The Start-Ups We Don't Need

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Are we encouraging the creation of too many low-productivity businesses?

Policymakers believe a dangerous myth. They think that start-up companies are a magic bullet that will transform depressed economic regions, generate innovation, create jobs, and conduct all sorts of other economic wizardry. So they provide people with transfer payments, loans, subsidies, regulatory exemptions, and tax benefits if they start businesses. Any businesses.

Take, for example, the remarks of President George W. Bush, who said in a speech to the Small Business Week Conference in 2006, "Small businesses are vital for our workers…. That's why it makes sense to have the small business at the cornerstone of a pro-growth economic policy…. The Small Business Administration is working hard to make it easier for people to start up companies. We understand that sometimes people have got a good idea, but they're not sure how to get something started…. And so we've doubled the number of small business loans out of the SBA since I came to office."

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This is bad public policy. Encouraging more and more people to start businesses won't enhance economic growth or create a lot of jobs because start-ups, in general, aren't the source of our economic vitality or job creation.

You might be startled by this position, going, as it does, against the grain of most popular arguments. It might even seem illogical to you. After all, companies such as Apple in computers,

Microsoft in software, Google in Internet search, and Genentech in biotechnology are all examples of wildly successful start-ups. Federal Express and Wal-Mart were also start-up companies not too long ago. So, surely, these companies must have contributed to economic growth?

Yes, of course they have. But those companies are not typical start-ups. The typical start-up is a company capitalized with about $25,000 of the founder's savings that operates in retail or personal services. Odds are pretty good that it is a home-based business, and the founder aspires to generate around $100,000 in revenue in five years. So even at the time that Apple, Microsoft, Google, and FedEx were founded, they weren't anything like the t ypical new business.

To get more economic growth by having more start-ups, new companies would need to be more productive than existing companies. But they're not. A study by economists John Haltiwanger, Julia Lane, and James Spletzer, published in the American Economic Review Papers and Proceedings, combined data from the U.S. Census and other sources to look at the relationship between firm productivity and firm age. The results showed that firm productivity increases with firm age. This means that the average new firm makes worse use of resources than the average existing firm, which is not what you would expect if economic growth benefits more from the creation of new firms than from the expansion of existing ones. And you shouldn't think that the typical start-up makes up for its poor productivity when it gets older, because the typical start-up is dead in five years.

This pattern makes sense: there shouldn't be a positive correlation between economic growth and the rate at which typical start-ups are formed over the long term. Economist Niels Noorderhaven and his colleagues, in an article published in Entrepreneurship Theory and Practice, have explained how as countries become wealthier, the rate at which they create start-ups falls. Societal wealth leads average wages to go up, which encourages business owners to use machines to replace work that used to be done by hand. Capital (the machinery) is subject to greater economies of scale—the reduction in the cost of production that comes from generating things in higher volume—than labor. As a result, the increased use of capital leads companies to grow in size and hire people who would otherwise have gone into business for themselves.

Moreover, as economist Martin Caree and his colleagues have shown in a study published in Small Business Economics, when countries get wealthier and real wages rise, the opportunity cost of running your own business goes up, because the amount of money that you could have earned working for someone else increases. This increased opportunity cost leads more people to go to work for others than when real wages are lower.

Finally, as countries get richer, they change where economic value is created: first from agriculture to manufacturing, and then from manufacturing to services. Economist David Blau, in a study in the Journal of Political Economy, has explained that as the source of economic value shifts from activities where self-employment is more common, such as agriculture, toward activities where self-employment is less common, such as manufacturing, the proportion of people running their own businesses drops.

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So if you want to find countries where there are a lot of entrepreneurs, go to Africa or South America. Rich countries are richer than poor countries because they had more economic growth in the past. So, if we measure new business creation and economic growth over a long enough horizon to see real differences in economic growth among countries, the countries that have had consistently faster economic growth (the rich ones) actually have declining rates of new firm formation.

In fact, if we look at the correlations between rates of new firm formation and economic growth over the medium to long term, we see that firm formation declines as economic growth increases. For instance, in an article in Work, Employment and Society, sociologists Dieter Bögenhold and Udo Staber report that the correlation between real GNP growth rates and the rate of self-employment in France, West Germany, and Italy between 1953 and 1987, and in Sweden between 1962 and 1987, was negative.

We also have ample evidence that when governments intervene to encourage the creation of new businesses, they stimulate more people to start new companies disproportionately in competitive industries with lower barriers to entry and high rates of failure. That's because the typical entrepreneur is very bad at picking industries and chooses the ones that are easiest to enter, not the ones that are best for start-ups. Rather than picking industries in which new companies are most successful, most entrepreneurs pick industries in which most start-ups fail. So by providing incentives for people to start businesses in general, we provide incentives for people to start the typical business, which is gone in five years.

And who is most likely to respond to those incentives and start businesses? Not the best entrepreneurs. We know that unemployed people are more likely to start businesses than people who have jobs. Why? Because they have less to lose by becoming entrepreneurs. After all, it's less costly to you to start a company if your alternative is watching daytime TV than if it is taking home a paycheck from a job.

The problem is that people who are unemployed also tend to perform worse when they start companies than people who quit their jobs to start businesses, probably because their bar for what kind of business to pursue is much lower. So policies designed to increase the total number of new businesses disproportionately attract the worst entrepreneurs.

Okay, new firm formation might not enhance economic growth, but, as everyone knows, new firms create more jobs than existing firms, right? As John Case, commentator for Inc. Magazine, explained, "Most of the 20 million new jobs created during the past 15 years came not from established giants, the companies that had led America's growth up till then. The jobs came from companies that were smaller, newer—or both. They came from that 'independent entrepreneurial sector.'"

But Case, and the others who make the same argument, are wrong. Very few people work in new firms. Companies with at least one employee that are less than two years old account for only 1 percent of all employment in the United States, according to analysis published in Regional Studies by economists Zoltan Acs and Catherine Armington. By contrast, companies with at least one employee that are more than ten years old account for 60 percent of all employment in this country.

So how many jobs do new businesses create? Data from the Bureau of Labor Statistics show that 31,472,000 jobs were created in the United States in 2004. That year, 580,900 new firms

with at least one employee were started, each of which had an average of 3.8 employees. Thus, in 2004, new firms created 2,207,420 jobs, or 7 percent of the total number of jobs created in that year.

Measuring net job creation—new jobs created minus old jobs lost—is a whole lot harder than measuring gross job creation. So we have fewer estimates of it. But estimates of net job creation by new firms are remarkably similar to the estimates of gross job creation. A study in The Quarterly Journal of Economics by economists Steven Davis and John Haltiwanger shows that in manufacturing, one-year-old firms created 6.4 percent of the net new jobs, an estimate that is consistent across industries, regions, firm size, and type of firm ownership.

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So every year a cohort of new firms is founded that generates about 6 percent or 7 percent of the new jobs created in that year. But how many jobs does that cohort of firms account for in its second year? And what about in its third year? And in all years after that? On average, the answer is none. For instance, in an article published in the Monthly Labor Review, Amy Knaup at the Bureau of Labor Statistics found that the cohort of new employer firms founded in the United States in 1998 employed 798,066 people in its first year but employed only 670,111 people in 2002. In other words, the number of jobs lost by new firms that close down in their second year, third year, fourth year, and so on, exceeds the number of jobs added by the expansion of the new firms that survive. Far from being job creators, as a whole, new firms have net job *destruction* after their first year.

It also takes a lot of entrepreneurs to create lasting jobs. To get one business employing at least one person ten years from now, we need 43 entrepreneurs to begin the process of starting a company. And how many jobs will that startup have, on average, ten years after it was founded? The answer is nine. In short, 43 people have to try to start companies so that we can have nine jobs a decade from now. That's not the spectacular yield that you might expect if you read the press reports about the job creation of start-ups.

So far we have talked about the jobs that start-ups create as if they are the same as the jobs in existing companies. But they're not. They're worse. On average, jobs in new firms pay less, offer fewer fringe benefits, and provide less job security than jobs in existing firms.

The data show that jobs in new firms are more likely to be part-time than jobs in existing fi rms. Moreover, jobs in t he average new firm do not pay as well as jobs in the average existing business. In their book *The Entrepreneurial Process: Economic Growth, Men, Women and Minorities*, sociologists Paul Reynolds and Sammis White found that the average new job paid 72 percent of the average statewide wage in the firm's first year and that the wages in those firms were still below the state average when they were four years old.

Jobs in new firms also offer fewer benefits than jobs in existing firms. David Bernstein analyzes the Federal Reserve Board's survey of small business finances for an article in Applied Economics, and finds that businesses become more likely to offer a pension plan or health insurance coverage to their employees as they get older.

The size of the difference in the tendency of new and existing firms to offer health insurance is substantial. A study by Alison Wellington, published in Contemporary Economic Policy, showed that men who work for others are three times as likely, and women who work for others are six

times as likely, to have health insurance as those who work for themselves. Moreover, preliminary data from the Kauffman Firm Survey show that, in 2004, only 23.2 percent of new firms offered health insurance to their full-time employees.

Clearly, creating typical start-ups isn't the way to enhance economic growth and create jobs. So what is? It's pretty straightforward. Stop subsidizing the formation of the typical start-up and focus on the subset of businesses with growth potential. Getting economic growth and jobs creation from entrepreneurs isn't a numbers game. It's about encouraging the founding of high-quality, high-growth companies.

To get more economic growth by having more start-ups, new companies would need to be more productive than existing companies. But they're not.

A tiny sliver of startups accounts for the vast majority of the contribution to job creation and economic growth that comes from entrepreneurial activity. According to data from the National Venture Capital Association, since 1970, venture capitalists have funded an average of 820 new companies per year. These 820 startups—out of the more than two million companies started in this country every year—have enormous economic impact. A report posted on the Venture Impact website explains that, in 2003, companies that were backed by venture capitalists employed 10 million people, or 9.4 percent of the private sector labor force in the United States, and generated $1.8 trillion in sales, or 9.6 percent of business sales in this country. Moreover, in their book *The Money of Invention: How Venture Capital Creates New Wealth*, economists Paul Gompers and Josh Lerner report that in 2000, the 2,180 public companies that received venture-capital backing between 1972 and 2000 comprised 20 percent of all public companies in the United States, 11 percent of their sales, 13 percent of their profits, 6 percent of their employees, and one-third of their market value, a figure in excess of $2.7 trillion dollars.

Instead of just believing naively that all entrepreneurship is good, policymakers need to recognize that only a select few entrepreneurs will create the businesses that will take people out of poverty, encourage innovation, create jobs, reduce unemployment, make markets more competitive, and enhance economic growth. Therefore, as unfair as it might sound, policymakers need to "stop spreading the peanut butter so thin." They need to recognize that all entrepreneurs are not created equal. They need to think like venture capitalists and concentrate time and money on extraordinary entrepreneurs, and to worry less about the typical ones.

How? First, we need to reduce the transfer payments, loans, subsidies, regulatory exemptions, and tax benefits that encourage marginal entrepreneurs to start businesses. Since the average existing firm is more productive than the average new firm, we would be better off economically if we got rid of policies that encourage a lot of people to start businesses instead of taking jobs working for others.

Take, for example, the home office tax deduction. Half of all new businesses are home-based businesses. So people who start businesses that they operate out of their homes can deduct the costs of using part of their homes for their businesses—a deduction not available to them if they work for someone else—which gives people an incentive to start companies that do little to enhance economic growth or to create new jobs.

Alternatively, consider the state Self-Employment Assistance Programs in place in Delaware, Maine, Maryland, New Jersey, New York, Oregon, and Pennsylvania. According to the Department of Labor's website, "The program is designed to encourage and enable

unemployed workers to create their own jobs by starting their own small businesses. Under these programs, states can pay a self-employed allowance, instead of regular unemployment insurance benefits, to help unemployed workers while they are establishing businesses and becoming self-employed. Participants receive weekly allowances while they are getting their businesses off the ground." But unemployed people tend to start marginal businesses that create few jobs and have high failure rates, so is this program a good use of resources?

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A third program that doesn't make efficient use of our resources is the Small Business Development Center Program, which is hosted by universities, colleges, and state economic development agencies, and funded in part through a partnership with the Small Business Administration. Its mission, according to the website of America's Small Business Center Network, "is to help new entrepreneurs realize their dream of business ownership." By making the process of starting a business easier, the SBDC program is encouraging the formation of more of the typical start-ups that are not enhancing economic growth or spurring job creation.

We need to reallocate resources to programs that support high-growth companies. For instance, we could shift money into the Small Business Innovation Research Program, which requires federal government agencies to set aside a portion of their budgets to support commercially viable R&D projects at small companies. The recipients of these funds are much more likely than the typical start-up to contribute to economic growth and to create jobs.

Alternatively, we could make the research and development tax credit permanent. This policy provides a 20 percent tax credit for U.S.-based R&D expenditures. Research and development tax credits offer an incentive for entrepreneurs to conduct R&D that they otherwise would not undertake. Those new companies that conduct R&D, and which would benefit from this credit, are more likely than the typical start-up to contribute to economic growth and job creation.

Some might argue that we can't just focus on the small number of highly successful startups because we don't know which start-ups will become high-growth businesses and which won't. As a result, we must throw mud against the wall and see what sticks.

This view may be politically appealing, but it is naive. It assumes that we can't identify the things that make new businesses more likely to survive, generate profits, increase sales, and hire people. Unless the beliefs of venture capitalists and sophisticated business angels are completely wrong, we know what criteria to focus on. The human capital of the founder and his motivations, the industries in which companies are founded, their business ideas and strategies, their legal forms and capital structure—all of this information helps us to identify likely winners and likely losers.

In fact, most people know how to select the companies to bet on. Take, for example, the following two businesses:

• A personal cleaning business that is started by an unemployed high school dropout, is pursuing the customers of another personal cleaning business, is capitalized with $10,000 of the founder's savings, and is set up as a sole proprietorship.

• An Internet company that is started by a former Microsoft employee with 15 years of experience in the software industry, an MBA, and a master's degree in computer science, who is pursuing the next generation of Internet search, and is capitalized with $250,000 in money from the founder and the Band of Angels in San Francisco, and is set up as a corporation.

Which one would you put your resources behind? It's obvious that the second business's chances to contribute to economic growth and create jobs are far better than the first's and that, on average, we would be better off putting our resources into businesses like it.

The fix for our failing public policies on entrepreneurship will take political will. The greater benefits from the better policies are diffuse and down the road because they come from having more high-growth, job-creating companies. Policymakers need to choose to pursue either good policies or good politics.

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