's a sense that the debt and deficit problem has subsided. Clearly, though, the structural budgetary imbalance is one of the most challenging issues facing the United States going forward, and the fundamental problem I don't think has been addressed at all. How do we get American people to realize this and support the necessary action now, despite its unpopularity, rather than waiting until it's too late, until we have to make decisions we don't want to?**

Congressman Ryan: Really good question. First of all you're right. Just because the annual deficit has gone down from almost catastrophic levels, the problem still has clearly not been dealt with. We've got massive deficits and debt in the horizon, because of baby-boomers retiring. By 2018, the deficit starts taking back off, and we're back into trillion dollar ranges. The real answer is, if you deal with this problem now, you can phase in reforms prospectively. The biggest programs being age-based programs like Medicare and Social Security, and some of Medicaid.

So, if you phase in reforms now that are more patient-centered, more market-based, you don't have to change or affect the benefits for anyone in or near retirement, who already organized their lives over the current promises government has made them. You can give younger people programs, which right now are going to be bankrupt for them when they retire, more certainty that you'll have solvency, and better programs that they can rely on.

So I think the key is to translate or to communicate how it's smart to go now. It means people who are already in retirement or near retirement see no changes, and it gives younger people a chance in time to prepare for programs that'll be more reliable, more solvent. The alternative is, do nothing, and then you have a crisis, then you have problems, and then you're cutting benefits in real time to real people who have already retired, who have already organized their lives around these promises. That would be government reneging of the promises it made to people.

Eric Lawrence: **What captures young American voters' attention, particularly due to our sensationalist media, are social issues. It's often what they come out to vote on. How can the Republican Party convince more young voters to care more about the budget and fiscal issues instead, given that they aren't exactly sexy topics. How does the Republican Party plan to win over such voters without fundamentally reevaluating or at least moderating its stance on social issues?**

Congressman Ryan: We're a big tent party. We have within our party leaders of good standing, who have different positions on these different social issues. For instance, Scott Brown was our nominee up in New Hampshire, who had very moderate social issues views. We have Susan Collins, we have Mark Kirk, we have governors across the country who have moderate stances on some of these issues. The point being, we all rally around the tallest pole in our big tent party, which is: economic liberty, limited government, free enterprise, opportunity, upward mobility, the constitution. These are the things we agree on, these are the things we fight for, that we have consensus on. We have within our party an agreement to be civil with one another, and agree to disagree on some of those issues when those moments arise. You don't see that in the other party. You see a purging of different views in those other parties, not a tolerance of different views. You see a tolerance of different views within our party. But the first point - which is the most important one - is expanding opportunity. Economic mobility and opportunity is really the cornerstone of what we're talking about here, and that's the fiscal and economic issues. That is where we show we're the party of ideas. That is where we have reforms, whether it's getting people from welfare to work, whether it's free market education and healthcare reforms to get at the rising cost of these things, whether it's producing a healthier economy so that people coming out of school have greater opportunity.

Right now, young people don't see that, and I think we are a party that is showing those answers. I think it's economic opportunity, or lack thereof, that is something that we can really translate into attracting younger people. I think it's the limited government aspect, as well. I think people want to be free. They want to maintain their liberties. If you have a progressive state where you have a government that believes it can now grant people rights - rights aren't natural, they're government granted - it's a government that tells you what to do and how to live your life. You can get in this a couple, not many, a couple of social issues where people have difference of opinions on those, and we tolerate their views on those.

Kailash Sundaram: **What advice do you have for young aspiring politicians and do you have any tips for getting elected to office or how to be successful in office?**

Congressman Ryan: What I would do is read, understand who you are and what you believe. Early on, at an early age, volunteer and intern on campaigns and in-office of an elected official, so that you can understand what it really is like. I think there's this romanticized vision or version in people's minds of what these jobs are all about. What happens is, people commit to their undergraduate degree, they commit to their major, and then they come out of school. Then they go for the first time and get involved, and they find out that it really isn't exactly what they thought it was and it's too late.

So I always tell young people, get involved early on, volunteer or work on a campaign, volunteer or intern in an office, so you can see the nitty gritty of it, so you can see the day-to-day. So you can see that really, it's not about glamour or press or things like that. It's really about a lot of hard work. And see if that's something you like, if that's something that you want to persist through. Then you'll at least go into it with eyes wide open with rational expectations. That to me is the key thing.

But the other part, to the first point I made, is if you want to read, read the classics. Read different points of view - read the left, read the right. See who you are, see what you believe. At a young age, do this: don't think you've got it all figured out. You guys are at Andover, you're very smart young people, but you don't know everything. You've got a lot to learn.

Don't be one of those young people who thinks they've got it all figured out and they know it because they read it in some book. Know that you don't have all the wisdom that there is to have. You can learn a lot from people who are older, who have been through some of these things before. So take life on with a little bit of humility and respect for other views, and treat people with civility, and you will go a whole lot further in life than you otherwise would. ■

Creating Another 'Morning in America'

Tom Campbell, *former US Congressman*
Tennyson Teece, *Editor in Chief*

Burger King is one of the most recent American companies to propose reincorporation outside the US in order to lower its taxes. These moves are called corporate inversions, and they have been criticized as being economically unpatriotic by Treasury Secretary Jack Lew.[1]

However, companies would be far less motivated to reincorporate outside the US if US corporate taxes were not imposed on all the earnings of a US corporation, even when made elsewhere than in the US. The inversion strategy does not diminish the taxes a company has to pay on its earnings in America one penny. It saves a company money only because America insists on taxing a company's earnings wherever they are made. No other country does that, and America does it only to American companies.[2] Hence, US companies have a strong incentive to reincorporate overseas.

The inverse is also true: if we lowered US taxes on corporations, more would start up here, fewer would leave, and we would have more investment and employment in America. However, it is very hard politically to lower taxes on US corporations, without being accused of favoring the wealthy and powerful. The left argues that corporations pay dividends to wealthy people, so that it is only "fair" to tax their profits.

Corporations pay 35 percent marginal tax in the US, the highest rate in the developed world[3] (state and local taxes can add up to ten percent more).[4, 5] Their dividends to the wealthiest Americans are taxed at 22 percent. So, if you are a shareholder in a company that pays the top rate (for example many consulting firms), you receive 78 percent of 65 percent of the company's earnings that it decides to pay as a dividend. That means you keep 49.3 percent of the earnings, an effective tax rate of 50.7 percent! That's higher than the top marginal tax rate on ordinary income of 39.6 percent.[6]

The left further argues that the wealthy should pay more because they are wealthy. President Obama has famously said that the wealthiest Americans needed pay their "fair share" of taxes. According to Congress' Joint Committee on Taxation, it turns out that this year those making over $100,000 will pay 95 percent of all personal income taxes in the US.[7] If that's unfair, what would be "fair"? 100 percent?

Some on the left say that, figuring in the Social Security, Medicare, and unemployment insurance taxes, the percentage of all taxes paid by the wealthy is below 95 percent. They're right: it's 76 percent. Those making over $100,000 earn 60 percent of all the income in America, and they pay 76 percent of all the taxes.[8] Is that "fair"?

The left has one more argument: people with lower incomes spend a higher percentage of their income, while wealthier people save and invest a higher percentage of their income. The savings rate of the wealthiest 1 percent of Americans was 37 percent in the second quarter of 2013.[9] The overall savings rate was around 5 percent during this period.[10] Instead of investing this money, though, wealthy Americans, and corporations for that matter, are holding large amounts of liquid assets,[11] in part because of policy uncertainty.[12]

Individuals' tendency to consume, on the other hand, is much less susceptible to swings in sentiment. Perhaps that's why John Maynard Keynes convincingly argued that household spending drives the economy; it now constitutes 70 percent of the US economic activity.[13] Since a tax cut to investors would result in less money circulating through the economy compared to a tax cut to consumers, the left argues it would help invigorate our economy to tax the wealthy even more, and the less wealthy less.

How about a compromise? Grant the left its argument that what our economy needs now is a boost in consumption from more disposable income for working Americans. But grant the right its argument that taxing corporations drives them overseas, and kills jobs in America. Combine the two ideas with a proposal to lower the tax that both employers and employees pay. That tax is the Federal Insurance Contributions Act or "FICA" that pays for Medicare and Social Security. For many low income Americans, it is the only federal tax they pay, since workers making below the median income oftentimes pay no federal income tax.[14] Lowering their FICA tax will give them more disposable income. Lowering the employer's FICA tax will make it cheaper to do business in America (just like lowering the corporate income tax would), but will do so exactly in proportion to the amount of salary the employers pay in America.

More people would be hired as companies had more money to spend on doing so. Many companies would return and some foreign companies might choose to locate in America too. US companies that have refrained from spending in the US that portion of their earnings made overseas could bring it back to the US and spend it here.

If the left and right were both correct, economic growth would take off, allowing us to eventually lower taxes on everyone as the tax base grew faster even as the rate dropped. That's exactly what happened in the 1980's, and it could happen again. ■

Tom Campbell is a former five-term US Congressman from California's 12th and 15th Districts, a former Dean of the Haas School of Business, and a US Senate Candidate from California in the 2010 Republican Primary. Mr. Campbell also served in the Reagan Administration. He is currently the Dean of the Dale E. Fowler School of Law at Chapman University.

Tennyson Teece is a four-year senior at Phillips Academy from Berkeley, California. He is the CEO of Andover Economics Society and the Editor in Chief of the Andover Economic Review.

The GOP's Problem with Hispanic Voters

Joshua Henderson, *Writer*

Recent events surrounding the border crisis and President Obama's push for his immigration agenda have made the United States' political reality all the more clear: racial minorities will shape the future of U.S. politics. After largely failing to pass a bill addressing the border crisis that caused an influx of tens of thousands of child refugees across the U.S.-Mexico border and the potential legislative clash between Obama and Congressional Republicans, we should be reminded of the capacity the Hispanic population has to dictate agendas and dramatically alter the United States' political landscape. A study conducted by the Pew Research Center, a nonpartisan fact tank based in Washington D.C., projects that the Latino population will make up almost a third (29 percent) of the U.S. population by 2050. Meanwhile, the non-Hispanic, White population will dwindle to just 47 percent of the U.S. population by the same time.[1]

While the exponential growth of the Hispanic population in the U.S. manifests itself in many ways, including the current immigration crisis, the effects of that growth become most evident during national elections, where both parties are making protracted efforts to gain favor with the Hispanic voting bloc. Recently, however, the Democratic Party, has proven more successful in its endeavors to attract Hispanic voters. Just when it seemed the GOP was beginning to gain traction with its Latino constituents (Bush carried 35 percent and 40 percent of the Hispanic vote in the 2000 and 2004 elections, respectively), John McCain only managed to carry a mere 31 percent of the Hispanic vote in 2008. In the 2012 election, Mitt Romney received only 27 percent of the vote compared to Barack Obama's 71 percent. Although there have been some Republican successes (Senator Ted Cruz carried 40 percent of the Hispanic vote in his 2012 victory), the gap between the GOP and Hispanic voters continues to grow.[2,3]

The irony of this trend is apparent – the Latino population is, on the whole, ideologically aligned with the Republican Party. More religious, entrepreneurial (a third of small business start-ups in 2013 were headed by a Latino), and staunchly anti-abortion (53 percent of Hispanics think abortions should be illegal while only 40 percent of the general population feels the same way) than the American population as a whole, the Hispanic voting bloc seems to be comprised of both socially and fiscally conservative constituents. In fact, only 30 percent of Hispanics identify as liberal, while 32 percent identify as conservative.[4] Why, then, do Republicans fail to appeal to Hispanic voters? The answer is simple: immigration.

Whether warranted or not, it is common opinion that the GOP is opposed to achieving meaningful legislative reform regarding immigration. The mainstream Republican stance on illegal immigration in recent years has been one of hostility. From championing of the E-Verify program at a national level and increased efforts to block illegal immigrants to firmly opposing amnesty provisions in immigration reform, the Republican establishment has alienated the Hispanic population and lost sight of what every immigrant wants most: a path to legal citizenship.

A recent poll conducted by Latino Decisions found that among Hispanic voters, 54 percent would be likely to vote for a Republican presidential candidate in 2016 who played a key role in passing a bill that would grant undocumented immigrants a chance at gaining legal citizenship. If the same candidate did not help pass such a bill, only 30 percent of the same respondents would give their vote to the candidate. Rand Paul articulated the reality conveyed statistically in the poll above, claiming that "[Latinos are] not going to care whether we go to the same church, or have the same values, or believe in the same kind of future of our country until we get beyond that [immigration]."[5]

Yet, Republicans in the House of Representatives could not pass a bill to address even the United States' most pressing concern at the time, the border crisis, before Congress' summer recess. Instead of forging the path towards achieving comprehensive immigration reform with the potential to alleviate the stigma that prevents Hispanics from voting for the GOP, Republicans have failed to make any headway whatsoever. It seems Republicans have placed a greater value on prolonging their petty quarrel with Barack Obama than on gaining the support of the fastest-growing racial demographic in the United States. The repercussions of neglecting to reconcile with the Hispanic population that Republicans could potentially face will be far greater in the 2016 elections. If Republicans want to save their party's future and avoid becoming a permanent political minority, the issue of immigration cannot be discarded any longer. Republicans need to take the lead on passing immigration reform in Congress, and they need to do it now. ■

Joshua Henderson is a four-year senior at Phillips Academy from Raleigh, North Carolina.

Endnotes:

A New Age of Investing Crowdfunding 101
Eric Lawrence

1 *"The Statue of Liberty and America's Crowdfunding Pioneer," BBC News, accessed July 24, 2014, http://www.bbc.com/news/magazine-21932675.*
2 *"Joseph Pulitzer," National Park Service, accessed July 24, 2014, http://www.nps.gov/stli/historyculture/joseph-pulitzer.html/index.htm.*
3 *Ibid.*
4 *Chance Barnett, "The Crowdfunder's Guide to General Solicitation and Title II of the JOBS Act," Forbes, last modified September 23, 2013, accessed July 23, 2014, http://www.forbes.com/sites/chancebarnett/2013/09/23/the-crowdfunders-guide-to-general-solicitation-title-ii-of-the-jobs-act/.*
5 *Ibid.*
6 *Ibid.*
7 *Ibid.*
8 *Jumpstart Our Business Startups Act, H.R. 3606 (2012). Accessed July 25, 2014. http://www.gpo.gov/fdsys/pkg/BILLS-112hr3606enr/pdf/BILLS-112hr3606enr.pdf.*
9 *"Accredited Investors," U.S. Securities and Exchange Commission, accessed July 23, 2014, http://www.sec.gov/answers/accred.htm.*
10 *Joanna Schwartz to U.S. Securities & Exchange Commission, memorandum, "Re: Proposed Rule Amendments to Regulation D, Form D and Rule 156 Under the Securities Act File No. S7-06-13," September 23, 2013, http://www.sec.gov/comments/s7-06-13/s70613-400.pdf.*
11 *"The Ultimate Crowdfunding Guide," Crowdfund Insider, http://www.crowdfundinsider.com/the-ultimate-crowdfunding-guide/.*
12 *Ibid.*
13 *Ibid.*
14 *Ibid.*
15 *"How Does Peer Lending Work," Lending Club, accessed July 26, 2014, https://www.lendingclub.com/public/how-peer-lending-works.action.*
16 *Ibid.*
17 *"How it Works," Fundrise, accessed July 26, 2014, https://fundrise.com/investing-with-fundrise.*
18 *"Why Invest in Earlyshares?," Earlyshares, accessed July 25, 2014, http://www.earlyshares.com/learn-more/overview.*
19 *"Executive Team," Earlyshares, accessed July 25, 2014, http://www.earlyshares.com/learn-more/about/executive-team.*
20 *Joanna Schwartz, "Q&A with EarlyShares CEO on the Future of Crowdfunding," interview by Nancy Dahlberg, Miami Herald, last modified July 21, 2014, accessed July 25, 2014, http://www.miamiherald.com/2014/07/20/4243889/qa-with-joanna-schwartz-ceo-of.html.*
21 *"Who We Are," Young Presidents' Organization, accessed July 25, 2014, http://www.ypo.org/about/.*
22 *Joanna Schwartz, "Fund-Raising the Roof," interview by Julia Chatterley,Worldwide Exchange, CNBC, June 17, 2014, produced by CNBC Europe.*

The Flaws of Popular Stock Indicators
Part One
Miles Neumann

1 *G. B. Stewart, III, The Quest for Value: A Guide for Senior Managers (New York, NY: HarperBusiness, 1991), 24-35.*
2 *David Thomas, "Why Free Cash Flow Is Better Than Earnings," Shares and Stockmarkets, July 29, 2013, accessed August 1, 2014, http://sharesandstockmarkets.com/free-cash-flow-v-earnings/.*
3 *G. B. Stewart, III, The Quest for Value: A Guide for Senior Managers (New York, NY: HarperBusiness, 1991), 24-35.*
4 *David Thomas, "Why Free Cash Flow Is Better Than Earnings," Shares and Stockmarkets, July 29, 2013, accessed August 1, 2014, http://sharesandstockmarkets.com/free-cash-flow-v-earnings/.*
5 *G. B. Stewart, III, The Quest for Value: A Guide for Senior Managers (New York, NY: HarperBusiness, 1991), 24-35.*
6 *Ibid., p.35*
7 *Ibid., p.63*
8 *"Follow-On Offering," Investopedia, accessed August 01, 2014, http://www.investopedia.com/terms/f/followonoffering.asp.*
9 *Ibid.*
10 *Ibid.*
11 *Richard Loth, "Why Do Share Prices Fall after a Company Has a Secondary Offering?," Investopedia, accessed August 01, 2014, http://www.investopedia.com/ask/answers/07/*

secondary_offering.asp.

[12] G. B. Stewart, III, The Quest for Value: A Guide for Senior Managers (New York, NY: HarperBusiness, 1991), 35-37.

[13] Ibid.

[14] Ibid.

[15] Ibid.

[16] Ibid.

[17] Ibid.

[18] Ibid.

[19] "Follow-On Offering," Investopedia, accessed August 01, 2014, http://www.investopedia.com/terms/f/followonoffering.asp.

[20] G. B. Stewart, III, The Quest for Value: A Guide for Senior Managers (New York, NY: HarperBusiness, 1991), 35-37.

The Flaws of Popular Stock Indicators Part Two
Miles Neumann

[1] "Earnings Growth," BusinessDictionary.com, accessed November 22, 2014, http://www.businessdictionary.com/definition/earnings-growth.html.

[2] G. B. Stewart, III, The Quest for Value: A Guide for Senior Managers (New York, NY: HarperBusiness, 1991).

[3] Ibid.

[4] Ibid.

[5] Ibid.

[6] Ibid.

[7] Ibid.

[8] Ibid.

[9] Ibid.

[10] Ibid

[11] Ibid.

[12] "Dividend Payments: Dividend Policy, Preferred Shares and Common Stock," The Financial Pipeline, accessed August 07, 2014, http://www.finpipe.com/dividends-payments/.

[13] G. B. Stewart, III, The Quest for Value: A Guide for Senior Managers (New York, NY: HarperBusiness, 1991).

[14] "Dividend Payments: Dividend Policy, Preferred Shares and Common Stock," The Financial Pipeline, accessed August 07, 2014, http://www.finpipe.com/dividends-payments/.

[15] "Dividend Yield," Investopedia, accessed August 07, 2014, http://www.investopedia.com/terms/d/dividendyield.asp.

[16] G. B. Stewart, III, The Quest for Value: A Guide for Senior Managers (New York, NY: HarperBusiness, 1991).

[17] Ibid.

[18] Ibid.

[19] Ibid.

[20] Ibid.

[21] Ibid.

[22] Ibid.

[23] Ibid.

[24] Ibid.

[25] Ibid.

[26] Ibid.

How General Motors Got Away With Murder
Natalia Suarez

[1] "GM Recall Costs Rise to $2.7 Billion as Lawsuits Multiply." Daily Herald. N.p., 27 Oct. 2014. Web. 01 Nov. 2014.

[2] Tanya Basu, "Timeline: A History Of GM's Ignition Switch Defect." NPR. March 31, 2014. Accessed November 2, 2014. http://www.npr.org/2014/03/31/297158876/timeline-a-history-of-gms-ignition-switch-defect.

[3] "GM Ignition Switch Recall Costs Reach $2.7 Billion." Claims Journal News. October 31, 2014. Accessed November 01, 2014. http://www.claimsjournal.com/news/national/2014/10/31/257090.htm.

[4] "GM Recall and Faulty Ignition Switch - Consumer Reports Policy & Action." Consumer Reports.org. March 2014. Accessed November 01, 2014. http://consumerreports.org/cro/2014/03/gm-recall-raises-concerns-about-warning-systems-for-auto-safety/index.htm.

[5] David Shepardson, "GM Fund Approves 30 Death Claims." The Detroit News. October 27, 2014. Accessed November 01, 2014. http://www.detroitnews.com/story/business/autos/general-motors/2014/10/27/gm-death-claims-approved-hit/17998733/.

[6] Tanya Basu, "Timeline: A History Of GM's Ignition Switch Defect."

[7] Thomas, Phillip. "GM Knew About Deadly Defect For Nearly A Decade, Dismissed It In Technical Service Bulletin - The Truth About Cars." The Truth About Cars. February 20, 2014. Accessed November 02, 2014. http://www.thetruthaboutcars.com/2014/02/gm-knew-about-deadly-defect-for-a-decade/.

[8] Tanya Basu, "Timeline: A History Of GM's Ignition Switch Defect."

[9] Ibid.

[10] Ibid.

[11] David Shepardson, "GM Fund Approves 30 Death Claims." The Detroit News. October 27, 2014. Accessed November 01, 2014. http://www.detroitnews.com/story/business/autos/general-motors/2014/10/27gm-death-claims-approved-hit/17998733/.

The North American Energy Renaissance
This is part one of a two part series on North American competitiveness.
Tennyson Teece

[1] "Seconds Out, Round One." The Economist, November 20, 2014. Accessed November 23, 2014. http://www.economist.com/news/21631838-first-time-pemex-will-face-competition-mexican-oil-seconds-out-round-oe?zid=298&ah=0bc99f9da8f185b2964b6cef412227be.

[2] "LNG: A Liquid Market." The Economist, July 14, 2012. Accessed November 23, 2014. http://www.economist.com/node/21558456.

[3] "Deep Sigh of Relief." The Economist, March 16, 2013. Accessed November 23, 2014. http://www.economist.com/news/special-report/21573279-shale-gas-and-oil-bonanza-transforming-americas-energy-outlook-and-boosting-its.

[4] U.S. Department of Energy. "Natural Gas Weekly Update." U.S. Energy Information Administration. Last modified November 19, 2014. Accessed November 23, 2014. http://www.eia.gov/naturalgas/weekly/.

[5] "Deep Sigh of Relief." The Economist.

[6] The Economist. "America's Bounty: Gas Works." July 14, 2012. Accessed November 23, 2014. http://www.economist.com node/21558459.

[7] "Deep Sigh of Relief." The Economist.

[8] The Economist. "American Industry and Fracking: From Sunset to New Dawn." November 16, 2013. Accessed November 24, 2014. http://www.economist.com/news/business/21589870-capitalists-not-just-greens-are-now-questioning-how-significant-benefits-shale-gas-and.

[9] "Deep Sigh of Relief." The Economist.

[10] The Economist. "American Industry and Fracking: From Sunset to New Dawn."

[11] U.S. Department of Energy. "Bakken Fuels North Dakota's Oil Production Growth." U.S. Energy Information Administration. Last modified August 4, 2014. Accessed November 24, 2014. http://www.eia.gov/todayinenergy/detail.cfm?id=17391.

[12] Smith, Grant. "U.S. Seen as Biggest Oil Producer after Overtaking Saudi Arabia." Bloomberg. Last modified July 4, 2014. Accessed November 24, 2014. http://www.bloomberg.com/news/2014-07-04/u-s-seen-as-biggest-oil-producer-after-overtaking-saudi.html.

[13] "The New Economics of Oil: Sheikhs v Shale." The Economist, December 6, 2014. Accessed December 13, 2014. http://www.economist.com/news/leaders/ 21635472-economics-oil-have-changed-some-businesses-will-go-bust-market-will-be.

[14] "US Oil Settles at $57.81 per Barrel, the Lowest since May 2009." CNBC. Last modified December 12, 2014. Accessed December 13, 2014. http://www.cnbc.com/id/102262608.

[15] The Economist. "Star-spangled Spenders." January 4, 2014. Accessed November 24,2014. http://www.economist.com/news/united-states/21592643-americans-cool-imports-current-account-deficit-shrinks-star-spangled-spenders.

[16] U.S. Department of Energy. "AEO 2014 Early Release Overview." U.S. Energy Information Administration. Last modified December 16, 2013. Accessed November 24, 2014. http://www.eia.gov/forecasts/aeo/er/executive_summary.cfm.

[17] The Economist. "America's Bounty: Gas Works."

[18] "The New Economics of Oil: Sheikhs v Shale." The Economist, December 6, 2014. Accessed December 13, 2014. http://www.economist.com/news/leaders/21635472-economics-oil-have-changed-some-businesses-will-go-bust-market-will-be.

[19] The Economist. "American Industry and Fracking: From Sunset to New Dawn."

[20] The Economist. "Star-spangled Spenders."

[21] Government of Alberta. "Facts and Statistics." Alberta Energy. Accessed November 24, 2014. http://www.energy.alberta.ca/oilsands/791.asp.

[22] "Power Sector CO2 Emissions Sensitive to Policy Changes and Natural Gas Supply." U.S. Energy Information Administration. Last modified June 9, 2014. Accessed November 24, 2014. http://www.eia.gov/todayinenergy/detail.cfm?id=16611.

[23] U.S. Department of Energy. "AEO 2014 Early

Release Overview."

[24] Bredehoeft, Gwen. "Renewable Electricity Projections Show Growth under Alternative Assumptions in AEO2014." U.S. Energy Information Administration. Last modified April 29, 2014. Accessed November 24, 2014. http://www.eia.gov/forecasts/aeo/elec_proj.cfm.

[25] "U.S. Energy-Related Carbon Dioxide Emissions, 2013." U.S. Energy Information Administration. Last modified October 21, 2014. Accessed November 24, 2014. http://www.eia.gov/environment/emissions/carbon/.

[26] The Economist. "America's Bounty: Gas Works."

[27] "Estimated Health Effects from U.S. Coal-Fired Power Plant Emissions." Rocky Mountain Institute. Accessed November 24, 2014. http://www.rmi.org/RFGraph-health_effects_from_US_power_plant_emissions.

[28] Wald, Matthew L. "Fossil Fuels' Hidden Cost Is In Billions, Study Says." The New York Times, October 19, 2009. Accessed November 24, 2014. http://www.nytimes.com/2009/10/20/science/earth/20fossil.html?_r=0.

[29] "Air Emissions." U.S. Environmental Protection Agency. Accessed November 24, 2014. http://www.epa.gov/cleanenergy/energy-and-you/affect/air-emissions.html.

[30] "European Worries: Sorting Frack from Fiction." The Economist, July 14, 2012. Accessed November 24, 2014. http://www.economist.com/node/21558458.

[31] Seifer, Ben. "DOE Report Finds No Evidence of Hydraulic Fracturing Contaminating Water." Energy in Depth. Last modified September 17, 2014. Accessed November 24, 2014.

[32] "European Worries: Sorting Frack from Fiction." The Economist.

The Federal Reserve and Quantitative Easing
Miles Neumann, Executive Editor

[1] Polyana Da Costa, "Financial Crisis Timeline: Collapse and Bailout," Financial Crisis Timeline: Collapse and Bailout, 2014, accessed October 16, 2014, http://www.bankrate.com/finance/federal-reserve/financial-crisis-timeline.aspx.

[2] "History of the Federal Reserve," Federalreserveeducation.org, 1913: The Federal Reserve System is Born, accessed October 15, 2014, http://www.federalreserveeducation.org/about-the-fed/history/.

[3] Neil Irwin, "The Federal Reserve Was Created 100 Years Ago. This Is How It Happened.," Washington Post, December 21, 2013, accessed November 13, 2014, http://www.washingtonpost.com/blogs/wonkblog/wp/2013/12/21/the-federal-reserve-was-created-100-years-ago-this-is-how-it-happened/. and

[4] Steven Perlberg, "14 Questions About The Federal Reserve You Were Too Embarrassed To Ask," Business Insider, September 18, 2013, This seems complicated and arbitrary. Why do we even have a Federal Reserve?, accessed October 17, 2014, http://www.businessinsider.com/what-does-the-federal-reserve-do-2013-9.

[5] Neil Irwin, "The Federal Reserve Was Created 100 Years Ago. This Is How It Happened.," Washington Post, December 21, 2013, accessed November 13, 2014, http://www.washingtonpost.com/blogs/wonkblog/wp/2013/12/21/the-federal-reserve-was-created-100-years-ago-this-is-how-it-happened/.

[6] Ibid.,

[7] Steven Perlberg, "14 Questions About The Federal Reserve You Were Too Embarrassed To Ask," Business Insider, September 18, 2013, So the point of the Fed is to control economic panics? How?, accessed October 17, 2014, http://www.businessinsider.com/what-does-the-federal-reserve-do-2013-9.

[8] Ibid.,

[9] "What Is the FOMC and When Does It Meet?," Federalreserve.gov, March 18, 2014, accessed November 13, 2014, http://www.federalreserve.gov/faqs/about_12844.htm.

[10] Steven Perlberg, "14 Questions About The Federal Reserve You Were Too Embarrassed To Ask," Business Insider, September 18, 2013, Expanded? What does the Fed do now?, accessed October 17, 2014, http://www.businessinsider.com/what-does-the-federal-reserve-do-2013-9.

[11] "Reserve Requirements," Federalreserve.gov, November 5, 2013, accessed November 13, 2014, http://www.federalreserve.gov/monetarypolicy/reservereq.htm.

[12] Steven Perlberg, "14 Questions About The Federal Reserve You Were Too Embarrassed To Ask," Business Insider, September 18, 2013, Expanded? What does the Fed do now?, accessed October 17, 2014, http://www.businessinsider.com/what-does-the-federal-reserve-do-2013-9.

[13] Steven Perlberg, "14 Questions About The Federal Reserve You Were Too Embarrassed To Ask," Business Insider, September 18, 2013, So what monetary measure can the Federal Reserve take if rates are at zero?, accessed October 17, 2014, http://www.businessinsider.com/what-does-the-federal-reserve-do-2013-9.

[14] Kimberly Amadeo, "What Is Quantitative Easing?," About.com, February 27, 2014, Definition, accessed October 16, 2014, http://useconomy.about.com/od/glossary/g/Quantitative-Easing.htm.

[15] Joseph Gagnon et al., Large-Scale Asset Purchases by the Federal Reserve: Did They Work, report no. 441, March 2010, accessed November 13, 2014, http://www.newyorkfed.org/research/staff_reports/sr441.pdf.

[16] Ben S. Bernanke, "Chairman Ben S. Bernanke At the Stamp Lecture, London School of Economics, London, England" (speech, Chairman Ben S. Bernanke At the Stamp Lecture, London School of Economics, London, England, London School of Economics, London, January 13, 2009), accessed October 17, 2014, http://www.federalreserve.gov/newsevents/speech/bernanke20090113a.htm?d=1&s=blogmb.

[17] Ibid.,

[18] Ibid.,

[19] Ibid.,

[20] Ibid.,

[21] Ibid.,

[22] Ibid.,

[23] Ibid.,

[24] Kimberly Amadeo, "What Is Quantitative Easing?," About.com, February 27, 2014, Did QE Work?, accessed October 16, 2014, http://useconomy.about.com/od/glossary/g/Quantitative-Easing.htm.

[25] Steven Perlberg, "14 Questions About The Federal Reserve You Were Too Embarrassed To Ask," Business Insider, September 18, 2013, So what monetary measure can the Federal Reserve take if rates are at zero?, accessed October 17, 2014, http://www.businessinsider.com/what-does-the-federal-reserve-do-2013-9.

[26] Kimberly Amadeo, "What Is Quantitative Easing?," About.com, February 27, 2014, Did QE Work?, accessed October 16, 2014, http://useconomy.about.com/od/glossary/g/Quantitative-Easing.htm.

[27] "What Is Quantitative Easing?," The Economist, January 14, 2014, accessed October 16, 2014, http://www.economist.com/blogs/economist-explains/2014/01/economist-explains-7.

[28] Joseph Gagnon et al., Large-Scale Asset Purchases by the Federal Reserve: Did They Work, report no. 441, March 2010, accessed November 13, 2014, http://www.newyorkfed.org/research/staff_reports/sr441.pdf.

[29] Ibid.,

[30] "Treasury Note," Investopedia, accessed November 13, 2014, http://www.investopedia.com/terms/t/treasurynote.asp.

[31] "Mortgage-Backed Security (MBS)," Investopedia, Video, accessed November 13, 2014, http://www.investopedia.com/terms/m/mbs.asp.

[32] Ibid.,

[33] Kimberly Amadeo, "Mortgage-backed Securities," About.com, How Mortgage-Backed Securities Went Wrong, accessed November 13, 2014, http://useconomy.about.com/od/glossary/g/mortgage_securi.htm.

[34] Ibid.,

[35] "Mortgage-Backed Security (MBS)," Investopedia, Video, accessed November 13, 2014, http://www.investopedia.com/terms/m/mbs.asp.

[36] Kimberly Amadeo, "Mortgage-backed Securities," About.com, Mortgage-Backed Securities Changed the Housing Industry, accessed November 13, 2014, http://useconomy.about.com/od/glossary/g/mortgage_securi.htm.

[37] Joseph Gagnon et al., Large-Scale Asset Purchases by the Federal Reserve: Did They Work, report no. 441, March 2010, accessed November 13, 2014, http://www.newyorkfed.org/research/staff_reports/sr441.pdf.

[38] Polyana Da Costa, "Financial Crisis Timeline: Collapse and Bailout," Financial Crisis Timeline: Collapse and Bailout, 2014, accessed October 16, 2014, http://www.bankrate.com/finance/federal-reserve/financial-crisis-timeline aspx.

[39] "Agency Bond," TheFreeDictionary.com, 2012, accessed November 13, 2014, http://financial-dictionary.thefreedictionary.com/Agency+debt.

[40] Ibid.,

[41] Joseph Gagnon et al., Large-Scale Asset Purchases by the Federal Reserve: Did They Work, report no. 441, March 2010, accessed November 13, 2014, http://www.newyorkfed.org/research/staff_reports/sr441.pdf.

42 Polyana Da Costa, "Financial Crisis Timeline: Collapse and Bailout," Financial Crisis Timeline: Collapse and Bailout, 2014, accessed October 16, 2014, http://www.bankrate.com/finance/federal-reserve/financial-crisis-timeline aspx.

43 Ibid.,

44 Ibid.,

45 Ibid.,

46 Kimberly Amadeo, "What Is Quantitative Easing?," About.com, February 27, 2014, Definition, accessed October 16, 2014, http://useconomy.about.com/od/glossary/g/Quantitative-Easing.htm.

47 Ibid.,

48 Ibid.,

49 Ibid.,

50 Polyana Da Costa, "Financial Crisis Timeline: Collapse and Bailout," Financial Crisis Timeline: Collapse and Bailout, 2014, accessed October 16, 2014, http://www.bankrate.com/finance/federal-reserve/financial-crisis-timeline.aspx.

51 Ibid.,

52 Ibid.,

53 Ibid.,

54 Angela Monaghan, "US Federal Reserve to End Quantitative Easing Programme," Theguardian.com, October 29, 2014, accessed November 13, 2014, http%3A%2F%2Fwww.theguardian.com%2Fbusiness%2F2014%2Foct%2F29%2Fus-federal-reserve-end-quantitative-easing-programme.

55 Board of Governors of the Federal Reserve System, "Press Release," news release, October 29, 2014, Federalreserve.gov, accessed November 13, 2014, http://www.federalreserve.gov/newsevents/press/monetary/20141029a.htm.

56 Joseph Gagnon et al., Large-Scale Asset Purchases by the Federal Reserve: Did They Work, report no. 441, March 2010, accessed November 13, 2014, http://www.newyorkfed.org/research/staff_reports/sr441.pdf.

57 Ibid., 2

58 Ibid., 4

59 Ibid., 6

60 Ibid., 28

61 Polyana Da Costa, "Financial Crisis Timeline: Collapse and Bailout," Financial Crisis Timeline: Collapse and Bailout, 2014, accessed October 16, 2014, http://www.bankrate.com/finance/federal-reserve/financial-crisis-timeline.aspx.

62 Joseph Gagnon et al., Large-Scale Asset Purchases by the Federal Reserve: Did They Work, report no. 441, March 2010, 29, accessed November 13, 2014, http://www.newyorkfed.org/research/staff_reports/sr441.pdf.

63 "What Is Quantitative Easing?," The Economist, January 14, 2014, accessed October 16, 2014, http://www.economist.com/blogs/economist-explains/2014/01/economist-explains-7.

64 Richard Dobbs and Susan Lund, "Quantitative Easing, Not as We Know It," The Economist, November 14, 2013, accessed October 17, 2014, http://www.economist.com/node/21589830.

65 Ibid.,

66 Ibid.,

67 Ibid.,

68 Ibid.,

69 "Labor Force Statistics from the Current Population Survey," Bureau of Labor Statistics, December 5, 2014, accessed December 5, 2014, http://data.bls.gov/timeseries/LNS14000000.

70 "Annual Growth of the Real Gross Product (GDP) of the United States from 1990 to 2013." Statista.Accessed December 3, 2014. http://www.statista.comstatistics/188165 annual-gdp-growth-of-the-united-states-since-1990/.

71 "US Inflation Rate by Year," Multpl.com, 2014, accessed November 14, 2014, http://www.multpl.com/inflation/table.

72 "Monetary Policy," Investopedia, accessed October 15, 2014, http://www.investopedia.com/terms/m/monetarypolicy.asp.

73 "What Is Quantitative Easing?," The Economist, January 14, 2014, accessed October 16, 2014, http://www.economist.com/blogs/economist-explains/2014/01/economist-explains-7.

74 Jérémie Cohen-Setton, "The Distributional Effect of Quantitative Easing," The Distributional Effect of Quantitative Easing, October 27, 2014, accessed November 14, 2014, http://www.bruegel.org/nc/blog/detail/article/1467-the-distributional-effect-of-quantitative-easing/.

75 Kimberly Amadeo, "What Is Quantitative Easing?," About.com, February 27, 2014, Did QE Work?, accessed October 16, 2014, http://useconomy.about.com/od/glossary/g/Quantitative-Easing.htm.

76 "What Is Quantitative Easing?," The Economist, January 14, 2014, accessed October 16, 2014, http://www.economist.com/blogs/economist-explains/2014/01/economist-explains-7.

77 Steven Perlberg, "14 Questions About The Federal Reserve You Were Too Embarrassed To Ask," Business Insider, September 18, 2013, So what monetary measure can the Federal Reserve take if rates are at zero?, accessed October 17, 2014, http://www.businessinsider.com/what-does-the-federal-reserve-do-2013-9.

78 Kimberly Amadeo, "What Is Quantitative Easing?," About.com, February 27, 2014, Definition, accessed October 16, 2014, http://useconomy.about.com/od/glossary/g/Quantitative-Easing.htm.

79 "What Is Quantitative Easing?," The Economist, January 14, 2014, accessed October 16, 2014, http://www.economist.com/blogs/economist-explains/2014/01/economist-explains-7.

80 Ibid.,

81 Ibid.,

82 Joseph Gagnon et al., Large-Scale Asset Purchases by the Federal Reserve: Did They Work, report no. 441, March 2010, 6, accessed November 13, 2014, http://www.newyorkfed.org/research/staff_reports/sr441.pdf.

83 Steven Perlberg, "14 Questions About The Federal Reserve You Were Too Embarrassed To Ask," Business Insider, September 18, 2013, So what monetary measure can the Federal Reserve take if rates are at zero?, accessed October 17, 2014, http://www.businessinsider.com/what-does-the-federal-reserve-do-2013-9.

84 Lawrence H. White, "Inflation," The Concise Encyclopedia of Economics, accessed November 14, 2014, http://econlib.org/library/Enc/Inflation.html.

85 "US Inflation Rate by Year," Multpl.com, 2014, accessed November 14, 2014, http://www.multpl.com/inflation/table.

86 Steven Perlberg, "14 Questions About The Federal Reserve You Were Too Embarrassed To Ask," Business Insider, September 18, 2013, So what monetary measure can the Federal Reserve take if rates are at zero?, accessed October 17, 2014, http://www.businessinsider.com/what-does-the-federal-reserve-do-2013-9.

87 Kimberly Amadeo, "What Is Quantitative Easing?," About.com, February 27, 2014, Did QE Work?, accessed October 16, 2014, http://useconomy.about.com/od/glossary/g/Quantitative-Easing.htm.

88 Cullen Roche, "Can QE Cause Market Distortions & Even Bubbles?," Pragmatic Capitalism, September 28, 2013, accessed November 14, 2014, http://pragcap.com/can-qe-cause-market-distortions-even-bubbles.

89 Kimberly Amadeo, "What Is Quantitative Easing?," About.com, February 27, 2014, Did QE Work?, accessed October 16, 2014, http:/useconomy.about.com/od/glossary/g/Quantitative-Easing.htm.

90 "Interactive Gold Price Chart," World Gold Council, November 10, 2014, accessed November 14, 2014, http://www.gold.org/investment/interactive-gold-price-chart.

91 Cullen Roche, "Can QE Cause Market Distortions & Even Bubbles?," Pragmatic Capitalism, September 28, 2013, accessed November 14, 2014, http://pragcap.com/can-qe-cause-market-distortions-even-bubbles.

92 Jérémie Cohen-Setton, "The Distributional Effect of Quantitative Easing," The Distributional Effect of Quantitative Easing, October 27, 2014, accessed November 14, 2014, http://www.bruegel.org/nc/blog/detail/article/1467-the-distributional-effect-of-quantitative-easing/.

93 Richard Mills, "Biggie Sizing Plutocrats While the Circus Plays On," Safehaven.com, September 27, 2013, accessed November 14, 2014, http://www.safehaven.com/article/31265/biggie-sizing-plutocrats-while-the-circus-plays-on.

94 Jérémie Cohen-Setton, "The Distributional Effect of Quantitative Easing," The Distributional Effect of Quantitative Easing, October 27, 2014, Asset prices and inequality, accessed November 14, 2014, http://www.bruegel.org/nc/blog/detail/article/1467-the-distributional-effect-of-quantitative-easing/.

95 Ibid.,

96 Dave Gilson, "Charts: Income Growth Has Stalled for Most Americans," Mother Jones, September 18, 2013, accessed November 12, 2014, http://www.motherjones.com/politics/2013/09/charts-income-inequality-middle-class-census.

97 Josh Barro, "95% Of Income Gains Since 2009 Went To The Top 1% - Here's What That Really Means," Business Insider, September 12, 2013, accessed November 14, 2014, http://

www.businessinsider.com/95-of-income-gains-since-2009-went-to-the-top-1-heres-what-that-really-means-2013-9.

98 Jérémie Cohen-Setton, "The Distributional Effect of Quantitative Easing," The Distributional Effect of Quantitative Easing, October 27, 2014, accessed November 14, 2014, http://www.bruegel.org/nc/blog/detail article/1467-the-distributional-effect-of-quantitative-easing/.

Self Inflicted Harm
How a Broken Corporate Tax System Has Hindered The United States' Success
Carson Wardell

1 Tax Foundation, accessed August 12, 2014, http://taxfoundation.org/article/oecd-corporate-income-tax-rates-1981-2013.

2 Edward Kleinbard, "Tax Inversions Must Be Stopped," Wall Street Journal, July 21, 2014.

3 Joe Cahil, "Abbott Would Gain Big Time," Crain's Joe Cahil on Business (blog), accessed August 12, 2014, http://www.chicagobusiness.com/article/20140723/BLOGS10/140729937/abbott-would-gain-big-time-if-it-made-like-abbvie.

4 "How to Stop the Inversion Perversion,¨ The Economist, July 26, 2014, http://www.economist.com/news/leaders/21608751-restricting-companies-moving-abroad-no-substitute-corporate-tax-reform-how-stop.

5 Jackie Calmes, "Obama Offers to Cut Corporate Tax Rate to 28%," New York Times, February 22, 2012.

6 Daniel Horowitz, "A Conservative View of Dave," Red State, accessed August 12, 2014, http://www.redstate.com/2014/02/27/conservative-view-dave-camps-tax-reform-bill/.

7 Serwin, Kenneth, Eric Drabkin, and Laura Tyson. Implications of a Switch to a Territorial Tax System in the United States. Emeryville, CA: Berkeley Research Group, 2013. Accessed November 30, 2014. http://www.brg-expert.com/media/publication/391_BRG_Implications%20of%20Territorial%20Tax_Nov2013.pdf.

8 Elizabeth MacDonald, "President's 'Corporate Deserters' Pay High," Fox Business, accessed August 12, 2014, http://www.foxbusiness.com/2014/07/25/presidents corporate-deserters pay-high-taxes/.

FATCA: A Damaging Effort to Tax Foreign Accounts
Frank Geng

1 "Dropping the Bomb," The Economist, June 28, 2014, accessed November 26, 2014, http://www.economist.com/news/finance-and-economics/21605911-americas-fierce-campaign-against-tax-cheats-doing-more-harm-good-dropping.

2 "Foreign Account Tax Compliance Act," IRS, November 26, 2014, accessed November 26, 2014, http://www.irs.gov/Businesses Corporations/Foreign-Account-Tax-Compliance-Act-FATCA.

3 Laura Saunders, "More Americans Renounce Citizenship, With 2014 on Pace for a Record," The Wall Street Journal. October 24, 2014, accessed November 26, 2014, http://blogs.wsj.com/totalreturn/2014/10/24/more-americans-renounce-citizenship-with-2014-on-pace-for-a-record/.

4 "Fruit Of The Loom: A Killing In The Caymans?" Bloomberg Businessweek, May 10, 1998, accessed November 26, 2014, http://www.businessweek.com/stories/1998-05-10/fruit-of-the-loom-a-killing-in-the-caymans.

5 Jon Hartley, "Burger King's Tax Inversion and Canada's Favorable Corporate Tax Rates," Forbes, August 25, 2014, accessed November 26, 2014, http://www.forbes.com/sites/jonhartley/2014/08/25/burger-kings-tax-inversion-and-canadas-favorable-corporate-tax-rates/.

6 Jared Serbu, "New IRS Chief Says Budget Crunch, Understaffing Taking Its Toll," Federal News Radio: 1500 AM, February 26, 2014, accessed November 26, 2014, http://www.federalnewsradio.com/534/3557339/New-IRS-chief-says-budget-crunch-understaffing-taking-its-toll.

7 US Congress, Congressional Record - Senate, 17 March 2010, S1636, http://www.gpo.gov/fdsys/pkg/CREC-2010-03-17/pdf/CREC-2010-03-17-pt1-PgS1633-8.pdf#page=4.

8 ¨Economic Development: Business Research Data,¨ Office of the Governor: Rick Perry, accessed November 26, 2014, http://governor.state.tx.us/fittexas/default.aspx.

A Bipartisan Tax Compromise
Tennyson Teece, Tom Campbell

1 Bershidsky, Leonid. "Jack Lew's Unpatriotic Tax Fix." Bloomberg View. Last modified July 16, 2014. Accessed November 23, 2014. http://www.bloombergview.com/articles/2014-07-16/jack-lew-s-unpatriotic-tax-fix.

2 This policy, compared to a territorial system, annually costs the US $114 billion in lost repatriated earnings, $22 billion in GDP, and 154,000 jobs. Serwin, Kenneth, Eric Drabkin, and Laura Tyson. Implications of a Switch to a Territorial Tax System in the United States. Emeryville, CA: BerkeleyResearch Group, 2013. Accessed November 30, 2014. http://www.brg-expert.com/media/publication/391_BRG_Implications%20of%20Territorial%20Tax_Nov2013.pdf.

3 Lundeen, Andrew, and Kyle Pomerleau. "The U.S. Has the Highest Corporate Income Tax Rate in the OECD." Tax Foundation. Last modified January 27, 2014. Accessed December 5, 2014. http://taxfoundation.org/blog/us-has-highest-corporate-income-tax-rate-oecd.

4 "State Corporate Income Tax Rates, 2000-2014." Tax Foundation. Last modified March 22, 2013. Accessed December 5, 2014. http://taxfoundation.org/article/state-corporate-income-tax-rates.

5 However, deductions and exclusions allowed corporations to pay an average (as opposed to marginal) 21 percent in 2010. - McBride, William. "New CBO Projections Understate the Average Corporate Tax Rate." Tax Policy Blog. Entry posted February 4, 2014. Accessed November 23, 2014. http://taxfoundation.org/blog/new-cbo-projections-understate-average-corporate-tax-rate.

6 Joint Committee on Taxation,Overview of the Federal Tax System as in Effect for 2014, Rep. (2014). Accessed November 23, 2014. https://www.jct.gov/publications.html?func=startdown&id=4568.

7 Ibid.

8 Ibid.

9 Frank, Robert. "The Rich are Saving Cash at a Record Pace." CNBC. Last modified August 4, 2014. Accessed November 23, 2014. http://www.cnbc.com/id/100935856#.

10 Federal Reserve Bank of St. Louis. "Personal Savings Rate." Federal Reserve Bank of St. Louis. Last modified October 31, 2014. Accessed November 23, 2014. http://research.stlouisfed.org/fred2/series/PSAVERT/.

11 Frank, Robert. "Why Millionaire Investors Are Holding Cash." USA Today, May 27, 2013. Accessed November 23, 2014. http://www.usatoday.com/story/money/business/2013/05/27/millionaires-cash/2351629/.

12 Galston, William A. "Policy Uncertainty Paralyzes the Economy." The Wall Street Journal, September 24, 2013. Accessed November 23, 2014. http://online.wsj.com/articles/SB10001424052702303759604579093803870508872.

13 BBC. "US Economic Growth Rate Revised down." BBC News. Last modified February 28, 2014. Accessed November 23, 2014. http://www.bbc.com/news/business-26387690.

14 Joint Committee on Taxation, Overview of the Federal Tax System as in Effect for 2014.

The GOP's Problem with Hispanic Voters
Joshua Henderson

1 Passel, Jeffrey, and D'Vera Cohn. "U.S. Population Projections 2005-2050." Pew Research Hispanic Trends Project. Last modified February 11, 2008. Accessed August 11, 2014. http://www.pewhispanic org/2008/02/11/us-population-projections-2005-2050/#.

2 Lopez, Mark, and Paul Taylor. "Latino Voters in the 2012 Election." Pew Research Hispanic Trends Project. Last modified November 7, 2012. Accessed August 11, 2014. http://www.pewhispanic.org/2012/11/07/latino-voters-in-the-2012-election/.

3 Drucker, David. "Ted Cruz poll: Dems have edge over GOP among Hispanics in Texas." Washington Examiner. Last modified July 25, 2013. Accessed November 11, 2014. http://www.washingtonexaminer.com/ted-cruz-poll-dems-have-edge-over-gop-among-hispanics-in-texas/article/2533470.

4 Pew Research Center. "Social and Political Views." Pew Research Religion and Public Life Project Last modified May 7, 2014. Accessed August 11, 2014. http://www.pewforum.org/2014/05/07/chapter-9-social-and-political-views/.

5 Glueck, Katie. "Rand Paul: GOP must get 'beyond deportation'." Politico. http://www.politico.com/story/2014/04/rand-paul-go -must-get-beyond-deportation-105241.html.

Andover Economic Review is in the process of building an endowment to become financially sustainable. If you are interested in making a contribution, please contact the Endowment Team at endowment@andovereconomicreview.com. If you are interested in writing for the Andover Economic Review or publishing a Letter to the Editor, please email editorialboard@andovereconomicreview.com.

Cover designed by Dean Schwartz

Publication designed by Lisa Thayer

This page was intentionally left blank.

SIGIL. PHILLIP. ACAD. ANDOV. MDCCLXXVIII.

NON SIBI

FINIS ORIGINE PENDET