The Need to Improve U.S. Business Dynamism Through Entrepreneurship: Trends and Recommendations

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We explore macroeconomic trends and declining business dynamism and new venture creation rates in the U.S. We argue that the federal government's major economic policies in recent years have largely been defensive policies to protect large firms and existing employment, rather than proactive policies to encourage entrepreneurship and new venture/job creation. Drawing from the discussion throughout the paper, we show that there are major long-term economic concerns that need to be addressed through changes in public policy. We make recommendations and discuss actions that need to be considered and implemented for the long-term health of the U.S. economy.

INTRODUCTION

In 2008, when the Great Recession and global economic credit crisis hit, the U.S. economy was hemorrhaging jobs as gross domestic product (5) shrank. In the final quarter of 2008 and the first quarter of 2009, the U.S. economy lost about 700,000 jobs each month (U.S. BLS, 2015a). Over that 6-month period, GDP was shrinking at a rate of about 4 percent per year (U.S. BEA, 2015). The end of the Bush Presidency and the start of the Obama Presidency were marked by muscular proactive government economic policies that tried to inject capital and keep credit flowing in an effort to stem the job losses and get the economy growing again. The two largest government programs were the \$700 billion Troubled Assets Relief Program (TARP) signed into law by President Bush in October 2008, and the \$787 billion American Recovery and Reinvestment Act (also known as the "the Stimulus") signed into law by President Obama in February 2009.

There are times when private sector decisions lead to macroeconomic inefficiencies. Keynesian economics argues that these are best addressed through public policy solutions. Consistent with this view, research has shown that government actions can play a role in stimulating economies (Atkinson & Coleman, 1989; Baumol, 1990; Minniti, 2008). Such economic policies may include reducing barriers to trade (Jones, 2007), direct investment in the private sector (Cumming, 2007), tax code adjustments that encourage increased investment (Gentry & Hubbard, 2000) and public policies that facilitate entrepreneurship (Minniti, Bygrave, & Autio, 2006).

TARP and the Stimulus were clearly Keynesian approaches to address the economic crisis. They were consistent with the key Keynesian principle that direct government injection of capital into the private sector is beneficial to the broader economy (Audretsch & Thurik, 2001; O'Gorman & Kautonen, 2004;

Paul, 2002; Sassen, 2003). One could argue that these government policies saved the U.S. economy and led to the slow but steady recovery we have seen over the last several years. U.S. government figures show that the U.S. economy is now generating more than 200,000 jobs per month as GDP is growing at 2.2 percent a year. However, job creation figures and GDP growth have fluctuated from quarter to quarter as the recovery has sputtered forward. Digging just below the generally positive macroeconomic statistics, there is a growing concern about declining U.S. business dynamism (see Hathaway & Litan, 2014; Lockhart, 2013; Ozimek, 2013)

In the abstract of their recent paper, Hathaway and Litan (2014) explain that, "Business dynamism is the process by which firms continually are born, fail, expand, and contract, as some jobs are created, others are destroyed, and others still are turned over." At the heart of economic and business dynamism is the process of creative destruction (Schumpeter, 1934) which keeps the economy from stagnating. Entrepreneurs who are able to innovate and create value in new ways keep society moving forward. In fact, entrepreneurs, new venture creation, and the small business sector significantly contribute to the U.S. economy (Reynolds, Carter, Gartner, & Greene, 2004; Schumpeter, 1934), with some estimates crediting entrepreneurial activity for being responsible for half of U.S. GDP (Cornwall, 2008). To this end, new ventures and small businesses have been largely responsible for creating most of the net new jobs in the U.S. economy over the last several decades (Birch, 1987; Kirchoff & Phillips, 1988; Scarborough, Wilson, & Zimmerer, 2009; Van Stel & Storey, 2004). However, the rate of job creation from new business establishments appears to be on a steady decline as entrepreneurship and economic dynamism has declined in recent years (see Pethokoukis, 2014).

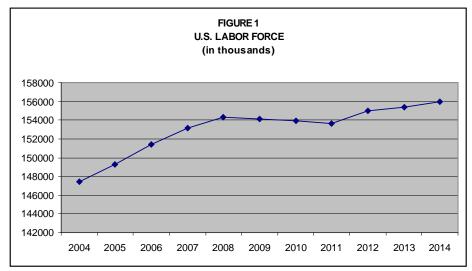
In this paper, we explore and discuss macroeconomic trends and declining business dynamism and new venture creation rates. We discuss how the major economic policies have largely been defensive policies to protect existing (mostly larger) firms and existing employment, rather than forward-moving policies that promote new technologies and encourage entrepreneurship and new venture/job creation. Drawing from the discussion throughout the paper, we show that there are major long-term economic concerns that need to be addressed through changes in public policy. We make recommendations and discuss actions that need to be considered and implemented for the long term health of the U.S. economy as well as the broader global economy.

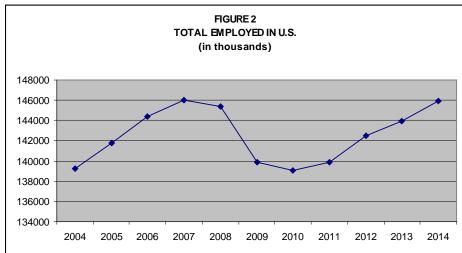
UNEMPLOYMENT, WORKFORCE STATISTICS, AND WAGES

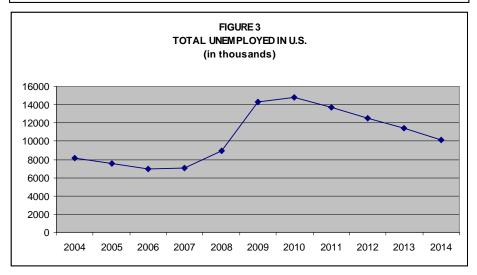
Before discussing trends in declining business dynamism, it is important to frame the current state of the macroeconomy and what has transpired over the last several years. The economy struggled and lost ground as the Great Recession took hold and has remained fairly weak even as we have seen some improvement in recent years. U.S. Bureau of Labor Statistics (BLS) data showed that unemployment rose from 5.1 percent at the end of 2007 to 8.1 percent at the end of 2008. In January 2010, unemployment hit a recent high point of 12.3 percent. It has been steadily declining since that point, and the February 2015 labor report (latest available at the time this manuscript was written) by the U.S. BLS showed that unemployment had fallen to 5.5 percent (U.S. BLS, 2015b). Some of this decline is a result of the improving economy. As discussed in the introduction, GDP was falling at the time of the Great Recession, but the most recent government figures show that it is rising at a rate of just over 2 percent a year in the fourth quarter of 2014. It was declining by 2 percent per year in the first quarter of 2014 after rising all of 2013, and jumped to 5 percent growth in the third quarter of 2014, before dropping back in the fourth quarter. This fluctuation demonstrates the ongoing economic instability. However, even as the U.S. economy is growing and the official unemployment rate has improved, the fact remains that there are many discouraged workers who are no longer looking for a job, and many individuals are now working part-time or temporary jobs that do not meet their needs (Elsby, Hobijn, & Sahin, 2010).

Several tables are offered to illustrate the significant trends in the U.S. labor market over the last decade. The next five figures all show the average monthly figures for key indicators for each year illustrated. Figure 1 shows the overall size of the labor market which flattened during the Great Recession but is now rising. Figures 2 and 3 illustrate the number of workers employed and unemployed,

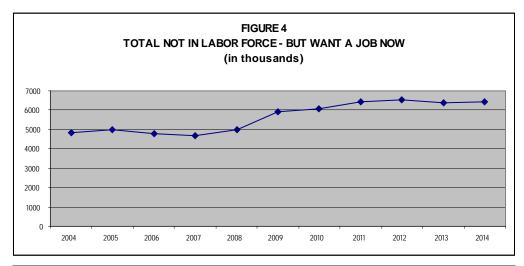
respectively. They show the fall in employment and the large increase in unemployment starting around 2007, and the improvements to the U.S. labor market beginning in 2010.

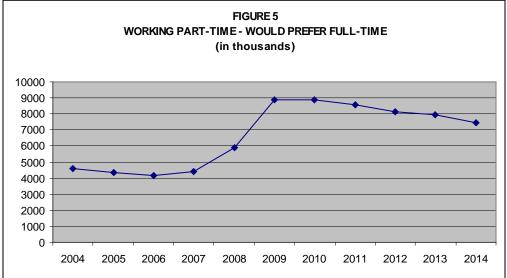






Taken by themselves, Tables 2 and 3 are promising; however, they do not tell the entire story about the changing nature of the U.S. labor market. Since 2010, there have been more than 6 million people who have consistently remained shut out of the labor force. These are individuals who want a job but cannot find one (see Figure 4). In addition, there has been a fairly consistent number of workers who are working part-time (1-34 hours per week), but who would rather work full-time (see Figure 5).





In addition, there is growing evidence that wages are stagnating (Fleck, Glaser, & Sprague, 2011), particularly for lower income workers (Greenhouse, 2013). Fleck and her colleagues (2011) found that from 1947 to 1979 labor productivity and labor compensation rose at about the same rate per year. However, since 1980 there has been a divergence such that productivity has been rising much faster than compensation. The gap from 2000 to 2009 had risen to a 1.4 percent difference per year, with labor productivity increasing by 2.5 percent per year and compensation only increasing 1.1 percent per year. With real compensation lagging behind productivity, it appears that American workers have fallen behind as profits have increased. This is further evidenced by a recent analysis of BLS statistics by *Bloomberg News* which showed that from 2009 to mid-2014 workers wages have only risen by 0.5 percent (Ito, Katz, & Kolet, 2014). The bottom line is that there has been improvement in the labor market since 2008, but many still cannot find jobs, many are working in part-time positions, and wages have been stagnant.

These factors all put a drag on robust economic growth because in the consumer-based U.S. economy consumers simply do not have as much purchasing power to buy goods and services.

DECLINING BUSINESS DYNAMISM AND NEW FIRM FORMATION

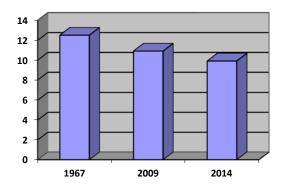
There is growing and fairly strong empirical evidence that entrepreneurship is on the decline in the United States. Analyses of published government data and several studies consistently show this disturbing trend taking place over the last several decades (Hathaway & Litan, 2014; Lockhart, 2013; Ozimek, 2013; Pethokoukis, 2014). Hathaway and Litan (2014) use Census data to show that the firm entry rate – measured as the percentage of all firms in the U.S. economy that are less than one year old – has steadily declined since the late 1970s. In 1978, new business startups made up nearly 15 percent of all firms, but had fallen to just over 8 percent of all firms by 2011. At the same time, their calculations showed that firm exits had stayed relatively consistent at around 9 percent. Thus, new firm creation and failure rates have become inverted. Fewer firms are being created while the failure rate remains consistent. In fact, since 2008, the firm entry rate has remained below the firm failure rate (Hathaway & Litan, 2014).

In a 2010 report by the U.S. Bureau of Labor Statistics (BLS), Hipple (2010) reported that the percentage of individuals who were self-employed in unincorporated businesses had fallen from 9.6 percent of the workforce in 1967 (7.2 million total unincorporated self-employed workers) to 7 percent by 2009 (9.8 million total unincorporated self-employed workers). However, this decline was partially offset by the fact that the number of self-employed incorporated workers increased from 2.9 percent of the workforce to 3.9 percent over that same period of time. This represented a rise from 3.4 million workers to 5.5 million workers. However, this was not enough of a gain to offset the diminishing percentage of unincorporated self-employed workers. Taking into account total unincorporated and incorporated self-employed workers, there was a 1.6 percent decline in the rate of total self-employement from 1967 to 2009 (Hipple, 2010), with most of the decline coming in the total number of self-employed unincorporated workers.

We examined more recent U.S. BLS statistics to see if the trends have continued. In July 2014, the number of incorporated self-employed workers had fallen to 5.3 million individuals (down from 5.5 million in 2009). The number of unincorporated self-employed workers also fell from 9.8 million in 2009 to 9.3 million in July 2014. These are discouraging figures given the increasing population and the large percentage of individuals who became unemployed after the Great Recession. In terms of percentages, the percentage of unincorporated self-employed workers fell to 6.3 percent of employed individuals and the incorporated also fell to 3.6 percent of the employed workforce. To summarize, the percentage of self-employed individuals – incorporated and unincorporated – was 12.5 percent of all employed workers in 1967, 10.9 percent in 2009, and just 9.9 percent by July 2014 (see Figure 6). At a time when we would hope and expect to see a rise in self-employment as firms cut back on their labor forces, the trend was just the opposite.

Pethokoukis (2014) reported and charted U.S. BLS figures which show that the number of jobs added by new business establishments has fallen from 2 million per quarter in 1998 to about 1.4 million by 2013. This is not surprising given the figures discussed above about the declining rates of self-employment and new venture creation. Perhaps most alarming is that the trend of declining business dynamism as measured by new firm formation can be found in every state and every major metropolitan area across the country (Hathaway & Litan, 2014). If the U.S. was experiencing the normal processes of creative destruction (Schumpeter, 1934), we might expect to find some states losing firms as certain industries or geographic areas are impacted by innovation and made obsolete through the normal cycle of technological discontinuities (Tushman & Anderson, 1986). But this is simply not happening. We are seeing the overall decline of entrepreneurship all across the country. This is an indication of economic and societal stagnation that left unaddressed will result in ongoing decline.

FIGURE 6
PERCENTAGE OF SELF-EMPLOYED WORKERS IN THE U.S. WORKFORCE



The importance of entrepreneurs to the U.S. economy cannot be overemphasized; empirical studies show their importance to employment and GDP growth (Audretsch & Thurik, 2001; Birch, 1987; Kumar & Liu, 2005). Reynolds and Curtin (2004) describe and show the benefits of new venture creation and entrepreneurship using data from the Panel Study of Entrepreneurial Dynamics (PSED). More specifically, they discuss how entrepreneurs bring technological innovations to create new sectors or markets which lead to job growth. In fact, there is research that suggests that a higher percentage of economic activity stems from entrepreneurs than from large firms (Wennekers & Thurik, 1999), and as stated earlier, prior research has consistently found that new ventures and small businesses have been the major source of the net new jobs in the U.S. economy historically (Birch, 1987; Kirchoff & Phillips, 1988; Scarborough, Wilson, & Zimmerer, 2009; Van Stel & Storey, 2004). Given what appears to be happening based on the statistics discussed above, it remains to be seen if this will continue to be the case over time.

There is an obvious problem that is growing – declining business dynamism can be seen in the form of the steadily diminishing rate of entrepreneurship. This does not bode well for long-term economic stability and growth, as it likely means that job creation will be depressed and technological innovation will be stifled. This will also have an effect on the jobs that are created, in that they will be in established industries, rather than new and emerging markets which are more likely to result in higher pay jobs and rapid economic growth. What is needed now is government action and public policies that can help spur entrepreneurship and private sector expansion.

FEDERAL PUBLIC POLICY RESPONSE TO THE GREAT RECESSION

Given the economic importance of entrepreneurship, it is not surprising that government at all levels have made efforts to implement policies aimed at encouraging entrepreneurial activities (see Minniti, 2008). However, we believe that public policies aimed at spurring economic activity and job creation at the federal level have largely tilted away from individual entrepreneurs and focused on large entities and existing firms. This can be seen clearly in the statistics cited above and by looking at where government funds and investment of taxpayer dollars have gone over the last several years.

There is no question that the federal government's policy response to the Great Recession was swift and robust. The stunning collapse of Wall Street giant, Lehman Brothers, shocked global markets and created the volatile and fear-filled environment that led to the October 3, 2008 passage of the \$700 billion TARP. This program amounted to the largest government bailout program for private sector firms in history. It was originally designed to prop up the private financial sector and open up consumer and business credit flows through direct government loans to struggling banks. However, the program quickly strayed from its original intent. Most of the money went to large institutions that had made significant investments in the risky and failing mortgage backed securities and credit default swaps that led to the crisis in the first place (see Singh, 2009). Within one year of the program, Citigroup and Bank of America

had received \$94 billion combined, and another \$100 billion had been concentrated into 13 other large banking institutions. In addition, the two largest TARP bailout recipients – General Motors and AIG – were not even banks, yet they had gotten \$70 billion each from the TARP in the first year of the program (Singh, 2009). All of this taxpayer money was spent to try to save the economy from the shocks of losing major institutions within the economy. It no doubt saved those companies from demise, but it also served to create moral hazard as it promoted the idea that there were firms in the economy that were "too big to fail" that the federal government would not allow to fail (Suskind, 2011).

The basic premise of the program was flawed if one believes in the benefits of capitalism and the invisible hand of competition (Smith, 1957), creative destruction (Schumpeter, 1934), and the importance of not creating moral hazard. TARP essentially bailed out the very firms that were at the heart of the economic crisis – the ones that had been poorly managed and taken on too much risk. Granted, the firms that received most of the money were enormous entities that would have created large holes in the economy and global shocks as they laid off workers had they not been bailed out, but one could make an argument that they should have been allowed to fail and been unwound through normal bankruptcy procedures. Instead of allowing new firms and those competitors that had not created so much risk exposure to threaten their own prospects for survival to rise up, the federal government decided that "too big to fail" would become established policy. It is more likely that future business decisions made by executives in these firms will be shaded by the knowledge that the federal government is willing to provide a financial backstop if/when things go wrong.

The other major economic policy that was implemented was the 2009 \$787 billion American Recovery and Reinvestment Act (again, better known as the Stimulus). About a month after taking office, President Obama shepherded it through Congress. With its mix of tax cuts, extension of unemployment benefits, assistance for state budgets, and funding for infrastructure projects, the Stimulus was promoted as necessary for economic recovery. The tax cuts were an effort to put more money in consumers' pockets but with consumers already holding so much individual debt it is unlikely that this led to new spending. The funding to cover shortfalls in federal programs (e.g., food stamps and unemployment benefits) kept many families from complete ruin in the wake of the global economic crisis. It also helped states close budget gaps to pay for existing police officers and teachers, but certainly Stimulus funds were not used to fund new initiatives to spur economic development. The closest it came to this was in trying to fund "shovel-ready" infrastructure projects, but again, this was not for new projects that would spur entrepreneurship. Instead, most of this money went to ongoing projects that had already been approved and were in need of completion.

What we saw in the federal government's response to the Great Recession was largely an effort to stabilize existing entities and programs to preserve the status quo. At a time when the economy was shedding jobs and there was a great need for new venture creation, the federal government's economic policy response largely ignored startup entrepreneurs and focused almost exclusively on large and existing firms. Perhaps this is not surprising given how quickly the economy and the major public trading markets were falling. Stemming the potential rising tide of major firm failures and funding government operations to try to stabilize the economy certainly works in the short run and may be good economic policy for the longer term. We do not want to debate the benefits of bailouts or discuss how the creation of moral hazard impacts future decision-making. Since these programs were passed, the economy has stabilized and improved. The economic turnaround can be seen in the job creation and GDP numbers, as well as one of the greatest bull runs in Wall Street history. The Dow Jones Industrial Average is up 10,000 points from its March 2009 low. Considering how deep the economic crisis was and the hole we have climbed out of, the economic turnaround is impressive, but it does not change the fact that there are significant concerns about the nature and ongoing sustainability of the U.S. economy.

No major program has been implemented at the federal level in years to spur entrepreneurship and we are now in an extended period of declining self-employment and entrepreneurship, wages have been flat and the U.S. workforce has millions of discouraged workers who cannot find a job or who are forced to work in part-time jobs. Unfortunately, much of the growth in U.S. GDP over the last two decades has been the result of financial engineering in which complex mathematical algorithms have been developed

to create exotic financial products like collateralized debt obligations (CDOs), mortgage backed securities, and credit default swaps (Antill, Hou, & Sarkar, 2014; Singh, 2009; Suskind, 2011). These creative financial products worked well until the bubble in the housing market popped, but it is debatable what actual value they created. The bubble was somewhat reinflated with TARP money and there is still no meaningful regulatory standards on these products (Suskind, 2011). Toward this end, Antill and his colleagues (2014) discuss how non-traditional financial firms (i.e., shadow banks) have grown rapidly and the potential systemic risk they continue to pose because of the non-transparency of their financial activities. We believe that a new phase of public policy and government action is needed which shifts toward the promotion of new startups. We discuss this further in the next section.

DISCUSSION AND RECOMMENDATIONS

Economies that possess the capacity to accommodate high rates of firm births and deaths are better able to compete in the global market (Bednarzik, 2000). This has been historically true within the U.S. economy, which has allowed for relative ease of entry for new firms (Sadeghi, 2008). There is great power in entrepreneurship. It can uplift people out of poverty, create wealth for individuals and geographic areas, and help society move forward to reach greater heights through market and technological innovations. It is possible that the rate of new venture creation will increase as the economy further improves; however, the long-term trend away from self-employment and entrepreneurship over the last several decades does not give us confidence in this possibility. Instead, we believe that public policies are needed to spur a new generation of entrepreneurs to make the U.S. economy more dynamic and put it on a new path to innovation. Without some form of incentive, it is difficult to see how the longterm trend will be reversed.

Congress and decision makers in federal agencies need to understand the importance of new venture creation and recognize the broader trends in diminishing business dynamism that are creating economic drag. Part of the problem may be that there is no well-funded lobbying effort on behalf of new ventures and/or would-be entrepreneurs that can compete with the armies of lobbyists hired by the "too big to fail" firms and large trade and special interest groups that have the ear of members of Congress. How to overcome this is a serious issue that needs to be addressed, but it is beyond the scope of this paper and is left to others. Rather, we will focus our discussion on possible options for mitigating the risks of the declining rate of business dynamism. Having aggressive, proactive policies to encourage ingenuity and the entrepreneurial spirit of individual Americas is needed to spur new venture creation and create sustainable economic dynamism which can lead to financial prosperity.

Although we cited some papers in the introduction that show a positive link between public policies and entrepreneurship (e.g., Atkinson & Coleman, 1989; Baumol, 1990; Minniti, 2008; Minniti, et al., 2006), the fact is that there is little academic research on best practices or public policies that consistently and successfully promote new venture creation (see Lerner, 2012). We offer several recommendations, but recognize that they have not been empirically researched to determine their efficacy or efficiency. Our purpose is to present broad options to the significant problem of diminishing business dynamism and entrepreneurship that we have discussed in this paper. We hope that our discussion of business dynamism and our potential solutions lead to further research.

Tax Policies/Enterprise Zones

At a high level, funding and capital are needed for entrepreneurial endeavors to emerge. There are many Americans who are actively pursuing new venture startups, but many do not go on to found those ventures - they remain in the nascent entrepreneurship stage and never actually create a firm (see Reynolds, 2000). Increasing access to capital and promoting investment may help increase the numbers of nascent entrepreneurs who go on to found firms. The federal government has the power to change tax policies and provide funding for entrepreneurial startups (Ogbolu & Singh, 2012).

Ogbolu and Singh (2012) described research that has shown the mixed success of tax policies in promoting entrepreneurship. They pointed out that past research has shown that higher marginal tax rates

are linked to lower levels of self-employment (Blau, 1987; Bruce & Moshin, 2003; Evans & Leighton, 1987). However, Bruce and Moshin (2006) argued that most tax policies have negligible effects on new venture formation. They explained that tax policies often have a significant effect on entrepreneurial activity for those entrepreneurs who are already operating, but do not generate significant changes in the number of new firms created. It would appear that higher tax rates can have a dampening effect on new venture creation, but lower tax rates do not necessarily have a major impact on improving the rate of formation. Some other tax incentives may be better at improving the rate of entrepreneurial creation.

With the significant drop in self-employment and entrepreneurship, the federal government should consider far more aggressive and untested tax policies. For example, elimination of all employment taxes, taxes on profits, and capital gains taxes for the first five years after firm creation would create a radically different tax structure for new venture startups. Many startup firms take several years to generate significant profits and grow their labor forces, so from a tax revenue standpoint, the federal government would not really experience any major cut in tax inflows that they would otherwise receive if these taxes were kept in place. However, as firms grew and firms that survive more than five years are likely to grow revenues and profits that can then build the tax base of the U.S. The capital gains tax break may entice more private investors into funding new venture startups. Overall, there would be increased economic activity even if every new firm failed. But not every firm would fail and those that survived and succeeded would bring innovations to market, lower prices for consumers by increasing competition, create jobs, and build the tax base.

Further, the federal government can target certain distressed geographic areas (e.g., high poverty rate, elevated unemployment rate) and implement advantageous tax structures within areas that they establish as enterprise zones. Enterprise zones offer entrepreneurs and established firms that relocate special targeted tax incentives for operating within the zone. These zones have been established in the past and there is little research on the benefits of enterprise zones. However, former U.S. Treasury Secretary during the Clinton Presidency, Robert Rubin, reported that for every tax dollar not collected by the federal government as part of 1980s enterprise zone programs, state and local governments collected \$1.90 in taxes (Rubin, 1994).

In addition to the tax discussion above, the federal government could also add other incentives such as employee wage credits for every employee who lives and works in an enterprise zone, work opportunity tax credits to encourage hiring youths in the zone, and expensing allowances that allow tax deductions on equipment purchased and placed in facilities within the zone. All of these could also be used to further encourage entrepreneurship and business development in the identified enterprise zone.

Direct Infrastructure Projects

Tax cuts are not as economically stimulative as direct government spending. Giving consumers more money to spend does not mean that they will spend it. They may save the money or use it to pay off existing debts. A more direct way for the government to stimulate the economy is through new spending programs. There are countless infrastructure and construction projects that are needed across the country. Spending money on fixing roads and bridges, and updating the energy and power infrastructure would create jobs now and improve the national environment for business for decades.

Expansion and improvements to roads and bridges helps alleviate traffic which improves worker productivity while also keeping drivers safe. These are obvious benefits. A more ambitious project would be upgrading the nation's piecemeal energy grid which is now 50 years old and outdated. The system is inefficient and is becoming increasingly at risk of failure. Redeveloping and upgrading the U.S. energy grid would reduce costs to consumers, reduce U.S. reliance on foreign oil, and perhaps most importantly create hundreds of thousands of new jobs, especially within the struggling construction and manufacturing sectors.

A massive public works project to upgrade the energy grid would assist the hard hit industrial sector and help multiple industries because of the many layers of jobs that would be created. Steel, aluminum, and plastics plants would receive orders for materials. Idle manufacturing plants throughout America could be reconfigured to produce transmission towers and lines, solar panels and wind turbines.

Technicians, welders, construction workers and electricians would be needed to install solar panels, construct transmission towers and wind farms, and lay down the new transmission lines. Trucking firms would benefit by having to ship the products all over the nation, and the banking sector would be tapped to finance this growth. Many of these jobs are high paying jobs and would create more consumers who would then help all types of other sectors of the economy (e.g., restaurants, grocery stores, department stores, etc.)

This type of economic activity would spur all types of entrepreneurial activity within all of these industries all across the country.

Such an endeavor would be expensive up front and would have to be funded by the federal government, but the resulting grid would lead to new firm creation and jobs, reduce U.S. dependence on foreign energy, and improve the nation's energy infrastructure so that it can last for the next several decades

National Business Plan Competition

Venkataraman (2004) has emphasized the broader role played by the government in collaborating with regional leaders, including private institutions and universities, in stimulating a range of "intangible" entrepreneurial resources, including role models and novel ideas. Through federally-funded and regionally-administered competitions, a national business plan competition could be established to bring entrepreneurial opportunities to life. Ogbolu and Singh (2012) provided a framework for such a competition and explained that it could also be used to promote other desirable public policies. They used the example of promoting energy independence and renewable energy technologies through the competition. This could be implemented in combination with the energy infrastructure improvement process described in the last section. The benefits would be that should viable and scalable new technologies be identified and developed as a result of such a competition, it would create national pride and excitement for free market solutions that could reduce American reliance on foreign energy sources through more efficient and possibly environmentally-friendly energy. This would go on to create employment opportunities well into the future as some of these firms may bring about the next great transformational technologies.

Funding for all of these efforts could come through deficit spending or new taxes in the short run, but once a critical mass of new firms is achieved it is likely that private sector investment and credit flows from private banks would also follow. This would build further economic momentum for a stronger recovery. Any up front government investment should be made up by future tax revenues from new and growing businesses.

Implications and Future Research Directions

As we have discussed throughout this paper, entrepreneurship is an important mechanism for economic development and government policies can play a major role in determining founding rates. The implications if there is no change in the declining trend in business dynamism is that the U.S. economy will continue to stagnate.

It should be noted that it is unrealistic to expect government policies to eliminate firm failures and certainly that is not what we are advocating for. Rather, it is important to increase the rate of firm foundings. While sometimes painful at an individual entrepreneur level, business churn (i.e., foundings and failures) is part of a healthy economic system. We simply do not know enough to determine which firms will be successful or end in failure (Holtz-Eakin, 2000). It is up to the free market to ultimately determine the optimal rate of entrepreneurship. That said, government action is needed to spur action on the part of would-be entrepreneurs to try to bring their firms into the marketplace.

There has been increasing interest in studying and understanding successful entrepreneurial processes and practices (Katz 2003; Singh, 2008). But more research is needed on public policy decision-making and the effectiveness of economic policies in spurring entrepreneurship (Lerner, 2012). While there is research to show that public policies have been positively related to entrepreneurship (e.g., Atkinson & Coleman, 1989; Baumol, 1990; Minniti, 2008; Minniti, et al., 2006), there is also research that has shown that at times

such policies may have even resulted in reducing interest in starting a business (Begley, Tan, & Schoch, 2005). There is a great need to better understand the effectiveness of public policy efforts with respect to entrepreneurship, and as such far more research is needed. This can help to better inform politicians and public policy experts on what works and what does not work.

CONCLUDING REMARKS

The purpose of this paper has been to make researchers and public policy experts more aware about the diminishing rate of business dynamism and offer some suggestions for policy changes and research directions. Entrepreneurs and small business owners have been the drivers of economic stability and growth for decades, but there has been a discouraging drop in entrepreneurship in recent years. It will take significant commitment and aggressive public policies to change this trend. Just as the Great Recession led to the \$700 billion TARP program to protect "too big to fail" entities, something must be done to spur new entrepreneurship and new venture creation. This may grow into an even more serious economic issue than the faltering banking sector in 2008 if it is not addressed.

Beyond the need for action, there is also a critical need for more research to better understand how and why public policies spur new venture creation. Identifying the most effective means for promoting entrepreneurship through government action can reignite the entrepreneurial spirit that seems to be slipping in the U.S. If done well, it can help unleash a new generation of entrepreneurs to bring innovation and economic benefits to the marketplace. We hope this paper will help researchers consider the dramatic changes that are occurring and develop new lines of research and knowledge development. We offered broad recommendations, but these are in need of further study. There are so many research needs to better understand the effectiveness of entrepreneurship-spurring policies, that the realm of possibilities is wide open. Much more future research, particularly longitudinal research, is certainly needed.

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