

AMERICAN PROSPERITY REQUIRES CAPITAL FREEDOM

J. Christopher Giancarlo

The Cato Institute was named after Cato's Letters, essays first published from 1720 to 1723 under the pseudonym of Cato, commonly known as Cato the Younger, who lived in Rome from 95 to 46 BC and was an implacable foe of Julius Caesar and stubborn champion of (lowercase "R") republican principles.

In our lifetime, the Cato Institute seeks to increase public appreciation for "principles of individual liberty, limited government, free markets and peace." It is the application of those principles to American capital markets and capital formation that we are here to discuss today.

What Happened to American Prosperity?

It is not a matter of opinion but a matter of economic fact that everywhere there are free and competitive markets, combined with free enterprise, personal choice, voluntary exchange, and legal protection of person and property, you will find the underpinnings of broad and sustained prosperity. These elements, wherever and whenever deployed, lift millions of people out of poverty.

Cato Journal, Vol. 35, No. 3 (Fall 2015). Copyright © Cato Institute. All rights reserved.

J. Christopher Giancarlo is a Commissioner on the Commodity Futures Trading Commission (CFTC). This article is based on his Keynote Address at the Cato Institute Center for Monetary and Regulatory Alternatives Summit on Financial Regulation held in New York City on June 2, 2015. It reflects the author's views and not necessarily those of the CFTC, other commissioners, or staff.

Here at home, these elements are under attack by critics of our financial markets. These critics have lost sight of the fact that global capital markets remain the engines of rising standards of living and prosperity. These critics talk about separating markets from risk, as if they have no idea that risk and prosperity are invariably linked. They say risk can be extracted from the marketplace through centralized economic planning and direction. They say income inequality can be reduced through increased political control over people's economic choices. They say wealth redistribution should be tolerated by passing on to our children and grandchildren additional trillions of dollars in federal debt.

Meanwhile, these critics of free markets hardly ever talk about regaining broad and durable prosperity. Yet, prosperity was the common state of the American experience for us and generations before us.¹ And Americans still want prosperity to be the default state for their children. What we have today is just not good enough.

In fact, what we have today is simply the worst U.S. recovery from any recession since the Great Depression. Last year, the managing director of the International Monetary Fund, Christine Lagarde, dubbed current economic conditions the “new mediocre” (Lagarde 2014). That is a mild description for the state we are in. During the first quarter of this year, the U.S. economy actually shrunk by 0.7 percent. GDP has not grown by more than 2.5 percent for the past half-dozen years—the slowest rate of growth since the United States began compiling reliable economic statistics a century ago. That is less than the average annual U.S. economic growth rate and substantially less than a typical postrecession rate of growth (Lacker 2015, Walker 2013).²

The official U.S. unemployment rate has fallen steadily during the past few years. Yet, this recovery has created the fewest jobs

¹The annual growth rate of gross domestic product (GDP) in the United States averaged 3.24 percent from 1948 until the first quarter of 2015, reaching an all-time high of 13.40 percent in the fourth quarter of 1950 and a record low of -4.10 percent in the second quarter of 2009 (www.tradingeconomics.com/united-states/gdp-growth-annual).

²Jeffrey M. Lacker, president of the Federal Reserve Bank of Richmond, noted that in the half century before the 2008 recession began real GDP grew at an average annual rate of approximately 3.5 percent. Dinah Walker noted that the economic expansion following the 2008 recession has been the weakest of the post-World War II era, with GDP rising about half as much as in the average post-World War II era recovery.

relative to the previous employment peak of any recovery (Ferrara 2013). In this year's first quarter, the labor force participation rate hit a 36-year low of 62.5 percent. The number of Americans not in the labor force hit a record high of 93.7 million people. Part-time work and long-term unemployment are still well above levels from before the financial crisis (Kosanovich and Sherman 2015, Timiraos 2014). One in three Americans between the ages of 18 and 31 are living with their parents (Fry 2013), and, in one out of five American families, no one has a job (U.S. Department of Labor 2015).

Worse, middle-class incomes continue to fall during this recovery, losing even more ground than during the recession. Real disposable personal income is well below its projected prerecession levels. The number in poverty has also continued to soar to about 50 million Americans. That is the highest level in the more than 50 years that the census has been tracking poverty (Ferrara 2013). Income inequality has risen more in the past few years, while the prospect of working in a secure full-time job has greatly diminished in this new mediocre economy (Pofeldt 2015).³

As a former business executive, I can tell you that the plethora of federal regulations is a major drag on the U.S. economy. Mark and Nicole Crain (2014) report that regulations now cost the U.S. more than 12 percent of GDP, or \$2 trillion annually; the average manufacturing firm spends almost \$20,000 per employee per year to comply with federal regulations; and for manufacturers with fewer than 50 employees, the per-employee cost rises to almost \$35,000. Is it any wonder that the rate of hiring is so abysmal? In a recent survey by PricewaterhouseCoopers (2014: 4), CEOs of American companies overwhelmingly cited overregulation as a barrier to capital investment that would otherwise stimulate job creation and wage growth.

Still, Americans remain an aspirational people despite the economic frustration of the past several years. Yet, they are increasingly worried they may soon fall out of their economic class (Allstate-National Journal 2013). I agree with Governor Jack Markell of Delaware, who recently wrote that Americans need jobs, not

³Forty percent of the U.S. workforce is now made up of workers not in traditional full-time employment, but in part-time, temporary, contract labor or other contingent work (Pofeldt 2015).

populism (Markell 2015). Americans want robust economic growth, not excuses based on bad winter weather. If we are to meet our obligations to the next generation of Americans, we must address head-on the challenges of the new mediocre and take steps to replace it with broad-based prosperity and full-time job creation.

Importance of Free and Competitive Capital Markets

The answer lies in economic freedom and opportunity: the same combination of ingredients that invariably leads to more prosperity—even for the poor—than does centralized political planning (see Lawson 2008).

Capital markets such as the stock and bond markets play an essential role in economic growth by marshaling resources and deploying them in productive ways. They serve as a link between savers and investors by shifting financial resources from surplus and waste to deficit and production. They allow the rational allocation of goods and resources, spurring expansion of trade and industry. And, yes, regulators have a key role to play in capital markets by making sure they are well ordered and not manipulated by bad actors, misconducted by fraud, or misused for political purposes.

Adequate trading liquidity is the lifeblood of successful financial markets. In essence, liquidity is the degree to which a financial instrument may be easily bought or sold with minimal price disturbance by ready and willing buyers and sellers. The United States has long enjoyed some of the world's deepest and most liquid financial markets for trading U.S. Treasury and other debt, equity, and derivative securities. The health of the U.S. economy is strongly tied to such deep liquidity, which is essential for overseas investors to continue to transact in our markets. If U.S. trading markets become shallower or less liquid, overseas investors may reduce activities in U.S. markets, imperiling American economic health.

Why Financial Derivatives?

The use of risk-hedging instruments, namely commodity futures, swaps, and other derivatives, is one of the key reasons Americans find plenty of food on the shelves. Many of our agricultural producers hedge their prices and costs of production in the futures markets. But such futures and other derivatives markets are not just beneficial for agricultural producers. They impact the price and availability of

the warmth in our homes, the energy used in our factories, the interest rates we pay on our home mortgages, and the returns we earn on our retirement savings. Well-functioning derivatives markets allow users to transfer the risks of variable production costs, such as the price of raw materials, energy, foreign currency, and interest rates, from those who cannot afford them to those who can. In short, derivatives serve society's need to help moderate price, supply, and other commercial risks. Thus, derivatives free up capital for other purposes and boost economic growth, job creation, and prosperity.

It is true that derivatives, like any other engineered product ever known to man, can serve both useful as well as harmful purposes. I concur with the thrust of Gretchen Morgenson and Joshua Rosner's book *Reckless Endangerment* that the 2008 financial crisis arose from an inferno of complex derivative products used for unfettered risk-taking overseen by feckless regulators amidst the government's deliberate degrading of mortgage-lending standards and the creation of a housing and credit bubble (Morgenson and Rosner 2011).

Yet, I also agree with scholar Peter Wallison that the combination of complex derivatives, bank leverage, and unwitting regulators alone would not have caused the depth and scope of the 2008 financial crisis. No, it required the federal government's encouragement of banks and other financial institutions to originate and hold enormous and opaque amounts of nontraditional, subprime, and Alt-A mortgage obligations to further the social goal of increased homeownership.⁴ When home values began to fall and lenders anticipated nonpayment of these toxic mortgages, it triggered a crisis of confidence in trading counterparties in securitized mortgage and credit markets and the bursting of a double bubble of housing prices and consumer lending. It led to a full "run on the bank," with rapidly falling asset values preventing U.S. and foreign lenders from meeting their cash obligations. The result was a financial crisis that was devastating for far too many American businesses and families.

⁴In his recent book, *Hidden in Plain Sight: What Really Caused the World's Worst Financial Crisis and Why It Could Happen Again*, Peter J. Wallison extensively documents how the financial crisis was directly caused by U.S. government housing policies, as a result of which over half of all U.S. mortgages were subprime or otherwise low quality—a fact that was grossly undisclosed to market participants and the American public (Wallison 2015).

However, seven years later, the standard press and political narrative has been that the financial crisis was primarily about deregulated banks engaging in excessive trading leverage through derivatives. The role of toxic mortgages has been almost, but not entirely, forgotten.

Uncoordinated Regulations Draining Liquidity from U.S. Financial Markets

Arising from that incomplete narrative of the financial crisis are many new financial-sector regulations that are disproportionately focused on capital adequacy of banks and financial institutions without corresponding attention to housing-finance reform. Most of the new regulations have the effect of reducing the ability of medium and large financial institutions to deploy capital in trading markets. Combined, these disparate regulations are already sapping global markets of enormous amounts of trading liquidity. Many of these new rules were cobbled together in the Dodd-Frank Act, the European Union's European Market Infrastructure Regulation⁵ and Markets in Financial Instruments Directive II,⁶ the Basel III accords,⁷ and the regulations by other overseas authorities. These reforms have ostensible and varied merits, and each has a supporting constituency. Yet, U.S. and overseas regulators continue to promulgate almost all of these rules in an uncoordinated and ad hoc fashion with a paucity of predictive analysis as to their impact on global trading markets.

The Commodity Futures Trading Commission's contribution to this liquidity-depleting mixture includes its flawed swaps-trading rules, about which I have written extensively in a CFTC white

⁵Regulation 648/2012, 2012 O.J. (L. 201) (EU) was intended to enhance the stability of the over-the-counter derivative markets throughout the EU states. The regulation entered into force on August 16, 2012. See <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0648>.

⁶Directive 2014/65, 2014 O.J. (L. 173) (EU). Available at <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0065&from=EN>.

⁷Basel III (or the Third Basel Accord) is a global, voluntary regulatory framework on bank capital adequacy, stress testing, and market liquidity risk. The members of the Basel Committee on Banking Supervision agreed upon this framework in 2010–11. The third installment of the Basel Accords was developed in response to the deficiencies in financial regulation revealed by the financial crisis of 2007–08. Basel III is intended to strengthen bank capital requirements by increasing bank liquidity and decreasing bank leverage. See Basel III, Basel Committee on Banking Supervision (www.bis.org/bcbs/basel3.htm).

paper (Giancarlo 2015a)⁸; the double-charging of margin on certain types of derivatives trades used to manage risks (Giancarlo 2015b); the likely imposition of strict limits on risk management of energy and commodities (Giancarlo 2015c); and the immensely complicated Volcker Rule, which no other jurisdiction has sought to emulate.⁹

Yet, the Dodd-Frank Act is only one source of leaks in the pool of market liquidity. Other new rules, dictated by U.S. and European central bankers and bank prudential regulators with little practical understanding of trading markets, are tying up billions in capital on the books of global financial institutions. Many of these rules seek to control borrowing and leverage in the financial system. They prioritize capital reserves over investment capital, balance sheet surplus over market-making, and systemic safety over investment opportunity. They include regulator-imposed margin payments on uncleared swaps,¹⁰ enhanced central clearinghouse recovery procedures,¹¹ capital-retention and leverage-reduction requirements under the Basel III accords,¹² and other rigid leverage ratios and edicts from loosely organized global shadow regulators like the Swiss-based Financial Stability Board. Then there is the financial transaction tax sought by the Obama administration¹³ and a systemic risk fee (tax)

⁸The white paper asserts that there is a fundamental mismatch between the distinct liquidity and trading dynamics of the global swaps markets and the CFTC's overengineered, futures-oriented swaps-trading regulatory framework. It identifies the following adverse consequences, among others, of the CFTC's flawed swaps-trading rules: driving global market participants away from transacting with entities subject to CFTC swaps regulation; fragmenting swaps trading into numerous artificial market segments; and increasing market liquidity risk, market fragility, and the systemic risk that the Dodd-Frank regulatory reform was predicated on reducing.

⁹"Prohibition and Restrictions on Proprietary Trading and Certain Interests in, and Relationships with, Hedge Funds and Private Equity Funds," 79 FR 5808 (January 31, 2014): www.cftc.gov/ucm/groups/public/@lrfederalregister/documents/file/2013-31476a.pdf.

¹⁰"Margin and Capital Requirements for Covered Swap Entities," 79 FR 57348 (September 24, 2014): www.gpo.gov/fdsys/pkg/FR-2014-09-24/pdf/2014-22001.pdf.

¹¹Financial Stability Board (2015: 3).

¹²See Basel III, Basel Committee on Banking Supervision (www.bis.org/bcbs/basel3.htm).

¹³See *Fiscal Year 2016 Budget of the U.S. Government*, Office of Management and Budget, 33: www.whitehouse.gov/sites/default/files/omb/budget/fy2016/assets/budget.pdf.

that the Treasury's Office of Financial Research (OFR) recently proposed to charge to members of clearinghouses (Capponi, Cheng, and Rajan 2015).

Worse, different regulatory authorities in the United States and abroad are adopting many of these rules piecemeal with different regulatory standards, requirements, and implementation schedules. It is causing the clear fragmentation of global financial markets, leading to smaller, disconnected liquidity pools that do not efficiently interact with one another. Divided markets are more brittle with shallower liquidity and more volatile pricing, posing a risk of failure in times of economic stress or crisis (Giancarlo 2015a: 48–52).

In response to the deluge of capital constraining regulations, major money-center banks are today building up large balance-sheet reserves instead of putting their capital to work in the markets and the economy. Large banks have dramatically reduced their inventories of Treasury and corporate bonds and other financial instruments. For example, estimates show that in the \$4.5 trillion bond market, banks hold just \$50 billion of corporate bonds compared with \$300 billion before the financial crisis (Nixon 2015). This lack of inventory deprives markets of the “shock absorber” mechanism that dealers traditionally provide. Without it, it is much harder to execute large trades without moving the market, causing greater price volatility.

A recent report by the Office of Financial Research (2014) asserts that changes in financial market structures caused by new regulations are reducing the willingness of some major market participants to smooth out volatility in global financial markets. According to this study, these changes will cause the U.S. financial system to become more vulnerable to debilitating financial market shocks. Federal Reserve Chair Janet Yellen recently acknowledged concerns that market liquidity may deteriorate during stressed conditions due to new regulations, among other factors (Katz 2015).

In trying to stamp out risk, global regulators are instead harming trading liquidity. Capital-constrained banks and other market makers have little choice but to limit their exposure to increasingly fragmented markets, especially in the event of financial turmoil. It has reached such a level that the IMF's 2014 Global Financial Stability Report discussed the need for *more, not less*, economic risk-taking to help global recovery (IMF 2014). The report calls on banks to

revamp their business models to once again become engines of growth. Yet, the IMF neglects to call out regulators for restricting the banks' ability to put their capital to work.

We need to look no further for a “canary in the liquidity coal mine” than the events of October 15, 2014, when yields on U.S. Treasury instruments suddenly plunged the most since 2009 without a discernable catalyst. The mini-crisis revealed a fundamental imbalance in the ratio of liquidity provided to markets by capital-constrained and risk-averse large banks and liquidity demanded from markets by a burgeoning buy-side (Perrotta 2014).¹⁴ JPMorgan CEO Jamie Dimon called it a “warning shot” to investors (Katz 2015). I fear that the next time global financial markets experience a sharp stress or shock—and that time will inevitably come—the cumulative effect of all the various Dodd-Frank Act, European, and Basel III rules may be to drain the market of trading liquidity that will be critical for short-term solvency for many ordinary, everyday American businesses.

Regulators often claim they are acting to avoid a repeat of the last crisis. Today, they may be laying the seeds of the next crisis: disappearance of trading liquidity in U.S. and global capital markets. One veteran industry commentator has aptly noted that “a market in which no one is willing to take a risk is a market that is very risky” (Lofchie 2015). Once again we see that flawed and ad hoc implementation of regulatory reform is increasing the systemic risk that the Dodd-Frank Act promised to reduce.

Where, Oh Where, Is FSOC?

Fortunately, the Dodd-Frank Act created a new super-regulator, known as the Financial Stability Oversight Council (FSOC), charged with coordinating the hundreds of new rules and regulations.¹⁵ Unfortunately, FSOC has been an unmitigated failure as a coordinator of regulatory reform. Rather than moderate the impact of liquidity-draining regulations, FSOC has spent its time designating Wall Street banks and insurance companies as “too big to fail” so that

¹⁴Some of the largest broker-dealers and proprietary-trading firms appear to have withdrawn from the market to manage heightened risk (FSOC 2015: 110).

¹⁵See “Purposes and Duties of the FSOC,” Section 112 of the Dodd-Frank Wall Street Reform and Consumer Protection Act, Public Law 111–203, 124 Stat. 1376, 1395 (2010).

someday they can be bailed out by taxpayers and regulated by none other than—you guessed it—the Federal Reserve.¹⁶

Interestingly, FSOC's just-issued Annual Report fully acknowledges that banks and broker-dealers are reducing their securities inventories and in some cases exiting markets (FSOC 2015: 108). It then instructs individual market participants and regulators to monitor these developments, including how regulations impact the provision of market liquidity. Good grief! Monitoring how all these new regulations impact market liquidity and may cause systemic risk is supposed to be FSOC's job!

Just as FSOC requires stress testing of "too big to fail" firms, FSOC should do some stress testing of its own. If U.S. markets are to remain the world's deepest and most liquid, FSOC should conduct a thorough analysis of the full impact of the mass of liquidity-reducing regulations that it is supposed to be coordinating.

One thing is certain: When a liquidity crisis hits, FSOC will be the first to point fingers; blame financial markets, banks, and large market participants; and demand more control over them. FSOC may even use its new powers and taxpayer money to bail out more U.S. and foreign financial institutions. Remember: "Never let a good crisis go to waste" (Seib 2008).¹⁷

Despite all this, I believe American voters expect the next administration, Democrat or Republican, to take steps to end the new mediocre and return to traditional American middle-class prosperity. That begins with efficient capital markets free from the artificial liquidity constraints emerging from a Pandora's box of competing and disjointed regulatory initiatives. U.S. regulators, not European central bankers, are authorized by Congress to manage U.S. markets. We should not subsume our authority to organizations that are unrecognized by U.S. law. It is time for FSOC to step up to its statutory duty to monitor and analyze the hundreds of new federal and

¹⁶It is now estimated that approximately \$25 trillion or 60 percent of the U.S. financial system's liabilities are backed by explicit or implicit protection from loss by the federal government. See "Special Report, Bailout Barometer: How Large is the Financial Safety Net?" Federal Reserve Bank of Richmond: www.richmondfed.org/safetynet.

¹⁷Seib recounts that Rahm Emanuel, President Obama's then-chief of staff, told a *Wall Street Journal* conference of top corporate CEOs: "You never want a serious crisis to go to waste."

overseas regulations. It is time for FSOC to measure the cumulative effect of these disparate rules and regulations on U.S. financial markets, looming systemic risk, and the sluggish American economy.

Conclusion

In conclusion, let me return to the Cato Institute's namesake, Cato the Younger. As you may know, Cato also appears as a literary character in the second book of Dante Alighieri's *Divine Comedy*, the timeless medieval poem about the transition from the road to Hell to the path to Heaven. Cato stands on the border of the two. He represents rebirth, renewal and redemption.

So too, we participants and observers of capital markets are at a transition point. We have been through the inferno of the financial crisis. We are told we are on an upward path. Yet, we seem somewhat stuck in a blinding fog obstructing a clear view of the right road ahead. Our fellow men and women are being buffeted by the impact of mediocre economic stewardship, ad hoc regulatory reform, and the failure of those whose duty it is to see through the haze.

Yet, I firmly believe Americans will persevere, in time, to greater prosperity and economic freedom. That is because, like Cato, Americans have always rejected and, I pray, will always reject the false promise of government-provided safety and a riskless future and, instead, hold fast to personal liberty, free markets, and the fruits of their own hard work and ingenuity.

References

- Allstate-*National Journal* (2013) "New Poll: Middle Class More Anxious than Aspirational." 16th Allstate-*National Journal* Heartland Monitor Poll (25 April).
- Capponi, A.; Cheng, W. A.; and Rajan, S. (2015) "Systemic Risk: The Dynamics under Central Clearing." Office of Financial Research, Working Paper (7 May).
- Crain, W. M., and Crain, N. V. (2014) "The Cost of Federal Regulation to the U.S. Economy, Manufacturing and Small Business." National Association of Manufacturers (10 September).
- Ferrara, P. (2013) "How Does President Obama's Economic Recovery Compare to Those of Other Presidents?" *Forbes.com* (4 August).

- Financial Stability Board (FSB) (2015) "Letter from the Chairman to G20 Finance Ministers and Central Bank Governors" (4 February).
- Financial Stability Oversight Council (FSOC) (2015) "2015 Annual Report." Available at www.treasury.gov/initiatives/fsoc/studies-reports/Documents/2015%20FSOC%20Annual%20Report.pdf.
- Fry, R. (2013) "A Rising Share of Young Adults Live in Their Parents' Home." Pew Research Center (1 August).
- Giancarlo, J. C. (2015a) "Pro-Reform Reconsideration of the CFTC Swaps Trading Rules: Return to Dodd-Frank." CFTC White Paper (29 January). Available at www.cftc.gov/ucm/groups/public/@newsroom/documents/file/sefwhitepaper012915.
- _____ (2015b) "Testimony before the U.S. House Committee on Agriculture, Subcommittee on Commodity Exchanges, Energy, and Credit" (14 April). Available at www.cftc.gov/PressRoom/SpeechesTestimony/opagiancarlos-5.
- _____ (2015c) "The CFTC's Proposed Position Limits Regime: Are U.S. Energy Markets at Risk?" (13 May). Available at www.cftc.gov/PressRoom/SpeechesTestimony/opagiancarlos-6.
- IMF (2014) "Policymakers Should Encourage Economic Risk Taking, Keep Financial Excess under Control." *IMF Survey Magazine* (8 October).
- Katz, I. (2015) "Yellen Says Regulators Ready to Act as Panel Cites Risks." Bloomberg (19 May). Available at www.bloomberg.com/news/articles/2015-05-19/yellen-says-regulators-ready-to-act-as-panel-cites-market-risks.
- Kosanovich, K., and Sherman, E. T. (2015) "Trends in Long-Term Unemployment." U.S. Department of Labor, Bureau of Labor Statistics (March).
- Lacker, J. M. (2015) "Economic Outlook, January 2015." Address before the Virginia Bankers Association and Virginia Chamber of Commerce 2015 Financial Forecast, Richmond, Va. (9 January).
- Lagarde, C. (2014) "The 'New Mediocre'." *Wall Street Journal* (16 October).
- Lawson, R. A. (2008) "Economic Freedom." In *The Concise Encyclopedia of Economics*, Library of Economics and Liberty. Available at www.econlib.org/library/Enc/EconomicFreedom.html.
- Lofchie, S. (2015) "Center for Financial Stability President Discusses the Era of 'Never Before'" (with Comment by Lofchie). The

- Cadwalader Cabinet (27 May). Available at www.cadwalader.com/thecabinet/regulatory_updates.php?
- Markell, J. (2015) “Americans Need Jobs, Not Populism.” *The Atlantic* (3 May).
- Morgenson, G., and Rosner, J. (2011) *Reckless Endangerment: How Outsized Ambition, Greed, and Corruption Created the Worst Financial Crisis of Our Time*. New York: Times Books/Henry Holt.
- Nixon, S. (2015) “Why Liquidity-Starved Markets Fear the Worst.” *Wall Street Journal* (20 May).
- Office of Financial Research (2014) “2014 Annual Report.” Office of Financial Research, U.S. Treasury Department (2 December).
- Perrotta, A. J. Jr. (2014) “An E-Trading Treasury Market ‘Flash Crash’? Not So Fast.” TABB Group (24 November). Available at <http://tabbforum.com/opinions/an-e-trading-treasury-market-flash-crash-not-so-fast>.
- Pofeldt, E. (2015) “Shocker: 40% of Workers Now Have ‘Contingent’ Jobs, Says U.S. Government.” *Forbes.com* (25 May).
- PricewaterhouseCoopers (2014) “Good to Grow, 2014 Annual Global CEO Survey.”
- Seib, G. F. (2008) “In Crisis, Opportunity for Obama.” *Wall Street Journal* (21 November).
- Timiraos, N. (2014) “Elevated Level of Part-Time Employment: Post-Recession Norm?” *Wall Street Journal* (12 November).
- U.S. Department of Labor (2015) “Employment Characteristics of Families—2014.” U.S. Department of Labor, Bureau of Labor Statistics News Release (23 April).
- Walker, D. (2013) “Quarterly Update: The U.S. Economic Recovery in Historical Context.” Council on Foreign Relations (22 August).
- Wallison, P. J. (2015) *Hidden in Plain Sight: What Really Caused the World’s Worst Financial Crisis and Why It Could Happen Again*. New York: Encounter Books.