



**Compete.**

Council on  
Competitiveness



# 2014 Clarion Call

The Council's members are committed to seeing America prosper. Our voice is strongest when it represents all sectors of the economy, when the voices of industry are joined with the major research universities and the community colleges, when labor finds common ground with management and when the national labs link with the American entrepreneurial spirit.

# Where America Stands

## Introduction

Since 2012, the *Clarion Call* has laid out a competitiveness agenda for policymakers, a roadmap to follow based on more than two decades of research and the insights of the nation's leading corporate executives, academic and labor leaders, and national lab directors. The *Clarion Call* highlights key emerging trends and ongoing U.S. competitiveness challenges. **And for the first time, the Council will offer letter grades on policymakers' progress (or lack thereof) on its core recommendations.**

The Council champions the belief that to be competitive, and raise the standard of living for all Americans, we must enhance productivity. The United States has an enviable track record in this regard, but warning signs abound. Despite having the largest, most productive and diverse economy in the world, America's recovery from recession remains historically slow and crucial policy actions that would help restore its dynamism remain stalled.

The Council, through its three decades of work on innovation, sustainability and resilience, has played an important role in formulating and driving a pro-growth policy agenda to support a robust American economy. That role remains as critical today as it was in 1986, when the Council was founded.

In the *Clarion Call*, the Council will assess the state of American competitiveness, but also put forth an agenda to enable everyday Americans to build more prosperous lives, drive new innovations, and advance toward a more confident future.

## 2014 Emerging Trends and Recent Developments

***More people are working but are producing below expectations. While the unemployment rate has reached pre-recession levels, anemic GDP growth is resulting in less output per person.***

Over the past three years, **productivity** has grown at an average rate of only 0.7 percent, a full percentage point below the average rate of the past decade and well below the 2.0 percent growth rate of the 1990s and the 2.5 percent rate of the 2000s.<sup>1</sup> Productivity—the amount of gross domestic product (GDP) generated per hour of labor—must grow over time to support higher wages and competitive companies in an advanced economy like the United States. Beyond the impact of the recession, troubling trends in technology innovation, investment, education, startup rates, and high skill immigration are slowing productivity.

America still has the world's largest economy and one of the highest levels of GDP per capita.<sup>2</sup> **Economic growth**, however, remains modest—well below the 4-5 percent level needed for a full recovery. Slow productivity and GDP growth contribute to stagnant household incomes for most Americans and an increase in wealth inequality.

1 Bureau of Labor Statistics, United States Department of Labor.

2 The World Fact Book, United States Central Intelligence Agency.

The outlook for **job creation** is more positive with employment returning to pre-recession levels. Despite a recent slowdown, July 2014 concluded a six month stretch with more than 200,000 jobs created per month, the best such streak since 1997.<sup>3</sup> The improving outlook includes an unemployment rate that dropped over the past year from 7.3 to 6.1 percent, although a considerable share of that improvement was due to a lower labor force participation rate, particularly among the long-term unemployed.

***American energy strength and abundance is narrowing the U.S. trade deficit.***

The shift in America from **energy** scarcity to abundance conveys significant competitiveness benefits in terms of output, jobs, trade and manufacturing. Since November 2012, the United States has been the world's largest petroleum producer, overtaking Saudi Arabia.<sup>4</sup> The United States overtook Russia as the world's largest natural gas producer in 2011 and widened the gap between 2012 and 2013.<sup>5</sup> This surge in supply has lowered domestic energy costs and attracted manufacturing investment from around the world. Industrial energy consumers in the European Union pay more than double their American counterparts, and Japanese firms pay nearly three times their U.S. competitors.<sup>6</sup>

Driven by improved energy independence and continued surpluses in services and agriculture, the U.S. **trade deficit** improved \$61 billion between 2012 and 2013.<sup>7</sup> Increased production of oil and natural gas was the primary driver. American exports of fuel oil and refined petroleum products rose 55 percent over the period, while imports of crude oil dropped 16 percent.<sup>8</sup> Tempering this significant improvement is the large and persistent U.S. trade deficit in goods, particularly with Asia. Completing trade accords with Europe and Asia remain important priorities, as does the need to reauthorize the Ex-Im Bank to provide globally competitive financing for U.S. exports.

***U.S. manufacturing output has recovered to its pre-recession levels and grew 4 percent from July 2013 to July 2014.***<sup>9</sup>

After a decade long skid, the manufacturing sector has added more than 600,000 jobs since 2010, outperforming job growth in other sectors of the U.S. economy.<sup>10</sup> This manufacturing resurgence is just one indicator of the dawning of an industrial transformation in the United States driven by an abundance of domestic energy, increased energy productivity, and a new generation of advanced manufacturing and energy technologies. Building on this momentum, the federal government, states and private actors have joined forces to co-invest in a national network of smart factories, manufacturing clusters and regional digital manufacturing pilots.

***Inaction on globally uncompetitive corporate taxes hit a tipping point in the last year as several U.S. firms moved headquarters overseas to more tax-friendly environments (i.e. inversion).***

The U.S. **corporate tax** rate of 39.1 percent is the highest of all advanced economies.<sup>11</sup> This competitiveness drag is exacerbated by a worldwide double taxation system that locks away approximately \$1.95 trillion<sup>12</sup> earned overseas that could otherwise be invested in the United States. U.S. firms are limiting their global tax liability and optimizing foreign tax and investment incentives, including U.S. firms utilizing inversions to move their headquarters overseas to more tax friendly environments.

## **The Competitiveness Landscape**

The turbulence and transition that has underpinned the U.S. economy for the past several years remains as disruptive as ever, creating mismatches in skills and structural imbalances against the backdrop of outdated regulations and a deteriorating national infrastructure. A look at critical indicators shows a mixed competitiveness picture across the American economic landscape.

3 Bureau of Labor Statistics, United States Department of Labor.

4 Energy Information Administration, United States Department of Energy.

5 Energy Information Administration, United States Department of Energy.

6 European Commission.

7 Bureau of Economic Analysis, United States Department of Commerce.

8 Energy Information Administration, United States Department of Energy.

9 Economic Research & Data, Board of Governors of the Federal Reserve System.

10 Bureau of Labor Statistics, United States Department of Labor.

11 Organization for Economic Cooperation and Development.

12 Rubin, Richard. Companies' Offshore Profits Keep Piling Up, Bloomberg News. March 20, 2014.

There has been a welcome improvement in the nation's budget deficit to about 3 percent of GDP and a temporary cease-fire to the brinksmanship over whether the United States government would honor its debts. The medium and long-term outlook for **U.S. debt**, however, remains largely unchanged and poses significant problems. The budget deficit is poised to grow rapidly after 2018 and debt held by the public stands at \$17.6 trillion, or 74 percent of GDP.<sup>13</sup> The Congressional Budget Office projects that under current law the debt is on track to exceed the size of the entire U.S. economy in 25 years. Without a broad agreement on curbing entitlement growth and comprehensive tax reform, the discretionary federal budget from which strategic investments in research, education, infrastructure, and other competitiveness priorities are made will remain severely strained. The available funding will be inadequate to meet future economic and national security needs—further undermining economic growth and prosperity.

The “ace-in-the-hole” for the American economy continues to be the private sector's ability to innovate—to introduce new high margin products and services—and be adaptive, flexible and resilient. America remains a global **innovation** leader—accounting for one-third of all global research and development (R&D). This lead, however, is shrinking as many of our competitors around the world are increasing national investment in R&D, both nominally and as a share of their economies.<sup>14</sup>

Although industry is the dominant R&D investor in the United States, the federal government is the primary investor in basic research that explores foundational knowledge and enables transformative breakthroughs. Such critical investment is declining in real terms,<sup>15</sup> galvanizing concerted action by leaders in academia and industry calling for bipartisan action to close the “innovation deficit.”

Startups, often the beneficiaries of these long-term investments, act as agents of innovation and productivity for the wider economy and account for the majority of

net new jobs created, yet they are declining as a share of U.S. businesses. There are some encouraging signs. Initial public offerings (IPOs) are growing beyond pre-recession levels. In 2013, 97 American IPOs raised \$21 billion. In the first half of 2014 alone, 160 IPOs have raised \$32.4 billion.<sup>16</sup>

America must unleash and capitalize on this entrepreneurial promise and potential, yet we continue to strangle and inhibit progress by keeping and enacting innovation-hostile policies and regulations at the federal, state and local levels. The continuing growth of government **regulation** has imposed new costs and uncertainties that business leaders and entrepreneurs claim have slowed investment, limited expansion and curtailed hiring. The growth of major regulatory rules (those with an annual impact exceeding \$100 million) has impacted sectors, from health care to finance to energy, placing a particularly high burden on small businesses. For example, since 1981 the federal government has issued more than 2,300 manufacturing rules, and from 2009-2013, the annual number of major manufacturing rules has roughly doubled the pace of the prior 16 years.<sup>17</sup>

America's leadership in increasingly interconnected fields such as nanotechnology, materials science, biotechnology, robotics, and information technology is crucial to America's ability to solve complex problems, create new industries, drive competitive advantage, and shake off economic malaise. One particular high-growth field, colloquially referred to as Big Data, lies at the intersection of the ability to collect, analyze, and use data. The nexus of sensors, the Internet of Things, vast repositories of data, high performance computing, analytics, and applications have opened myriad opportunities in existing and undreamed of industries. The United States is well poised to lead this next wave of information-centric productivity growth and prosperity.

Although challenges in cyber security, software, and talent development are substantial, America holds a strong hand with top research universities,

13 *The 2014 Long Term Budget Outlook*, Congressional Budget Office. July 15, 2014.

14 Grueber, Martin and Studt, Tim. *2014 Global R&D Funding Forecast*, Battelle. December 2013.

15 Hourihan, Matt. *COMPETES Funding Update: the Senate Gets Involved*, American Association for the Advancement of Science. July 24, 2014.

16 Baltro, Michael. *US IPO Showing Strong Growth*, Financial Buzz. August 20, 2014.

17 *Impact of Regulation on the Manufacturing Sector*, Manufacturers Alliance for Productivity and Innovation. September 2013.

an unparalleled national laboratory complex, one of the world's most entrepreneurial cultures, and a robust, diverse base of technology. For instance, in supercomputing alone, the United States is home to 233 of the Top 500 supercomputers in the world,<sup>18</sup> with the actual lead even stronger in national security realms and proprietary industry. Further, the U.S. is poised to lead the path to exascale and quantum computing. Ensuring Americans have the **talent and skills** to develop and use these “productivity enhancing tools” is essential to securing these economic opportunities.

Yet structural and political problems plague progress in addressing education reform, skilled immigration, and job-readiness training. Although improving, America's K-12 performance trails most of its competitors.<sup>19</sup> Tuition and fees at four-year colleges increased 27 percent beyond the rate of inflation between 2009 and 2014.<sup>20</sup> As a result, among all students who graduated from four-year colleges in 2012, seven in ten left with debt that averaged nearly \$30,000. Just 20 years ago, fewer than half of college students graduated with debt, and the amount was less than \$10,000 on average.<sup>21</sup> Immigration reform necessary to attract and retain world class talent remains stalled in Congress. Indeed, U.S. spending on programs to train active labor market participants is significantly lower as a share of the economy than our competitors Germany and Japan.<sup>22</sup>

Educational and skill disparities continue to be a core driver of the growing **income divide** among Americans. In 2012, the median wage for a U.S. job that requires a post-secondary education paid almost double (\$67,140) those jobs that require a high school diploma (\$35,170) and over three times those jobs attainable with less than a high school diploma (\$20,110).<sup>23</sup> Additionally, because of their investments in advanced training, the highly skilled trade unions are seeing average wages well above those of non-skilled workers.

Infrastructure improvements are sorely needed to upgrade and modernize American roads, ports, levees, bridges, inland waterways, dams, airports, electric grids and waste facilities. America still has not come to grips with the high cost and risk of aging **infrastructure**. By 2020, inadequate infrastructure for things like transportation, energy, and water is projected to burden businesses with \$1.2 trillion in costs and households with \$611 billion in higher bills.<sup>24</sup>

18 [www.top500.org](http://www.top500.org).

19 Chappell, Bill. *U.S. Students Slide in Global Ranking on Math, Reading, Science*, NPR News. December 3, 2014.

20 *Trends in Higher Education*, The College Board.

21 College Board, Institute for College Access and Success.

22 Organization for Economic Cooperation and Development.

23 *Education and Training Outlook for Occupations, 2012-2022*, Bureau of Labor Statistics, United States Department of Labor.

24 *Failure to Act Economic Studies*, American Society of Civil Engineers.

# The Competitiveness Report Card

The Council on Competitiveness is grading policymakers on the progress, or lack thereof, to address several key competitiveness policy recommendations developed from over a decade of research and the insights of the nation's leading corporate executives, academic and labor leaders, and national lab directors. A grade of "C" represents neither positive action nor negative impact.



# The Competitiveness Report Card

## CALL TO ACTION

## GRADE

## RESULT

### TALENT

Reform immigration rules to ensure that the world's best talent innovates and creates opportunities in the United States. Staple a green card to the diplomas of high skilled immigrants who acquire an advanced degree in the United States.

**C**

Comprehensive immigration reform in 2014 is dead and prospective action for the next Congress is now at stake too. The broad bipartisan support for high skilled immigration reform risks once again falling victim to policymakers' unwillingness to find a compromise that will help attract and retain high skilled talent and secure our borders for the good of the nation.

Expand science, technology, engineering and math (STEM) education linked to projected job opportunities of the future.

**B**

Despite Congressional inaction on recommendations from the White House and high-profile panels, the number of STEM degrees awarded each year has been on the rise since 2007 putting the U.S. on pace to meet the President's goal of "one million additional college graduates with bachelor and associate degrees in STEM fields" over the next decade (*June 2014 AAAS analysis of NSF data*). However, initiatives such as the Council's National Engineering Forum reveal that public and private sector efforts to better link skills to jobs remains an ongoing problem.

Strengthen career and technical education (CTE) and training programs through partnerships with business or labor that prepare students and workers for good jobs that fill labor market needs.

**B**

More than a decade after it expired, the Workforce Investment Act was re-reauthorized and amended through the Workforce Innovation and Opportunity Act signed into law this past July. The bill will help bring job-training programs into the 21st century by introducing performance measures, streamlining programs, increasing state flexibility, and expanding employer partnerships.

### INVESTMENT

Double the investment in federal research and development encouraging cross disciplinary partnerships to commercialize results.

**D**

Federal investment in R&D as a percentage of GDP has been declining every year for the last decade—falling from 1.04 percent to 0.79 percent between 2003 and 2013—creating a growing "innovation deficit" that will be difficult to reverse.

Projections for 2014 and 2015 show the continuation of this de-investment in basic research. (*AAAS*)

Urge the administration and Congress to work together, across party lines, to compromise on spending and revenue measures that will bring the Nation's deficit and debt down to historical norms.

**C**

While the modest economic recovery has reduced the ratio of debt to GDP, and Congress passed the 2013 Bipartisan Budget Act, ending the most recent cycle of fiscal brinksmanship, these gains may be short lived. Starting in 2018, the deficit is expected to grow substantially due to an aging population, rising health care costs, expansion of health care subsidies, and growing interest payments on the national level.

Lower the corporate tax rate to 23 percent, in line with the upper quartile of OECD economies.

**D**

Despite the U.S. still having one of the highest corporate tax rates in the world, no action was taken to bring it in line with countries competing for corporate investments. In the first half of 2014, roughly a dozen large U.S. firms have merged and moved headquarters overseas (inversions) to avoid high U.S. rates and double taxation.

Reduce taxes on repatriated earnings to less than 5 percent, in line with other OECD economies.

**D**

Corporate tax reform remains elusive while \$1.95 trillion remain locked up overseas due to tax rules that encourage companies to keep earnings outside of the United States. Accumulated profits of U.S. multinationals are up 11.8 percent from this time last year. (*Bloomberg: Offshore profits avoid IRS reach*)



**CALL TO ACTION****GRADE****RESULT****TECHNOLOGY**

Implement a national network of advanced manufacturing clusters and smart factory ecosystems.

**A**

Regional stakeholders have moved aggressively to implement this recommendation and catalyze the development of these advanced manufacturing hubs of innovation. Two new manufacturing hubs came online in 2014 and are comprised of hundreds of companies, universities, community colleges, national laboratories and government agencies that are collaborating and co-investing in the development of manufacturing technologies to commercialize and scale up in the United States.

Lead in high performance computing by committing to exascale computing, and expanding pilots that give U.S. small and medium sized businesses access to modeling and simulation tools.

**B**

With the administration pushing for legislation to expand HPC throughout the supply chain, efforts are underway to increase access to HPC at the state and local level—many building off of the Council's Midwest Pilot (NDEMC). The House passed the American Super Computing Leadership Act to further the development of exascale computing.

Promote best practices in the protection of intellectual property rights around the world.

**B**

While global IP piracy continues as a major concern—the number cyber-attacks on U.S. networks hit a high water mark in 2013. The administration, Congress, the Departments of Commerce and Justice, and the U.S. Patent and Trademark Office have accelerated efforts to encourage best practices in online IP protection (*Verizon, 2014 Data Breach Investigation Report*). IP also is a cornerstone of new bilateral and multilateral trade agreements, though efforts to strengthen enforcement of IP protection laws have stalled.

**INFRASTRUCTURE**

Deploy modern and resilient energy, transportation, and cyber infrastructures to encourage investment and production in the United States, and to take full advantage of domestic energy supplies sustainably.

**C**

While recent congressional action granted the immediate solvency of the Highway Trust Fund keeping important transportation projects on track and construction workers on the job, the Fund shoots back into the red come the end of 2014, unless lawmakers come up with a long-term solution.

The average rate of investment in electricity infrastructure has increased over the last decade, but an investment gap remains. Current funding trends will lead to a \$107B gap by 2020 and almost \$732B by 2040, leading to increased electricity interruptions the nation cannot afford (ASCE).

Positively, between 2013 and 2014, the United States moved up two places to No. 7 on the World Economic Forum Network Readiness Index—a holistic measurement and ranking of the cyber infrastructure of more than 140 countries.

Re-assert leadership in global trade, expanding market liberalization and forging strategic agreements with Brazil, China, India, Japan, the EU, and the Trans Pacific Partnership Countries.

**C**

Progress continues toward trade agreements with the EU, Japan and several Asia Pacific Countries. However, earlier this year Congress denied the Obama Administration trade promotion authority (TPA), making treaty ratification doubtful. No major U.S. trade agreement has ever been ratified without TPA.

Re-authorize the Export-Import Bank and expand its mission to fund domestic infrastructure projects.

**D**

Not only has there been no progress toward expanding this important national resource to enable investment in America's infrastructure and export financing, some members of Congress want to revoke the bank's charter when it comes up for renewal at the end of September 2014. The need for competitive financing for exports of U.S. products is critical at a time when major global trading partners are providing massive subsidies to bolster their export industries.

# The Path Forward

The Council's CEOs, its academic and labor leaders and its national lab directors remain committed to both putting forward a pro-growth agenda to enhance American competitiveness and to promoting that agenda with policymakers at all levels. The *Clarion Call* stands as a guidepost for those looking for the path forward.

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# About the Council

## WHO WE ARE

The Council's mission is to set an action agenda to drive U.S. competitiveness, productivity and leadership in world markets to raise the standard of living of all Americans.

The Council on Competitiveness is the only group of corporate CEOs, university presidents and labor leaders committed to ensuring the future prosperity of all Americans and enhanced U.S. competitiveness in the global economy through the creation of high-value economic activity in the United States.

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## HOW WE OPERATE

The key to U.S. prosperity in a global economy is to develop the most innovative workforce, educational system and businesses that will maintain the United States' position as the global economic leader.

The Council achieves its mission by:

- Identifying and understanding emerging challenges to competitiveness
- Generating new policy ideas and concepts to shape the competitiveness debate
- Forging public and private partnerships to drive consensus
- Galvanizing stakeholders to translate policy into action and change

## JOIN THE CONVERSATION



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