

"The Start-up Slump: Can Tax Reform Help Revive Entrepreneurship"

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Chairman Tiberi, Ranking Member Heinrich, and members of the Committee, thank you for the invitation to testify today.

My name is John Dearie and I'm the founder and president of the Center for American Entrepreneurship (CAE), a nonpartisan research, policy, and advocacy organization whose mission is to engage policymakers in Washington and across the nation regarding the critical importance of entrepreneurs and start-ups to innovation, economic growth, and job creation – and to pursue a comprehensive policy agenda intended to significantly enhance circumstances for new business formation, survival, and growth.

Introduction

The Committee's focus today on tax reform and entrepreneurship is not only timely and important, it is, in my view, the intersection of two of the most urgent policy areas demanding the attention of our nation's policymakers. I say that because of the critical importance of both sound tax policy and thriving entrepreneurship – and the mutually reinforcing relationship between the two – to the nation's foremost economic challenge, accelerating economic growth.

As members of the Committee are no doubt aware, the U.S. economy has been mired in a rut of sub-par performance for more than a decade. After expanding at an average annual rate of about 3.4 percent for most of the post-World War II era, the economy has not grown at 3 percent or better since 2005 – that is, for nearly 13 years now – and has averaged only 2.2 percent since the end of the Great Recession, more than eight years ago.

The current Administration has rightly made economic growth of 3 percent or better its top economic objective, and has also correctly identified comprehensive tax reform as one of the principal pathways for achieving that goal. As members of this Committee understand all too well, our nation's current tax code is a mess – overly complex and burdensome, illogical, uncompetitive, outdated, riddled with inefficiencies – all of which amounts to a significant obstacle to investment, work, production and, ultimately, economic growth.

Tax policy is one of the most powerful tools of economic policymaking available to Congress, and tax reform that achieves a simpler code, a broader base, and lower tax rates would be a tremendous boon to economic growth, job creation, and greater economic opportunity.

But even the most successful tax reform will not be enough for the United States to achieve its full economic potential. A simple, efficient, fair, and properly focused tax code is a powerful facilitator of economic growth – but it's not where economic growth comes from.

Economic growth comes principally from gains in productivity, driven by innovation – which comes disproportionately from new businesses, or "start-ups." And, as the title of this hearing references, American entrepreneurship is in trouble, with start-up rates falling for nearly three decades. Re-achieving America's full economic potential – and the growth, jobs, and opportunity the American people deserve – requires turning that decline around, which in turn requires changes in public policy. Tax reform is one of the essential changes in public policy that thriving entrepreneurship requires.

And – importantly – thriving entrepreneurship will compound the positive impact of an effective and efficient tax code. Start-ups, and the entrepreneurs who launch them, take incredible risks against very long odds to become the next generation of successful American companies. More start-ups mean more profitable businesses paying more taxes. And faster economic growth – driven by thriving entrepreneurship and facilitated by a world-class tax code – means more Americans employed, consuming, investing, and paying taxes.

Tax reform promotes stronger entrepreneurship, which, in turn, expands and extends the benefits of a competitive tax code. This hearing, therefore, hits the bull's eye of America's economic growth challenge.

The first part of my testimony will address the importance of entrepreneurship to economic growth. The second part will address the importance of tax reform to thriving entrepreneurship.

America's Economic Growth Crisis

For more than a decade now the U.S. economy has been mired in a pattern of below-historical trend economic growth. Since emerging from the Great Recession more than eight years ago, the U.S. economy has grown at an average annual rate of just 2.2 percent — more than a percentage point slower than the post-WWII average of 3.4 percent. Indeed, as mentioned above, the U.S. economy has not grown at 3 percent or better on an annual basis since 2005, thirteen years ago.

Alarmingly, the Congressional Budget Office (CBO) recently announced that economic growth "is projected to remain modest, averaging slightly above 2.0 percent through 2018 and averaging somewhat below that rate for the rest of the period through 2027."¹

Many private sector economists agree. A survey earlier this year by the National Association for Business Economics found that respondents had lowered their growth outlook to just 2.2 percent this year and 2.4 percent next year.² Former Treasury Secretary Larry Summers has referred to the U.S. economy's sub-par post-recession performance as "secular stagnation."³

An economy that grows at a healthy pace of 3 percent or better on a sustained basis provides the opportunity necessary for the American people to pursue their dreams and achieve their potential. Slower growth – particularly over an extended period – means less economic opportunity, slower job creation, lower wages, and greater economic anxiety.

Indeed, weak economic growth experienced since 2005 is the principal cause of America's most serious, politically difficult, and, in some ways, mutually reinforcing challenges, including:

- persistent underemployment;⁴
- high and rising long-term debt;
- stagnant middle-class wages;
- wide and worsening income, wealth, and opportunity inequality;
- the highest poverty rates since the late-1960s; and,
- record numbers of Americans reliant on government programs like food stamps and disability insurance.

To meaningfully address these challenges – and the anger, cynicism, and populism they inspire – we must accelerate economic growth back to the historical average *on a sustained basis*.

¹ "An Update to the Budget and Economic Outlook: 2017 to 2027," Congressional Budget Office, June 2017.

² "Survey: Economists Expect Slower U.S. Growth," Associated Press, June 5, 2017.

³ "U.S. Economy May Be Stuck in Slow Lane for Long Run," Josh, Boak, *Associated Press*, February 9, 2014.

⁴ "The Idle Army: America's Unworking Men," Nicholas Eberstadt, *The Wall Street Journal*, September 1, 2016.

The difference between growth of 2.2 percent and 3.4 percent may not seem significant, but in an economy the size of the U.S. economy percentage points matter. Had the economy grown at 3.4 percent since emerging from recession in 2009, GDP last year would have been more than \$1 trillion greater. Over a twenty-five year period, the difference between a U.S. economy growing at 2.2 percent annually versus 3.4 percent is more than \$100 trillion in *additional* economic output.

While complete solutions to the challenges listed above require progress on a number of fronts, there is little doubt that our ability to address these and other problems would be greatly enhanced by faster economic growth. Growth at or above the post-WWII rate of 3.4 percent on a sustained basis would produce the jobs necessary to end underemployment, the opportunity necessary to accelerate socio-economic mobility, the rising real wages needed to narrow the income gap and reduce poverty, and the additional tax revenue necessary to narrow budget deficits and substantially reduce the nation's long-term debt.

Where Does Economic Growth Come From?

Over most of economic history, it had been widely assumed that economic growth stems from enhancements to one or both of the two principal components of an economy – labor and capital. For an economy to grow, it was thought, either the supply of labor had to expand or capital intensity had to somehow increase.

But in 1957, American economist Robert Solow demonstrated that most of economic growth cannot be attributed to increases in labor or capital, but only to gains in productivity – more output per unit of input – driven by innovation. As businesses and workers become more efficient, costs fall, profits and incomes rise, demand expands, and economic growth and job creation accelerate.⁵

Solow's identification of innovation-driven productivity gains as the driver of economic growth has been echoed by economists ever since. As Nobel Laureate economist Paul Krugman has observed: "Productivity isn't everything, but in the long run it's almost everything."

A country's ability to improve its standard of living over time depends almost entirely on its ability to raise its output per worker...Compared with the problem of slow productivity growth, all our other long-term economic concerns – foreign competition, the industrial base, lagging technology, deteriorating infrastructure, and so on – are minor issues.⁶

Solow's growth model is one of the great economic insights of all time – the economic equivalent of E=MC². Solow was awarded the Nobel Prize in economics in 1987, the National Medal of Science in 1999, and the Presidential Medal of Freedom in 2014.

⁵ Robert M. Solow, "Technical Change and the Aggregate Production Function," *Review of Economics and Statistics* (The MIT Press) 39, no. 3, 1957: 312–320.

⁶ Paul Krugman, *The Age of Diminished Expectations*, The Washington Post Company, 1990, pp. 9–13.

New Businesses as the Engine of Innovation, Productivity Gains, and Growth

The great significance of Solow's work is that it not only defined the *nature* of economic growth, it also identified its principal *source*. That's because economists have long understood that innovation – particularly major or "disruptive" innovation – comes disproportionately from new businesses, or "start-ups."

Economists Robert Litan and Carl Schramm emphasized this reality in their 2012 book *Better Capitalism*:

[E]ntrepreneurs throughout modern economic history, in this country and others, have been disproportionately responsible for truly radical innovations — the airplane, the railroad, the automobile, electric service, the telegraph and telephone, the computer, air conditioning, and so on—that not only fundamentally transformed consumers' lives, but also became platforms for many other industries that, in combination, have fundamentally changed entire economies...

Large companies, with their large fixed costs of plant, equipment, and to some extent personnel, have perfected the economic arts of economies of scale production and incremental innovation. But...most large companies are less eager to pursue radical innovations — those that disrupt current business models in which the firms are heavily invested.⁷

In addition to innovation, research conducted in 2009 by John Haltiwanger, Ron Jarmin, and Javier Miranda, followed by further analysis by scholars at the Kauffman Foundation, has shown that start-ups also account for virtually all net new job creation.⁸

From the standpoint of innovation, economic growth, and job creation – arguably the three most important metrics of economic health and vitality – thriving entrepreneurship is the beating heart, the very soul, of any economy.

The Engine of Innovation and Growth is Breaking Down

Unfortunately, as scholars at the Kauffman Foundation, the Brookings Institution, and elsewhere have documented, entrepreneurship in America is in trouble. Not everywhere, of course; in places like Silicon Valley, Austin, TX, Boulder, CO, and Cambridge, MA entrepreneurship is thriving. But in broad terms, entrepreneurship in America is struggling.

⁷ Robert E. Litan and Carl J. Schramm, *Better Capitalism: Renewing the Entrepreneurial Strength of the American Economy*, Yale University Press, 2012.

⁸ John Haltiwanger, Ron Jarmin, and Javier Miranda, "Business Dynamics Statistics Briefing: Jobs Created from Business Start-Ups in the United States," Ewing Marion Kauffman Foundation, 2009; Dane Stangler and Robert Litan, "Where Will the Jobs Come From?" Ewing Marion Kauffman Foundation, November 2009; Tim Kane, "The Importance of Start-Ups in Job Creation and Job Destruction," Ewing Marion Kauffman Foundation, July 2010.

After remaining remarkably consistent for decades, the number of new businesses launched in the United States peaked in 2006 and then began a precipitous decline – a decline accelerated by the Great Recession. New data released by the Census Bureau on September 20th show that new business formation continues to languish near a record low. From 2000 to 2006, the economy produced an average of 511,000 new employer firms each year. Since 2009, however, the number of new business launched annually has dropped to about 400,000 – meaning the United States currently faces a start-up deficit of 100,000 missing new firms *every year*.

Research by the Kauffman Foundation indicates a rebound in 2015 and 2016, but the recovery is from a very low level and the number of start-ups remains well below pre-recession rates. ¹⁰

Even more alarming, economists Robert Litan and Ian Hathaway have shown that entrepreneurship rates have fallen near a 30-year low – and that this decline is occurring in all 50 states, in all but a handful of the 360 metro areas examined, and across a broad range of industry sectors, including high-technology. The chart below, taken from Litan and Hathaway's May 2014 paper, shows that the number of new firms as a percentage of all firms has been in steady decline for more than three decades – and, from 2008 to 2012, actually fell below the rate of business failure. In other words, over that brief period, more businesses were failing in America than launching.



⁹ Business Dynamic Statistics, Census Bureau, https://www.census.gov/ces/dataproducts/bds/data.html.

¹⁰ Index of Start-Up Activity, Ewing Marion Kauffman Foundation, August 2016. Also see testimony by Dane Stangler, Vice President for Research & Policy, Ewing Marion Kauffman Foundation, before the Committee on Small Business and Entrepreneurship, U.S. Senate, June 29, 2016.

¹¹ "Declining Business Dynamism in the United States: A Look at States and Metros," Robert Litan and Ian Hathaway, The Brooking Institution, May 5, 2014. Also see John Haltiwanger, Ian Hathaway, and Javier Miranda, "Declining Business Dynamism in the U.S. High-Technology Sector," the Ewing Marion Kauffman Foundation, 2014.

As Solow's growth model would predict, U.S. productivity has fallen along with the decline in rates of new business formation. Annual productivity gains averaged about 2.5 percent from 1948 to 2006, but have fallen to about 1.1 percent since 2011—less than half the historical rate. Growth in output per hour slowed to just 0.5 percent in 2014, 0.3 percent in 2015, and just 0.2 percent last year. 12

Nobel Prize recipient Edward Prescott and his colleague Lee Ohanian from Stanford University have argued that the economy's anemic performance in recent years is due largely to the plunge in productivity growth — caused by the dramatic decline in start-ups:

The remarkable productivity growth that has enabled the U.S. to become the wealthiest country on earth has slowed considerably in recent years.

The most recent period of rapid productivity growth in the U.S. — and rapid economic growth — was in the 1980s and '90s and reflected the remarkable success of new businesses in information and communications technologies, including Microsoft, Apple, Amazon, Intel, and Google. These new companies not only created millions of jobs but transformed modern society, changing how much of the world produces, distributes and markets goods and services.

Sadly, the annual rate of new business creation is about 28 percent lower today than it was in the 1980s, according to our analysis of the U.S. Census Bureau's Business Dynamics Statistics annual data series. Getting the U.S. economy back on track will require a much higher annual rate of new business start-ups. ¹³

Circumstances in rural areas of America are particularly acute. A recent report by the Economic Innovation Group shows that most of the new business formation that has occurred since the Great Recession has been highly concentrated, clustered mostly in high-density urban or suburban areas. Fully half of the net increase in U.S. business establishments between 2010 and 2014 occurred in just 20 counties, and 17 of those 20 counties are in just four states — California, Florida, New York, and Texas. This pattern of concentration stands in stark contrast to previous recoveries. From 1992 to 1996, for example, 125 counties generated the same 50 percent of new businesses.¹⁴

Given the critical role start-ups play as the principal source of disruptive innovation, productivity growth, economic growth, and job creation, such circumstances amount to nothing short of a national emergency.

¹² Eric Morath, "U.S. Productivity Advanced for Second Straight Quarter, *The Wall Street Journal*, February 2, 2017.

¹³ Edward C. Prescott and Lee E. Ohanian, "U.S. Productivity Growth Has Taken a Dive," *The Wall Street Journal*, February 3, 2014.

¹⁴ "A New Map of Economic Growth and Recovery," Economic Innovation Group, May 2016.

Why are Start-up Rates Declining?

Rates of new business formation have fallen near multi-decade lows, both in terms of the number of new businesses being launched and the share of all U.S. businesses that are new.

But why?

To find out, a colleague and I decided to put the question directly to America's entrepreneurs. Over the summer of 2011, we conducted roundtables with entrepreneurs in 12 cities across the United States, asking them, quite simply: "What's in your way?"

More than 200 entrepreneurs participated – from a web-based software company in Seattle to an industrial construction firm in Orlando, from a developer of bioscience technologies in Boston to a distributor of glow-in-the-dark fluorescent fish in Austin – all explaining in specific and vividly personal terms the issues, frustrations, and obstacles that are undermining their efforts to launch new businesses, expand existing young firms, and create jobs. ¹⁵

An astonishing take-away from our roundtables – and enormously significant from the standpoint of potential policy solutions – is that the problems and obstacles encountered by entrepreneurs across the country are remarkably consistent. Entrepreneurs from Austin to Boston and from Seattle to Orlando reported the same burdens, frustrations, and difficulties:

- "We have the jobs, and we need to fill them to survive, but we can't find enough people with the skills we need."
- "Our immigration policies don't effectively attract and retain the world's best and most innovative talent."
- "Access to start-up capital is even more difficult in the wake of the financial crisis."
- "Over-regulation is killing us."
- "Taxes take scarce capital from us, and tax complexity and uncertainty divert too much of our time and attention away from our new businesses."
- "There's too much economic uncertainty and it's Washington's fault. Whether it's the fiscal cliff, the debt ceiling, government shut-downs, the inability to achieve tax reform, immigration reform, or effectively deal with the national debt, Washington is a generator of problems not solutions, a source of anxiety and uncertainty for businesses and it's killing the economy."

¹⁵ For more on the roundtables and what we learned from American entrepreneurs, see *Where the Jobs Are: Entrepreneurship and the Soul of the American Economy*, John Dearie and Courtney Geduldig, John Wiley & Sons, 2013.

Our summer on the road revealed a number of critical insights central to any discussion about accelerating economic growth.

First, new businesses are extremely fragile – a third fail by their second year, half by their fifth. And yet, those new businesses that survive tend to grow, innovate, and create jobs at very rapid rates.

Second, the policy needs and priorities of new businesses are unique. Start-ups are different from existing businesses. The challenges they confront are different and their ability to successfully navigate those challenges is more limited.

Third, many policymakers in Washington and around the country do not sufficiently understand or appreciate the unique nature, importance, vulnerabilities, and needs of start-ups. Focused on the priorities of either large corporations or the small business community, policymakers too often overlook the economy's true engine of growth and job creation.

Finally, policy help for America's entrepreneurs is urgently needed. Given the critical role they play in our nation's economy as the principal source of innovation, growth, and job creation, America's young businesses need and deserve a comprehensive policy framework designed to cultivate and nurture start-ups.

Tax Reform and Entrepreneurship

As mentioned in the Introduction, tax policy is one of the most powerful levers of economic policymaking that Congress has at its disposal, and tax reform is one of the essential changes in public policy that thriving entrepreneurship requires. Many often assume that tax policy isn't relevant to start-ups since new businesses typically lose money in their early years and, therefore, don't pay income tax. This generalization overlooks the reality that the U.S. tax code presents a number of challenges for start-ups – challenges that can amount to the difference between survival and failure. Specifically, the current tax code penalizes businesses with substantial, early-years losses, discourages investors from backing risky new businesses, and impedes successful new companies from expanding.

CAE's tax reform proposals for revitalizing American entrepreneurship are:

Reduce Tax Rates

While many start-ups lose money in their early years and, therefore, don't pay income tax, some do achieve profitability shortly after launch. For those fortunate new businesses, tax rates are important because capital is the lifeblood of any new business. As one entrepreneur explained to us: "People talk about access to capital in the context of investors. But it's also about holding onto the money you generate internally through sales. Young businesses barely scrape by in the early years, and yet the government takes a third of any profit in taxes – money that could have been invested back into the business."

Nearly 95 percent of U.S. businesses, 85 percent of small businesses, and virtually all new businesses are organized as S corporations, partnerships, limited liability companies (LLCs), or sole proprietorships. Such businesses are referred to as "pass-through" businesses because their profits are passed through to owners and investors who pay taxes on those distributions by way of their individual returns.

Entrepreneurs who choose to organize their new business as a pass-through currently face a higher federal tax rate – 44.6 percent – than at any point since 1986, and 10 percentage points higher than C corporations. A recent Tax Foundation report showed that the all-in tax rate on pass-through business income can exceed 50 percent when state and local taxes are included. New businesses that organize as C corporations are taxed at 35 percent – the highest statutory business tax rate in the industrialized world. Meanwhile, the top tax rate on capital gains – 25 percent – is the highest since 1997, and the top tax rate on dividends – also 25 percent – is the highest since 2002.

Simplify the Tax Code

Tax complexity and uncertainty exacerbate the burden of high tax rates. Unlike larger or more established firms, start-ups typically don't have the resources to hire a chief financial or tax officer to navigate a complex and ever-changing tax code – they do it themselves. And uncertainty regarding future tax obligations can discourage or even punish calculated risk-taking. Entrepreneurs distracted with tax compliance rather than focused on their product, service, and the marketplace are much more likely to make mistakes, miss opportunities, or even fail.

CAE supports comprehensive tax reform that would significantly reduce tax rates by simplifying the tax code and broadening the tax base through major reductions in existing expenditures, exemptions, preferences, and other loopholes. According to the Joint Committee on Taxation, revenue lost due to tax expenditures hit a record high in 2017 of \$1.6 trillion, or nearly 80 percent of combined corporate and individual tax revenue. If counted as part of the annual budget, expenditures would amount to over a quarter of total government spending. Reducing the number and/or size of expenditures, exemptions, and other loopholes would enable policymakers to lower statutory rates without a significant loss of net revenue.

More favorable and predictable tax treatment would help cultivate new business formation, survival, and growth by allowing new businesses to retain and reinvest more of what they earn, preserving critical cash flow, and minimizing the distraction and burden of tax complexity and uncertainty.

Allow Start-ups to Use the Cash Method of Accounting

Current law generally permits businesses with gross receipts of \$5 million or less to use the cash method of accounting. The cash method is simpler, less costly, and easier for new businesses to understand than accrual accounting or other more complex accounting methods, and simplifies tax accounting. CAE recommends that start-ups be permitted to use the cash method of accounting, if they choose to, for the first five years of operation.

Move to a Territorial Tax System

A particularly counterproductive and anti-innovation aspect of the current U.S. tax code is that the United States is the only major industrial nation that applies income tax to the worldwide earnings of U.S.-based businesses. Most other nations maintain a "territorial" framework whereby taxes are paid only to the governments of the countries in which foreign profits are earned. The Germany-generated earnings of France-headquartered companies, for example, are taxed by Germany but not also by France.

Though the U.S. code applies to worldwide earnings, business income earned overseas is taxed only if it is transferred home. As long as foreign-earned profits remain abroad, U.S. taxes are indefinitely deferred. The system of assessing taxes on income earned anywhere in the world, together with the deferral of taxation until earnings are repatriated, creates a powerful incentive for U.S.-based businesses to keep their foreign earnings overseas – and to reinvest those funds anywhere but back in the United States.

U.S. corporations currently hold as much as \$3 trillion overseas, with hundreds of billions added every year. Moody's has noted that the practice is particularly common among technology companies, which depend on high rates of innovation and continuous research and development and are, therefore, particularly sensitive to repatriation taxes. According to a recent analysis by Bloomberg, the top eight technology companies alone account for a fifth of all U.S. corporate earnings held overseas – nearly \$500 billion.

CAE urges policymakers to shift to a territorial tax system. To be sure, overseas investment by U.S. corporations should not be discouraged or penalized. U.S. companies earn a large and growing share of their total earnings overseas, and foreign operations create additional value for shareholders and promote economic growth and job creation back home. But the global allocation of companies' resources should not be artificially driven by powerful and illogical tax-related incentives. A shift to a territorial system of taxation would result in the repatriation of hundreds of billions or even trillions of dollars, a significant portion of which would fund research and innovation that would likely spawn thousands of new American start-ups over time.

Allow Start-ups to Defer Income Tax Liability

Because capital is the lifeblood of any new business – and because holding onto as much capital as possible can be the difference between success or failure – CAE also recommends that startups be permitted to defer any tax liability incurred during the critical first five years, and to apply that tax liability at any time over the ensuing 20 years. Because money has a time value – future tax payments are worth less than immediate payments – deferred tax payments should be assessed a reasonable rate of interest, perhaps a real (inflation-adjusted) rate of 2 percent. The interest adjustment would also provide an incentive for start-ups to discharge of any deferred tax liability as quickly as possible once profitable.

Allow Start-ups to Carry Forward Losses and R&D Credits by Exempting from 382 and 383 Restrictions

The current tax code entails a fundamental asymmetry between the tax treatment of operating profits and losses – an asymmetry that significantly disadvantages new businesses. If an existing business sustains a net operating loss in a given year, it is often eligible to "carry back" and deduct the loss from income earned in previous years, or to "carry forward" the loss to be deducted from future income. Current law permits businesses to carry forward operating losses for a period of 20 years.

Most new businesses lose money in their initial years – sometimes for many years – before hopefully becoming profitable. Such losses are often due to substantial research and development (R&D) investments, salaries, and other expenses that exceed earnings. For many start-ups, R&D and salaries can be the primary expenses of the new company in its early years. Whatever the cause, start-ups, because they are new, have no previous income against which to apply current operating losses. Moreover, income against which losses can eventually be deducted might not materialize for years. Such circumstances are not only problematic from the standpoint of minimizing start-ups' tax liability, but can also discourage investment in new ideas, since the cost of new investment is not recoverable in a tax context.

Even more problematic, two aspects of the current tax code that restrict loss and credit carry-forwards – Sections 382 and 383 – can have the effect of virtually eliminating any carry-forward tax benefit for start-ups. Sections 382 and 383 were written in the mid-1980s to prevent "loss trafficking" – companies acquiring failing firms with large losses solely to use the acquired company's tax losses to offset other unrelated income. Section 383 pertains to tax credits, while Section 382 pertains to net operating losses. The rules can virtually eliminate the use of net operating losses and credits following transactions perceived as a change in ownership.

Start-ups often depend on outside investments, from venture capital firms or other sources, to finance R&D and other expenses, sometimes for many years. Such investments are critical for the survival and growth of new firms – but often trigger 382 and 383 change-of-ownership restrictions, potentially nullifying net operating loss carry-forward tax benefits, including for R&D investments. In other words, Section 382 and 383 carry-forward restrictions actually punish start-ups for incurring the very kinds of investments that federal tax policy explicitly encourages for older established firms.

With this policy inconsistency in mind, CAE recommends that net operating losses and R&D credit carry-forwards for start-ups be exempt from the limitation rules of Sections 382 and 383.

Allow Start-ups to Expense 100 Percent of Business Investment

Once a new business has been successfully launched and has established the viability of its product or service in the marketplace, entrepreneurs seek to grow, or "scale," their new business as rapidly as possible. Scaling is important to solidifying the long-term viability of a new business and to job, wealth, and opportunity creation. Successful scaling of a new business often requires significant capital investment in equipment, additional office space, and machinery.

Rapidly growing start-ups are disadvantaged by the current tax code, which requires businesses to deduct the cost of capital investment over long periods of time according to more than two dozen complex depreciation schedules. Because immediate deductions are more valuable than future deductions, the longer that businesses have to wait to write off the full cost of capital investment, the less likely they are to make critical investments necessary to expand.

The Small Business Tax Revision Act of 1958 created for the first time a special first-year depreciation allowance, whereby small businesses could deduct or "expense" from taxable earnings a portion of their total cost of capital and equipment investment, pursuant to section 179 of the Internal Revenue Code. Expensing is the most accelerated form of depreciation, allowing businesses to write off the cost of business investment immediately rather than over time. The purpose of the provision was to reduce the tax burden on small businesses, stimulate small business investment, and simplify tax accounting for smaller firms. The original deduction was limited to \$2,000 of the cost of new and used business machines and equipment.

Since 1958, the limits and details of the special expensing allowance have changed many times — most typically to raise the expensing limit as a means of stimulating economic growth by incentivizing business investment. In the midst of the accelerating economic downturn in 2008, Congress raised the allowance to \$250,000 as part of the Economic Stimulus Act of 2008, and then to \$500,000 as part of the Small Business Jobs Act of 2010. The American Taxpayer Relief Act of 2012, signed by President Obama to avoid the "fiscal cliff," preserved the \$500,000 allowance for 2013.

CAE recommends that start-ups be allowed 100 percent first-year expensing of all business-related capital, equipment, and real estate. According to an analysis by the Treasury Department, 100 percent expensing lowers the average cost of capital on new investments by more than 75 percent. Such savings are enormously significant, especially for new businesses for whom access to sufficient capital at reasonable terms remains a principal challenge.

Together with the ability to carry forward losses, explained immediately above, 100 percent expensing of all business-related investment – which would contribute to losses – would dramatically improve start-ups' financial and tax-related circumstances.

Expand PATH Act Payroll Tax Offset of R&D Credits

The Research and Experimentation Tax Credit – commonly known as the research and development (R&D) tax credit – was created as part of the Economic Recovery and Tax Act of 1981 to incentivize technological progress and innovation by allowing businesses to deduct a portion of the cost of research and product development from their taxable earnings. The United States was one of the first countries to incentivize R&D by way of the tax code and claimed the world's most generous tax treatment of R&D into the early 1990s.

¹⁶ "The Case for Temporary 100 Percent Expensing: Encouraging Businesses to Expand Now by Lowering the Cost of Investment," Department of the Treasury, Office of Tax Policy, October 29, 2010.

Since its introduction, the R&D tax credit has been shown to be a powerful driver of innovation and economic growth. A large and growing body of research indicates that R&D investment is associated with future gains in profitability and market value at the firm level, and with increased productivity at the firm, industry, and broader economy levels. R&D also has significant "spill-over" benefits, as research conducted by one firm can lead to progress that increases the productivity, profitability, and market value of other firms in related fields.

The credit is particularly relevant for start-ups, which often incur substantial losses in their early years due to research and development of new products and services, methodologies, and techniques – and for whom preservation of cash flow and operating capital is crucial to survival. And yet, until recently, start-ups were largely shut out of any benefit associated with the credit because it could only be applied against taxable earnings.

The Protecting Americans from Tax Hikes ("PATH") Act of 2015 made a number of improvements to the application of the R&D tax credit, perhaps most notably by finally making the credit permanent after numerous extensions and expirations since its creation in 1981. Now certain of the credit's availability, businesses can make investment decisions more effectively and efficiently. In addition, the PATH Act addressed the disconnect between the policy intention of the R&D credit and start-ups by allowing new businesses to apply the credit against payroll taxes, rather than income taxes, up to \$250,000 annually. To qualify, companies must have had gross receipts for five years or less and gross receipts of less than \$5 million for the tax year the credit is applied.

CAE recommends enhancing the PATH Act's payroll tax provision by expanding the eligibility definition to be consistent with the current definition of "qualified small businesses" (i.e., young companies with under \$50 million in gross assets), and to raise the payroll tax deduction limit to \$1 million annually.

Exempt Gains on Early-Stage Investments from Capital Gains Tax

Early-stage or "seed" financing is critical to the formation, survival, and growth of new businesses. "Angel" investors – wealthy individuals who invest in new companies – have emerged as the principal source of such funding, providing 90 percent of outside seed capital, once entrepreneurs have exhausted their own resources and those of family and friends. Each year, angels invest about \$25 billion in more than 70,000 new companies. For every new company that receives venture capital, 15 others receive angel capital. Amazon, Home Depot, and Uber are just a few examples of the many companies launched with angel capital.

According to the Center for Venture Research (CVR), which has analyzed the angel market since 1980, there are about 300,000 active angel investors in the United States. Angel investing has also become more organized in recent years, with more angels participating in groups, which facilitate more rigorous analysis of potential ventures, and, occasionally, help spread risk by syndicating investments. They also help entrepreneurs identify and connect with active angel investors. According to the Angel Capital Association, the number of angel groups across the country has tripled since 1999 to more than 400.

Angel investors are similar to venture capitalists in a number of ways. Like VCs, angels invest in new, high potential companies in exchange for an equity stake in the business. Many angel investors – particularly those who are current or former entrepreneurs – also provide advice, mentoring, and other support to the management teams of the new businesses they invest in. As with venture capital, angel capital is recovered and any returns realized when financed firms either go public or are bought by another company.

And, like venture investing, angel investing is very risky. According to the Angel Capital Association, half of all angel investments fail and just 7 percent of investments generate 75 percent of total returns.

Angel investors also differ from venture capitalists in significant ways. Unlike VCs, who invest institutionally-raised capital in amounts of \$1 million or more, angels invest their own money, typically in amounts between \$25,000 and \$500,000. Despite smaller individual investments, aggregate angel capital invested rivals that of venture capital.

Given the critical importance of early-stage seed capital to start-ups, the formation and commitment of angel capital should be incentivized. Section 1202 of the tax code was enacted in 1993 to incentivize investment in "qualified small businesses" by excluding a portion of any capital gains on investments held for at least five years from federal income tax. Section 1202 originally excluded 50 percent of capital gains from gross income.

The PATH Act of 2015 made permanent a 100 percent exclusion from capital gains tax for any gains on long-term investments in qualified small businesses, up to \$10 million or ten times the original investment, whichever is greater. Previously, the American Recovery and Reinvestment or "Stimulus" Act of 2009 raised the excluded portion from 50 percent to 75 percent, and exempted any gains from the Alternative Minimum Tax (AMT). Subsequent legislation raised the exclusion to 100 percent and extended the AMT exclusion temporarily. CAE recommends that this full exclusion from federal income tax of any gains on angel investments in start-ups held for at least five years be retained in order to maximize the pay-off on any successful investments.

At present, the Section 1202 exclusion only applies to companies organized as C corporations. Because most new businesses are launched as S corporations, partnerships, or limited liability companies (LLCs) – "pass-throughs" (see first recommendation above) – CAE also recommends that the 1202 exclusion be applied to any start-up that converts to a C corporation within five years – and that the period of time spent as a pass-through count toward the five-year holding period required by Section 1202. In other words, angel investors would not have to hold the investment for five years beyond conversion to a C corporation, but only five years beyond the original investment in the company.

Total capital gains tax revenues have historically represented less than 5 percent of federal tax revenues, so exempting gains on angel investments would have almost no impact on federal tax revenue. And since most angel investors reinvest most or all of their returns into the next generation of innovative new companies, exempting such gains from federal taxes would have the further benefit of increasing the amount of seed capital available to start-ups.

Allow Losses on Angel Investments to Be Deducted from Ordinary Income

As a counterpart to the Section 1202 tax treatment of angel investment *gains*, Section 1244 of the tax code allows investors in qualified small businesses to deduct *losses* on such investments as an ordinary loss (deducted from ordinary income) rather than as a capital loss. Normally, the tax code treats equity investments as capital assets and, therefore, losses are deducted as capital losses to offset capital gains. If capital losses exceed gains in a particular year, remaining losses are deductible up to a limit of \$3,000 annually, with any additional remaining losses carried forward to subsequent years. By contrast, a loss on a Section 1244 investment is deductible from ordinary income up to \$50,000 for individuals and \$100,000 for couples filing jointly.

To qualify for Section 1244 treatment, the issuing company's aggregate equity capital must not exceed \$1 million at the time of issuance, the company must have derived more than 50 percent of its income from business operations rather than passive investments for the previous five years, and the shareholder must have purchased the stock directly from the company and not received it as compensation. Start-ups generally don't issue stock for years after launch, if ever – nor have they been in existence for five years – and, therefore, currently don't meet the requirements of qualifying small businesses.

To further incentivize seed-stage investments in start-ups, CAE recommends expanding Section 1244 to permit losses sustained by angel investors on investments in new companies held for at least 5 years to be deductible from ordinary income up to \$100,000 annually.

Conclusion

Economic growth is driven by productivity gains, which are driven by innovation – which comes disproportionately from new businesses. Revitalizing American entrepreneurship, therefore, is the *essential pathway* to faster economic growth and the nation's ability to meaningfully address its most serious socio-economic challenges.

But that necessary revitalization requires changes in public policy. Fortunately, we have a good sense of what needs to be done. Research conducted in recent years, together with input from entrepreneurs by way of the roundtables mentioned above and other forums, has produced a uniquely credible pro-entrepreneurship growth agenda that, if enacted, would dramatically enhance the circumstances for new business formation, survival, and growth – and, in doing so, accelerate economic growth, in aggregate and across America's many communities, to the rate necessary to generate the opportunity, jobs, and wage growth the American people deserve.

Tax reform that includes a special focus on the unique tax-related vulnerabilities of start-ups is a critical part of America's pro-entrepreneurship, pro-growth policy agenda.

Thank you for organizing this important hearing and for inviting me to participate.