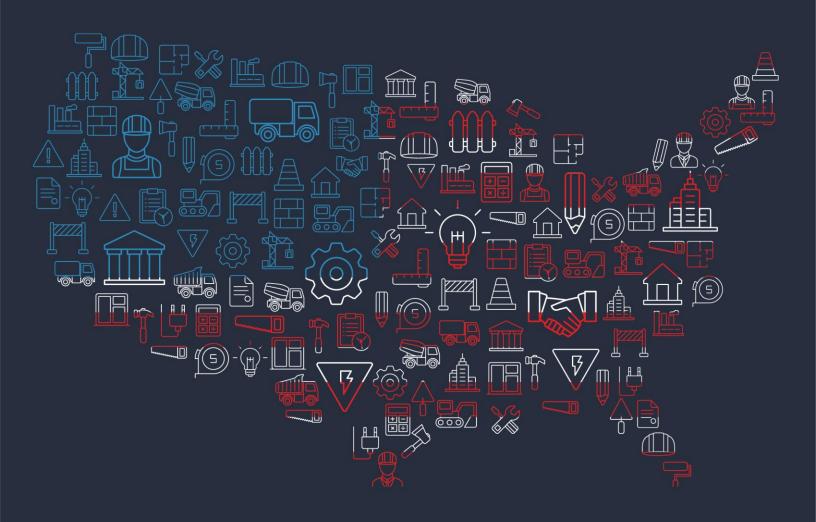
AMERICAN PROSPERITY PROJECT

A NONPARTISAN FRAMEWORK FOR LONG-TERM INVESTMENT

DECEMBER 2016





FULL POLICY FRAMEWORK

America's economic health depends on sustained, long-term investment to support our families and communities and to reinvigorate the economic engine that creates jobs and prosperity. There is no viable model under which either business or government can or should shoulder the responsibility for long-term investment alone; both are required.

The time is right for a national conversation about *long-term investment* in infrastructure, basic science, education and training for workers who feel the brunt of globalization and technology. We need to focus on the critical levers for economic growth along with sources of revenue to help pay for it, as well as ways to overcome the short-term thinking currently baked into government policy and business protocols.

The ideas offered here have been developed under the auspices of the Aspen Institute in consultation with a non-partisan working group of experts in public policy formation, tax and regulation, business, and corporate law and governance. While these ideas enjoy support across party lines, breaking the log jam and taking action will require a coalition of leaders across the private and public sectors who are committed to the health of the commons and America's prosperity.

The problem in brief:

- Decades of inadequate investment in America's infrastructure undermine our nation's safety and productivity. Once a global leader, the US now ranks 25th in infrastructure quality per the National Association of Manufacturers.
- Underinvestment in basic science research—by business and government—threatens America's leadership in technological innovation. The OECD reports that, relative to GDP, the US has fallen to 10th in R&D investment. At current rates, China will surpass the US in total investment in basic science research by 2019.
- CEOs and directors of our public companies report persistent pressure for short-term financial performance; a 2013 McKinsey survey¹ reports that short-term pressures have increased in recent years. The overwhelming majority of corporate leaders believe a longer time horizon would positively affect corporate performance, strengthen financial returns, and drive innovation.
- Short-term pressures also influence business investment. Despite record profitability, fixed capital investment by American corporations is the lowest since 1952² and employer-paid skills training declined 28% between 2001 and 2009.³
- Perverse incentives in our corporate governance system undermine the health of capitalism itself. Shorttermism is baked into our tax system and is evident in the decisions, regulations and rules that govern corporations and capital markets. Changes to the rules of the game are a necessary step to rebuild the public's trust in our economic system

The issues involved are complex. The work involved in identifying and adopting supportive policies is formidable but by no means insurmountable—and, in this moment, there is both challenge and opportunity.

America's incentive system for long-term investment is broken. It must be repaired to work effectively in a globally competitive market and to address today's most vexing "grand challenges"—from economic opportunity to new forms of energy and the need to rebuild America's physical infrastructure. The goal is a better deal for Americans working to support their families and communities—and the restoration of public trust in capitalism itself as an economic system that works for all.

There are parts of this proposal that each of us might not find ideal. As signatories, we do not endorse every idea in the framework, but we do endorse the principles that inform it. Long-term investment as a national priority transcends partisan divisions and this framework merits consideration to serve the best interests of our society as a whole, over the self-interests of a few. It is in that spirit that we advance and support this comprehensive approach to stimulate long term investment in our economy.

The American Prosperity Project Signatories

George Barrett Chairman & CEO, Cardinal Health

Dominic Barton Managing Partner, McKinsey

David Berger Partner, Wilson Sonsini Goodrich & Rosati PC

Chip Bergh CEO, Levi Strauss & Co.

Stanley Bergman Chairman of the Board and CEO, Henry Schein, Inc.

Sally Blount Dean, Kellogg School of Management, Northwestern University

Eli Broad Founder and former CEO, SunAmerica

William Budinger Chairman, The Rodel Foundation

Greg Case President and CEO, AON

Jim Cheek Member, Bass Berry & Sims PLC **Thomas A. Cole** Partner and former Chair of the Executive Committee, Sidley Austin LLP

Samuel A. Di Piazza, Jr. CEO, PwC International LLC (retired)

Karl Ege Senior Counsel, Perkins Coie LLP

Ambassador (ret.) Norman Eisen Fellow - Governance Studies, The Brookings Institution

William George Senior Fellow, Harvard Business School; Former CEO, Medtronic

Janet Hill Independent Director, Carlyle Group, Wendy's, Dean Foods

Chad Holliday Chairman, Royal Dutch Shell

Walter Isaacson CEO, The Aspen Institute

David Langstaff Former CEO, Veridian

Martin Lipton Founding Partner, Wachtell, Lipton, Rosen & Katz **Bryan Lourd** Co-Chairman, Creative Artists Agency

Phebe Novakovic CEO, General Dynamics

John Olson Partner, Gibson, Dunn, & Crutcher LLP

Paul Polman CEO, Unilever

lan Read CEO, Pfizer

Alice Rivlin Senior Fellow in Economic Studies, The Brookings Institution

Damon Silvers Associate General Counsel, AFL-CIO

Sir Martin Sorrell CEO, WPP

Paul Stebbins Chairman Emeritus, World Fuel Services Corp.

Leo E. Strine, Jr.

Affiliations are for identification purposes only.

The American Prosperity Project Working Group

Bill Budinger, Norman Eisen, David Langstaff, Martin Lipton, Maya MacGuineas, Miguel Padró, Jeff Peck, Judith Samuelson, Damon Silvers, Leo Strine Jr.

Our framework for this national conversation and for subsequent action has three goals:

- 1. Focus government investment on recognized drivers of long-term productivity growth and global competitiveness—namely, infrastructure, basic science research, private R&D, and skills training—in order to close the decades-long investment shortfall in America's future. Building this foundation will support good jobs and new business formation, support workers affected by globalization and technology, and better position America to address the national debt through long-term economic growth.
- 2. Unlock business investment by modernizing our corporate tax system to achieve one that is simpler, fair to businesses across the spectrum of size and industry, and supportive of both productivity growth and job creation. Changes to the corporate tax system could reduce the federal corporate statutory tax rate (at 35%, the highest in the world), broaden the base of corporate tax payers, bring off-shore capital back to the US, and reward long-term investment, and help provide revenues to assure that America's long-term goals can be met.
- 3. Align public policy and corporate governance protocols to facilitate companies' and investors' focus on long-term investment. Complex layers of market pressures, governance regulations, and business norms encourage short-term thinking in business and finance. The goal is a better environment for long-term investing by business leaders and investors, and to provide better outcomes for society.

Although these goals defy seemingly intractable politics-as-usual, they are broadly shared across a wide spectrum of leaders in both public and private sectors. The ideas outlined here have many sources and they require more conversation, debate, and action to reach the targeted outcomes of creating good jobs, encouraging innovation, and combatting economic short-termism.

When it is resolved in a course of action, the United States of America has the ability to do great things and make the necessary and sometimes difficult choices. In this case, national conversation and action on these ideas can give us ways to secure a bright future for all Americans, rebuilding the American dream now and for generations to come.

Goal # 1 - Rebuild the foundation for America's global economic leadership: Invest in widely-recognized drivers of productivity and economic growth

Restore America's infrastructure

A nation's infrastructure is the foundation that secures its standard of living. America's infrastructure was once the envy of the world. Today, the National Association of Manufacturers **ranks the US 25th in the world on infrastructure quality**; the American Society of Civil Engineers (ASCE) grades America's overall infrastructure at D+.⁴

Quality infrastructure creates a better business environment: it enhances safety, productivity, and quality of life for citizens; and it supports good jobs. Well-planned investments generate robust returns for decades, whereas the consequences of inadequate infrastructure take years, sometimes even decades, to be revealed. If the decades-long underinvestment is not addressed, the ASCE claims by 2020 the economy will "lose almost \$1 trillion in business sales, resulting in a loss of 3.5 million jobs..." translating to a loss of \$6,000 in disposable personal income, per household, per year, from 2021 to 2040.

In 2016, with both the Republican and Democratic Party platforms acknowledging the need to invest in infrastructure, this investment transcends politics and offers America an opportunity to unite in common cause for a better future. Further, in the current environment of low interest rates and material costs, underemployment, and promising technologies capable of enhancing the efficiency of new infrastructure, the conditions for investment in infrastructure have rarely been so good.⁵

The way forward

To restore America's global leadership in infrastructure requires integrated long-term planning and substantial investment—with credible estimates calling for an additional \$200 to 260 billion per year.⁶ Financing such an investment in a fiscally responsible way will require local, state, and federal government involvement, as well as private sector contributions. A range of proposed funding ideas worth serious consideration include user fees, federal grants, a self-funding infrastructure bank, private investment through bonds and public-private partnerships, and targeted taxes.

In addition to identifying sources of funding, we also need to streamline project approvals to optimize return on investment. Worker training programs, including enhanced public-private partnerships, will need special attention to meet demand for new jobs and to support those most affected by economic dislocation.

Economic returns on infrastructure investments are promising. A May 2014 report by Standard & Poor's cites that a \$1.3 billion infrastructure investment in America would likely add 29,000 jobs to the construction sector and beyond, boost economic growth by \$2 billion, and reduce the federal deficit by \$200 million for the year.⁷ But these returns may also be lost through poor coordination and cumbersome bureaucracy among local, state, and federal agencies. Adequate funding, streamlined approval processes, and integrated long-term planning are essential.

Investments in roads, airports, public transit, communications and energy systems, waterways, and schools will create jobs, increase productivity, and improve quality of life; they create the physical conditions for shared economic prosperity.

Invest in research and development

Federal funding for basic scientific research is an investment in Americans' prosperity, security, and quality of life. The OECD reports that the US is now 10th in R&D investment relative to GDP, and that China is set to surpass the US in total investment in basic science research by 2019.⁸ The Information Technology and Innovation Foundation ranks⁹ the US 22nd out of 30 nations in levels of university research.

In September, 2016, more than three dozen American CEOs called for federal funding of basic science for greater "prosperity, security and well-being,"¹⁰ but lagging investment in R&D is not just a public sector problem. The National Science Board (NSB) describes industry support for in-house basic research as "fairly stagnant" and financing of academic R&D has declined to a level "not seen in more than two decades."¹¹ An increasing share of corporate R&D investment occurs outside the US, due in part to our dated corporate tax code (see Goal #2.) Further, modern business R&D investment is often aimed at new product development rather than basic research needed for transformative innovation and breakthroughs—like the research once conducted at Bell Labs and Xerox PARC, which enabled the growth of todays' technology sector.

According to the NSB, federal support for university R&D began to fall in 2005 and the National Science Foundation reports that federal funding for higher education R&D declined by over 11% from 2012 to 2014, the longest multiyear decline since 1972.¹²

Investment in scientific research is critical to the kinds of technological breakthroughs that increase productivity, enhance national security, spawn entire new industries, and enhance quality of life. Such breakthroughs typically emerge from a combination of government-funded basic science research and robust private sector research; many of today's major scientific breakthroughs are outside the US. For example, MIT reports that of the four major global scientific breakthroughs in 2014, none were achieved in the US. In order to secure America's long-term prosperity, these trends must be reversed.

Hurdles for private investment in research and development include short-term pressures from capital markets and a tax code that discourages US multinational companies from investing at home. The pressures on corporations to make payouts to shareholders¹³ and meet quarterly financial expectations outweigh incentives to retain earnings and invest in R&D. According to Barclays, 82% of business leaders believe short-termism impedes their ability to think and plan for the long term, and among large companies, R&D investment is viewed as "the biggest loser."¹⁴

The way forward

The US federal government has always been and must continue to be an essential source of funding for basic science research. The American Academy of Arts and Sciences recommends an annual growth rate of at least 4%¹⁵ in basic science research funding and the American Physical Society has received bi-partisan support for a \$100 billion National Research Bank. Experts also acknowledge the need for better and more efficient collaboration between and among government, industry and academia in funding basic science research.

Private investment is also critical and increasing the US R&D tax credit to compete with other major world economies is a place to start. Equally important is the need to shift market incentives to encourage long term corporate investment in basic scientific research. Creating a policy environment more conducive to long-term investment can help business do what it does best: innovate and bring new products and services to market that solve real problems, create jobs and provide for the needs of consumers.

Goal #2 - Modernize our corporate tax system: Level the playing field, simplify tax collection, and promote long-term investment

The reforms and changes proposed reward long-term investment and patient capital and provide revenues for critical infrastructure and R&D. They also price externalities to leverage market capital investment. The revenues proposed come from a variety of sources and in each case will increase America's competitiveness over the long term. We acknowledge that new sources of revenue must be sufficient to cover expenditures, but this initiative and these proposals do not attempt to offer a plan for reducing the national deficit, per se.

Modernize corporate tax

The US corporate tax code inhibits long-term investment. It must be changed to be both fair and globally competitive and reduce the incentive to keep cash offshore. It must encourage capital investment at home, level the playing field, and produce needed revenue. The US has the highest statutory corporate tax rate in the OECD and yet collects less revenue from corporate taxes relative to GDP than our OECD counterparts. Despite clear needs for long-term business investment in good jobs, infrastructure, and innovation, it is estimated that US companies have several trillion dollars parked offshore. Further, a complex array of special purpose tax credits, carve-outs, and loopholes have accumulated over time that benefit certain industries and individual companies pursuing their own competitive advantage. But the net effect is a weaker, less fair, and less efficient business environment; America is poorer for it.

The way forward

A modernized tax code can broaden America's corporate tax base and level the playing field for all companies. Simplifying the code may also reduce costs of tax compliance and collection. Debate is likely over whether corporate tax reform should be revenue neutral or should generate new revenues for national priorities, but closing loopholes and leveling the playing field have broad appeal.

A smarter, more productive corporate tax system would:

- Eliminate loopholes and special deductions that allow some companies and industries to pay very little or no taxes while others pay close to the top statutory rate.
- Reward investment in America. Our current system of allowing companies to defer taxes on foreign
 income until repatriated encourages tax avoidance and discourages investments in America. There are
 many ideas on the table for rationalizing the system and assuring full participation and adequate revenue
 for needed infrastructure and services.¹⁶ The ultimate solution must encourage business investment at
 home and generate adequate revenue for investments in our future.
- Encourage long-term capital expenditures that support productivity growth, including tax incentives for evidence-based drivers of long-term productivity.¹⁷

Inevitably, any of the changes listed will benefit some and reduce subsidies for others. These will involve complicated policy choices but the end game is a more fair, less complex and cumbersome competitive environment in pursuit of America's long-term goals. Fixing the tax system will redirect corporate resources toward productive investment and value creation, over tax avoidance and value extraction.

<u>Curb excessive speculation on corporate securities without undermining beneficial trading with a</u> Financial Transaction Tax

Excessive securities trading funnels capital away from productive long-term investment, undermines trust in our capital markets, and introduces noise and unproductive volatility into the economy. Most investors are best served by indexed "buy and hold" strategies over active trading. Companies are well served by patient capital that allows long term strategy and investments to pay off.

Today's capital markets, however, are marked by high frequency trading (HFT) that benefits neither longterm savers nor operating companies in need of patient capital. It is estimated that HFT conducted by computer algorithms accounts for more than 60% of all US stock trades today. Frequent trading is immensely profitable for financial middlemen who earn trading fees, and for those seeking a technological speed advantage, at the expense of the financial system as a whole.

Regulation that prohibits excessively speculative and high frequency trading would be extremely complicated and difficult to enforce. However, a Financial Transactions Tax (FTT) could curb these practices, support the shared long-term goals of average investors and companies, and raise revenue to pay for long-term national priorities. The key to success is the level of taxation envisioned by proponents who favor a "fractional" tax— a fraction of 1% that is well below the sales tax that consumers in almost all states take for granted for purchase of retail goods—and that is thus likely to have little, if any, effect on long-term savers and investors.

The way forward

A well-designed US trading tax would curb excessive trading without undermining *beneficial* trading that supports market liquidity and facilitates price discovery. **Proponents of a Financial Transaction Tax ("Tobin Tax") believe taxing speculative trading can reduce high speed arbitrage without complicated and expensive regulation**. Other major economies around the world are addressing this problem with a "fractional" tax. For example, the EU is considering a 0.1% tax on stocks and 0.01% tax on derivatives. Britain, Hong Kong and Singapore have financial transactions taxes.

Despite the experience of the OECD, the concept of an FTT remains controversial in the US where some members of the financial community argue that an FTT would impose costs on average investors and hurt market liquidity.

In 2009, the Aspen Institute's Corporate Values Strategy Group and two dozen prominent signatories recommended such a policy.¹⁸ In 2011 the Joint Tax Committee estimated that a **0.03% trading tax would raise \$352 billion over 9 years (2013 to 2021).** A **2016 study by the nonpartisan Tax Policy Center found that an FTT could raise a maximum of 0.4 percent of GDP (\$75 billion in 2017) in the US.¹⁹ At these levels, an FTT would be internationally competitive²⁰, raise revenue to help fund infrastructure and basic science research, and could tilt the system towards real investment and away from speculation and arbitrage.**

Restructure capital gains tax to reward longer term holdings

There is considerable evidence that humans naturally overvalue the short term and undervalue the long term. This phenomenon is not limited to Wall Street or corporate boardrooms, however **our current capital gains tax structure exacerbates a natural tendency towards short-termism in business and capital markets.** The IRS paradoxically treats a one-year investment horizon as "long term." Assets held for less than one year are taxed as ordinary income; holdings of just one year (and more) are treated as "long term" and taxed at the much lower rate of 15%.

The way forward

As a starting point, we need to update the IRS definition of long-term holdings. Five years is an appropriate target, although a range of thoughtful approaches advocate for slightly shorter and longer periods. Research suggests that markets do respond to preferential rates, so utilizing the capital gains structure to encourage patient capital is a natural step to influence behavior.²¹

A more ambitious (and also more complex²²) approach would be to institute a gradual scale for capital gains taxes that assigns higher rates for short-term holdings and lower rates for long-term investment. This has broad appeal. Investors, corporate executives, labor leaders, and corporate governance experts proposed a sliding capital gains tax rate in the 2009 Aspen Institute policy recommendations²³. BlackRock CEO, Larry Fink, has also advocated for a sliding scale.

Price carbon to simplify regulation and stimulate investment

Carbon emissions are a textbook example of a negative externality—a cost imposed on society that is not fully priced in the sale of a good or service. Costs of carbon emissions are widespread and well documented, ranging from health effects to negative impacts on food prices, insurance, and disaster relief from extreme weather. These costs are rarely borne immediately, and are typically passed on to individuals and governments.

A predictable carbon price for all companies creates greater market certainty and incentives for companies to invest in innovation. The American Conservative states, "The best policy to address greenhouse gas emissions, while adhering to conservative principles, is a carbon tax combined with tax and regulatory reform." The least-intrusive, most predictable and most effective incentive to address the problem is a direct tax on carbon emissions, dubbed "the Reagan Way" by President Reagan's Secretary of State, George Schultz.

Scientists and economists support a phased in carbon tax or fee as a best first step to reduce emissions. The nonpartisan Citizen's Climate Lobby argues that "phased-in carbon fees on greenhouse gas emissions (1) are the most efficient, transparent, and enforceable mechanism to drive an effective and fair transition to a domestic-energy economy, (2) will stimulate investment in alternative-energy technologies, and (3) give all businesses powerful incentives to increase their energy-efficiency and reduce their carbon footprints in order to remain competitive."

Business executives from resource intensive industries, among others, already calculate a carbon tax in their internal budgets and scenario planning and US CEOs in a growing number of companies support internal carbon pricing to prepare for that likelihood of public policy.²⁴ A number of global oil companies support a carbon tax on the grounds that it would create a transparent, level playing field for free market competition.²⁵

The way forward

Beyond mitigating the costs described above, shifting incentives away from a carbon-intense economy to one that is cleaner, more durable, and independent of foreign sources of energy, will spur technological innovation, new industries, and jobs. It can also be a source of funding for regions and workers facing the greatest dislocations from reduction in the use of fossil fuels. A carbon tax can be a source of significant revenue. In 2011, the CBO estimated that a price of \$20 per metric ton on greenhouse gas emissions in the

United States in 2012, raised 5.6 percent per year thereafter, would yield a total of \$1.2 trillion in revenues from 2012 to 2021. Others have implemented or advocate pricing at \$25 to 40/ metric ton.²⁶

Even at the low end of this range, a carbon tax creates market incentives to reduce carbon emissions and invest in new technologies. A carbon tax enables companies innovating around low-carbon products, services, and business models to compete in the marketplace.

Carbon tax programs already exist in developed economies.²⁷ An effective carbon tax must be well-priced, phased in over an appropriate period of time, and predictable—while applying to the entire economy and stringently avoiding loopholes.

Goal #3 - Make it easier for business and capital markets to focus on the longterm: Align policy, regulation and business protocols

The majority of American investors are saving for long-term goals like retirement and college tuition. Meanwhile, companies need patient capital to invest in workers, innovation, and productive assets. Aligning the long-term interests of average investors, and the companies who need capital, is a critical lever for securing our long-term prosperity. The ideas and recommendations in this section are designed to align private incentives and regulations with the public good.

Update fiduciary duties and disclosures for financial intermediaries and investing institutions

Institutions that manage other people's money occupy a privileged position in our economy. Most American adults invest in the stock market, primarily through pension funds, mutual funds and private investment (or "hedge") funds. They are saving for long-term goals such as retirement and a child's college tuition. Thanks to the influx of these average investors, large institutions now hold nearly 70% of all equity issued in US public markets on behalf of these average investors—a nine-fold increase from 8% in 1950.²⁸ But too often, the long-term orientation of average investors gets lost in the layers of intermediation between these investors and the companies that seek their capital.

Institutional investors are the linchpin that ensures that Americans save for the future while assuring companies have access to capital for their long-term growth. These investing institutions, however, increasingly depend on the services of other intermediaries to make investing decisions and to manage corporate governance responsibilities. Federal policy should adapt to this reality in order to secure the strength and vibrancy of our economy and protect the financial assets of American households. What is required to better serve the long-term interests of average investors?

What would be required to better serve the long-term interests of average investors?

The way forward

The fiduciary duties of financial intermediaries are outlined in the Investment Advisers Act of 1940²⁹ and ERISA,³⁰ the 1974 federal law that governs private pension plans. While the principles that underpin these policies are sound, rapid changes and the complexity of modern capital markets require us to ensure that all intermediaries remain faithful to the needs and time horizons of the ultimate investors and savers. The following recommendations reflect the work of scholars and practitioners of corporate governance:

- Ensure that the standards of the 1940 Act and ERISA, which govern private pension plans, apply to all intermediaries who substantially advise or influence ERISA fiduciaries or invest retirement savings that are under the care of ERISA fiduciaries.³¹
- Create institutional investor disclosure standards- a "nutrition label on accountability-"³² on relevant compensation, incentives, trading practices and policies on proxy voting and other indicators of compatibility with the goals of long term savers.
- Require more immediate disclosure from investors who acquire a significant stake of a company's stock so that all investors can make informed investment decisions based on this material information. (Currently, investors have ten days to disclose they have reached a 5% ownership threshold. This is outdated and undermines transparency for other investors.)
- Ensure that the shareholder litigation brought by ERISA fiduciaries is in the interest of plan beneficiaries.

Make it easier for public companies to act long term

A sound long-term policy agenda should help relieve corporate leaders from short-term distractions that are endemic to governance protocols and market demands. We can expect better long-term corporate decisions by dampening the drumbeat of quarterly expectations and amplifying the voice of the long-term holders of capital. Critical points of intervention include the following:

- Discourage short-term earnings guidance and encourage more transparency on drivers of long-term corporate value, by requiring companies who offer guidance to do so within the context of the company's long-term strategy.³³
- Consider the most appropriate interval between shareholder votes on executive pay. The SEC requires a "say on pay" vote *at least* every 3 years; companies that establish a 3 year cycle enable investors to evaluate executive performance over a longer timeframe.
- Incentivize patient capital through enhanced shareholder voting rights and/or dividends that vest over time.

Conclusion

We believe that American families, government, and businesses can unite in common cause to secure our long-term global economic leadership.

Short-term thinking undermines economic growth and prosperity. Short-termism is prevalent in human nature—but also inflamed by the decision rules, incentives, and norms that structure our economic system. To secure a long-term view and plan we need to address the incentives for long-term investment. Properly structured, these incentives will generate revenues needed to rebuild America's capacity for critical investment in research, transportation, and education for the 21st century workforce.

The changes offered here, as a catalyst to a national conversation, are an investment in securing the future for our children and grandchildren. The time is ripe for change.

Acknowledgements

We also wish to acknowledge the individuals who provided thoughtful feedback and helped shape this framework. While all contributed valuable insight, the listing of their name should not be construed as an endorsement of the final Framework:

John Bogle, Henrietta H. Fore, William Galston, Patrick Gross, Lois Ingram, Hugh Johnston, Tom Kahn, Elaine Kamarck, Brink Lindsey, David McCormick, Krishen Mehta, Barbara Novick, Steve Odland, Henry Paulson, James Pethokoukis, Henry Schacht, Michael Strain, Laura Tyson, Antonio Weiss, Wendell Willkie, Joshua Zoffer

Document date: December 19, 2016



Endnotes

¹ (Bailey, Berube, Godsal, & Kehoe, 2014)

http://www.fclt.org/content/dam/fclt/en/ourthinking/20140123%20McK%20Quarterly%20Survey%20Results%20for%20FCLT.org/content/dam/fclt/en/ourthinking/20140123%20McK%20Quarterly%20Survey%20Results%20for%20FCLT.org/content/dam/fclt/en/ourthinking/20140123%20McK%20Quarterly%20Survey%20Results%20for%20FCLT.org/content/dam/fclt/en/ourthinking/20140123%20McK%20Quarterly%20Survey%20Results%20for%20FCLT.org/content/dam/fclt/en/ourthinking/20140123%20McK%20Quarterly%20Survey%20Results%20for%20FCLT.org/content/dam/fclt/en/ourthinking/20140123%20McK%20Quarterly%20Survey%20Results%20for%20FCLT.org/content/dam/fclt/en/ourthinking/20140123%20McK%20Quarterly%20Survey%20Results%20for%20FCLT.org/content/dam/fclt/en/ourthinking/20140123%20McK%20Quarterly%20Survey%20Results%20for%20FCLT.org/content/dam/fclt/en/ourthinking/20140123%20McK%20Quarterly%20Survey%20Results%20FcLT.org/content/dam/fclt/en/ourthinking/20140123%20McK%20Quarterly%20Survey%20Results%20FcLT.org/content/dam/fclt/en/ourthinking/20140123%20McK%20Quarterly%20Survey%20FcLT.org/content/dam/fclt/en/ourthinking/20140123%20McK%20Quarterly%20Survey%20Results%20FcLT.org/content/dam/fclt/en/ourthinking/20140123%20McK%20Quarterly%20Survey%20Results%20FcLT.org/content/dam/fclt/en/ourthinking/20140123%20McK%20Quarterly%20Survey%20FcLT.org/content/dam/fclt/en/ourthinking/20140123%20McK%20Quarterly%20Survey%20Survey%20FcLT.org/content/dam/fclt/en/ourthinking/2014040400FcLT.org/content/dam/fclt/en/ourthinking/201404040FcLT.org/content/dam/fclt/en/ourthinking/2014040FcLT.org/content/dam/fclt/en/ourthinking/2014040FcLT.org/content/dam/fclt/en/ourthinking/2014040FcLT.org/content/dam/fclt/en/ourthinking/2014040FcLT.org/content/dam/fclt/en/ourthinking/2014040FcLT.org/content/dam/fcLt/en/ourthinking/20FcLT.org/content/dam/fcLt/en/ourthinking/20FcLT.org/content/dam/fcLt/en/ourthinking/20FcLT.org/content/dam/fcLt/en/ourthinking/20FcLT.org/content/dam/fcLt/en/ourthinking/20FcLT.org/content/dam/fcLt/en/ourthinking/20FcLT.org/content/dam/fcLt/en/ourthinking/20FcLT.org/content/dam/fcLt/en/ou

² (Eisen, Smithers, 2015) Working Paper by Norm Eisen and Andrew Smithers, "Short-Termism, Perverse Management Incentives and Poor Productivity"

³ (Waddoups, C. Jeffrey, 2016) "Did Employers in the United States Back Away From Skills Training in the Early 2000s?" *ILR Review*, 69(2), March 2016, pp. 405–434

⁴ (Infrastructure Report Card, 2016) <u>http://www.infrastructurereportcard.org/a/#p/home;</u> (Senate Budget Committee) <u>http://www.budget.senate.gov/democratic/public/index.cfm/repairing-our-infrastructure</u>

⁵ (Summers, February 15, 2016) <u>https://www.foreignaffairs.com/articles/united-states/2016-02-15/age-secular-stagnation</u>

⁶ The ASCE estimates an additional \$200b/ year is needed; the National Association of Manufacturers recommends an additional \$100b/year—to redress the infrastructure needs already identified. More than \$260b/year⁶ may be needed to recapture global leadership.

⁷ (Standard & Poors Ratings Services, 2014) <u>http://www.engagedinvestor.co.uk/Journals/2014/01/30/n/a/q/How-To-Fill-A.pdf</u>

⁸ (OECD, 2014) <u>http://www.oecd.org/newsroom/china-headed-to-overtake-eu-us-in-science-technology-spending.htm</u>

⁹ (Atkinson & Steward, 2011) <u>http://www.itif.org/files/2011-university-research-funding.pdf</u>

¹⁰ (New York Times, September 26, 2016) <u>http://cdn.annenbergpublicpolicycenter.org/wp-content/uploads/Basic-Research-NYT-APPC-09-26-16.pdf</u>

¹¹ (National Science Board, 2008) <u>https://www.nsf.gov/statistics/nsb0803/start.htm</u>

¹² (Britt, 2015) <u>http://www.nsf.gov/statistics/2016/nsf16302/</u>

https://www.amacad.org/multimedia/pdfs/publications/researchpapersmonographs/AmericanAcad_RestoringtheFoundation. pdf

¹³ (Kamarck, Galston 2016) <u>http://www.brookings.edu/~/media/research/files/papers/2015/06/30-american-economy-growth-strategy-galston-kamarck/cepmglastonkarmarck4.pdf</u> The authors calculate that share buybacks have accounted for nearly 5% of total US GDP over the last decade.

¹⁴ (Davies, 2015) <u>https://www.barclayscorporate.com/content/dam/corppublic/corporate/Documents/research/short-termism-report.pdf</u>

¹⁵ (The American Academy of Arts and Sciences, 2014)

¹⁶ For analysis on some competing approaches see (Clausing & Avi-Yonah, 2007)

<u>https://www.brookings.edu/research/reforming-corporate-taxation-in-a-global-economy-a-proposal-to-adopt-formulary-apportionment/;</u> (Toder & Vaird, Alan D., 2014) <u>http://aei.org/wp-content/uploads/2014/04/-toder-viard-</u>report 132524981261.pdf; (Brannon, Holtz-Eakin, Lowell, 2011) https://www.americanactionforum.org/wp-

<u>content/uploads/sites/default/files/Growth%20Through%20Reform%20AAF.pdf</u>; (US Dept. of Treasury, 2007) https://www.treasury.gov/press-center/press-releases/Documents/07230%20r.pdf

¹⁷ For example, see the debate depreciation reform, including but not limited to bonus depreciation. See, e.g. Congressional Research Service, Bonus Depreciation: Economic and Budgetary Issues, July 7, 2014

https://www.fas.org/sgp/crs/misc/R43432.pdf.

¹⁸ (Aspen Institute Business & Society Program, 2009) <u>https://www.aspeninstitute.org/publications/overcoming-short-termism-call-more-responsible-approach-investment-business-management/</u>

¹⁹ (Burman et al., 2015) <u>http://www.taxpolicycenter.org/publications/financial-transaction-taxes-theory-and-practice/full</u>

²⁰ By way of comparison, the EU financial transactions tax is set to be .1% on stocks beginning in 2016. Australia charges .3% on stocks; Hong Kong charges .3% on stocks. Singapore charges .2% on stocks.

²¹ The CBO has found that capital gains taxes are quite elastic and thus responsive to these kinds of tax policy incentives. (Dowd, McClelland and Muthitacharoen, 2012) <u>https://www.cbo.gov/sites/default/files/112th-congress-2011-</u> 2012/workingpaper/43334-TaxElasticityCapGains 0.pdf

²² While a sliding scale provides an effective incentive and rewards for long term investment, it also introduces greater complexity to capital gains taxation. The Bipartisan Policy Center and tax experts like Leonard Burman of the Tax Policy Center advocate for taxing capital gains as ordinary income.

²³ (Aspen Institute Business & Society Program, 2009)

²⁴ (Cohen, 2015) <u>https://energyfactor.exxonmobil.com/exxonmobil-and-the-carbon-tax/</u>

²⁵ (The New York Times, 2015) <u>http://www.nytimes.com/2015/06/07/opinion/the-case-for-a-carbon-tax.html</u>

²⁶ Some state-level proposals put the carbon tax at \$25/ metric ton. Alberta's new carbon tax will begin at \$20/metric ton in 2017, increasing to \$30/metric ton in 2018 and rising with inflation thereafter. Some environmental groups have suggested that \$40/ metric ton is an appropriate price on carbon.

²⁷ Newer carbon tax programs exist in California, Alberta, Japan and Ireland. Sweden, The Netherlands, Finland, and Norway introduced carbon taxes in the 1990s.

²⁸ (Aguillar, 2013) <u>http://www.sec.gov/News/Speech/Detail/Speech/1365171515808#P21_2800</u>

²⁹ The Investment Act of 1940 applies to "any person who, for compensation, engages in the business of advising others, either directly or through publications or writings, as to the value of securities or as to the advisability of investing in, purchasing, or selling securities." While the Advisers Act does not expressly address the fiduciary duties of investment advisers, the U.S. Supreme Court has long recognized that such duties underlie the Advisers Act.

³⁰ ERISA governs some private pension plans and provides tax-advantaged status to such plans. ERISA and other acts (UPIA, UPMIFA, MPERS) govern funds to be invested for beneficiaries with long-term horizons.

³¹ For many detailed recommendations see "Securing Our Economic Future: A Sensible, Bipartisan Agenda To Increase Long-Term Investment And Job Creation In The United States", Leo E. Strine Jr., Keynote Address First Annual American College of Governance Counsel Dinner, Oct. 30, 2015 Some examples of modest changes include: 1) Update ERISA and SEC rules to require index funds to exercise their voting privileges in accordance with the investment philosophy and time horizons of their investors. 2) Require proxy advisory firms to disclose how their recommendations and guidance relates to index funds and retirement savings-specific concerns. 3) Require pension, charitable, and government investment funds to invest through investment advisors covered by the 1940 Act—thereby inducing hedge funds and private equity funds to be more transparent and to mirror the broader standards.

³² (Davis, 2012) <u>https://www.brookings.edu/wp-content/uploads/2016/06/Mobilizing-Ownership.pdf</u>

³³ (Hsieh, Koller, & Rajan, 2006)

http://www.mckinsey.com/insights/corporate finance/the misguided practice of earnings guidance; (Konsantonis & Serafeim, 2015)

http://static1.squarespace.com/static/5143211de4b038607dd318cb/t/563b5827e4b0efe399a2fc00/1446729767673/Impleme nting+Integrated+Guidance_November+2015.pdf