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The Role of Entrepreneurship in US Job Creation and Economic Dynamism[†]

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The United States has long been viewed as having among the world's most entrepreneurial, dynamic, and flexible economies. It is often argued that this dynamism and flexibility has enabled the US economy to adapt to changing economic circumstances and recover from recessions in a robust manner. While the evidence provides broad support for this view, the outcomes of entrepreneurship are more heterogeneous than commonly appreciated and appear to be evolving in ways that could raise concern. Evidence along a number of dimensions and a variety of sources points to a US economy that is becoming less dynamic. Of particular interest are declining business startup rates and the resulting diminished role for dynamic young businesses in the economy.

We begin by describing how the concept of entrepreneurship is reflected in existing data on firm age and size. The recent addition of firm age to official statistics represents a dramatic improvement in the information available to entrepreneurship researchers. We then turn to a discussion of the role of startup firms in job creation. Business startups account for about 20 percent of US gross (total) job creation while high-growth businesses (which are disproportionately young)

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account for almost 50 percent of gross job creation. Startups and young businesses are small, the underlying reason many commentators described small businesses as the engine of US job growth prior to availability of data by firm age (for summaries, see Haltiwanger, Jarmin, and Miranda 2013; Haltiwanger 2012).

The contribution of startups and young businesses to job creation involves rich dynamics. Most business startups exit within their first ten years, and most surviving young businesses do not grow but remain small. However, a small fraction of young firms exhibit very high growth and contribute substantially to job creation. These high-growth firms make up for nearly all the job losses associated with shrinking and exiting firms within their cohort. The implication is that each entering cohort of startups makes a long-lasting contribution to net job creation.

The contribution of startups and young firms to job creation is part of an overall rapid pace of reallocation of productive resources across firms in the US economy. Young firms exhibit rich post-entry dynamics: specifically, low-productivity young firms contract and exit, while high-productivity young firms rapidly expand. In addition, young firms appear to play a critical role in innovative activity that also contributes to productivity growth (including within-firm productivity growth).

An optimal pace of business dynamics—encompassing the processes of entry, exit, expansion, and contraction—would balance the benefits of productivity and economic growth against the costs to firms and workers associated with reallocation of productive resources. It is difficult to prescribe what the optimal pace should be, but evidence accumulating from multiple datasets and methodologies suggests that the rate of business startups and the pace of employment dynamism in the US economy has fallen over recent decades and that this downward trend accelerated after 2000 (Haltiwanger, Jarmin, and Miranda 2011; Reedy and Litan 2011). A critical factor in accounting for the decline in business dynamics is a lower rate of business startups and the related decreasing role of dynamic young businesses in the economy. For example, the share of US employment accounted for by young firms has declined by almost 30 percent over the last 30 years.

These trends suggest that incentives for entrepreneurs to start new firms in the United States have diminished over time. We do not identify all the factors underlying these trends in this paper but offer some clues based on the empirical patterns for specific sectors and geographic regions. We conclude with reflections on ripe research topics in this area.

Measuring Entrepreneurship

Measuring entrepreneurship and its economic effects is difficult. Available government data on US firms do not have a specific entry for "entrepreneurs." These data have traditionally contained information about the size of firms, and thus some observers have written or spoken as if small businesses are synonymous with entrepreneurs. However, we believe entrepreneurial activity is better represented by *new* businesses—that is, by age rather than by size. Indeed, using recently

available data with information on both firm *size* and firm *age*, Haltiwanger, Jarmin, and Miranda (2013) show that most of the job-creating prowess of small businesses is due to the contribution of startups and young businesses, which are also small at that stage in their lifecycle, as we discuss in the next section.

When thinking about "new" businesses, the distinction between new *firms* and new *establishments* is critical. Many US firms operate multiple establishments (that is, specific locations of business activity). New establishments of existing firms can take many forms, including simply replacing outdated existing establishments, thus new establishments often do not conform to standard notions of entrepreneurial behavior. For this reason, entrepreneurial research should focus on startups and young firms. It should exclude "new" businesses emerging from reorganizations such as mergers and acquisitions.

The Business Dynamics Statistics and the Longitudinal Business Database maintained by the US Census Bureau track the universe of employer firms—that is, firms in the private, nonagricultural sector with at least one employee.[1] The Longitudinal Business Database includes annual observations beginning in 1976 and currently runs through 2011. It provides information on detailed industry, location, and employment for every establishment in the private sector in a nationally comprehensive and integrated manner. With these data, it is possible to distinguish between true "startups," new establishments of existing businesses, and "new" firms formed by combining pre-existing establishments through merger and acquisition activity. The Longitudinal Business Database identifies the relationship between firms and establishments both cross-sectionally and over time. Thus, researchers can link establishment and firm information, compute characteristics such as firm size and firm age from the establishment information, and track patterns over time.

However, even within the category of startups, we should expect to find various types of entrepreneurs. Schoar (2010) argues for distinguishing between "subsistence" entrepreneurs and "transformational" entrepreneurs. Her distinction was intended primarily for emerging economies where many entrepreneurs have limited prospects for growth, but we think this distinction is useful for the US economy as well. Subsistence entrepreneurs can be thought of as those that create small businesses that provide employment for the entrepreneur and perhaps a few others (often family members), which do not usually grow. For example, Hurst and Pugsley (2011) find that many young and small business owners in the US economy state they do not have aspirations for high growth, but rather often started businesses for nonpecuniary reasons like time flexibility or personal goals. Transformational

[1] The Business Dynamic Statistics are recently available public domain data derived from the Longitudinal Business Database, and can be found at http://www.census.gov/ces/dataproducts/bds/. A fuller description of these data and the measures we use are provided in the online Appendix available with this paper at http://e-jep.org. We note that the Longitudinal Business Database employment and job creation numbers track closely those of the County Business Patterns and Statistics of US Business programs of the US Census Bureau (Haltiwanger, Jarmin, and Miranda 2009), as they all share the Census Bureau's Business Register as their source data.

entrepreneurs, on the other hand, create small startup businesses with the intention to innovate and grow, thus creating employment for other workers and value added for the economy. Clearly, only a subset of these transformational entrepreneurs are likely to succeed in the marketplace and grow. When people discuss the importance of entrepreneurs in job creation and productivity growth, they are envisioning transformational entrepreneurs, not subsistence entrepreneurs.

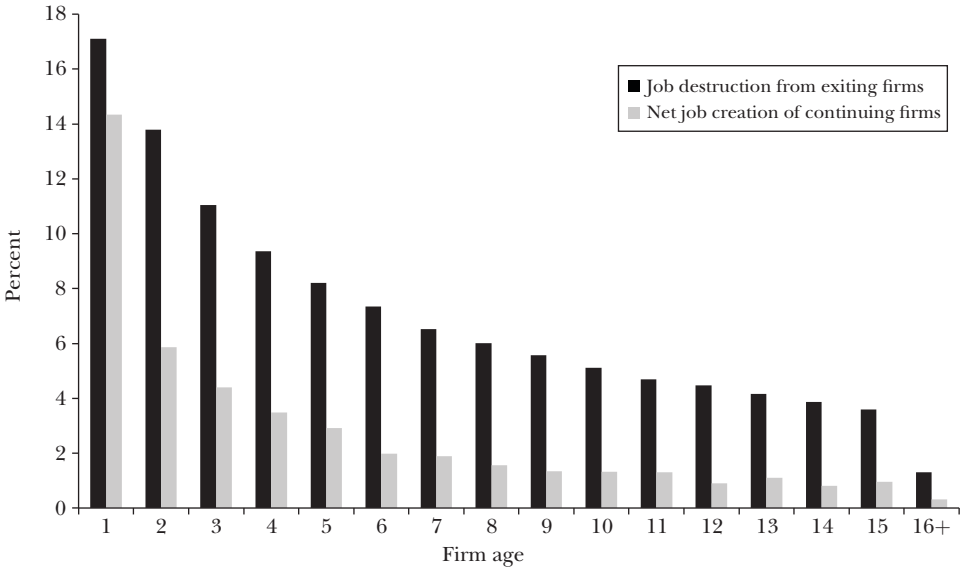
Other useful sources of data on startups include the Business Employment Dynamics from the US Bureau of Labor Statistics, which is a rich source of quarterly information on job creation and destruction. These data are more timely than the Census data but are less useful for studying firm size and firm age effects because firms are defined based on all activity operating under a single Employer Identification Number. However, many large multi-establishment firms have multiple Employer Identification Numbers. By contrast the Census Bureau uses survey and administrative data to create an enterprise-wide representation of all the establishments in the US economy that are under common ownership and control. Other important sources of data describing firm dynamics for the US economy include COMPUSTAT (which tracks publicly traded firms), the National Establishment Time Series (based on Dun and Bradstreet data), and the Kauffman Survey tracking a sample of recent entrants.

Startups and US Jobs

Startups and young businesses clearly play an important role in job creation. Between 1980 and 2010, the gross number of jobs created annually by all establishments averaged about 18 percent of the workforce—an average of 16.3 million jobs per year—according to our calculations from the Business Dynamics Statistics. About one-sixth of this amount, an average of 2.9 million jobs annually, can be traced to new firms, and another one-sixth can be traced to new establishments of existing firms. The net job creation statistics are even more striking. For new firms (that is, those with age equal to zero in the Business Dynamics Statistics), "net" and "gross" job creation are the same, because they have no previous jobs to lose, and so their net job creation is also 2.9 million jobs per year. Over these 30 years, average net job creation in the entire US private sector was approximately 1.4 million jobs per year. The implication is that cohorts of firms aged one year or older typically exhibit net job declines.

Taken at face value, these statistics might be interpreted as implying that all net job creation is due to startups. This interpretation is misleading for two reasons. First, gross job creation is an order of magnitude greater than net job creation in any given period. This implies that in any given period there are many different groupings of growing firms that could be used to account for net job creation. Second, it is important to examine the post-entry dynamics of startups. If, for example, all startups failed after a short period of time, then startups would not be making any long-lasting contribution to net job creation.

Figure 1
Up or Out Dynamics for Young Firms



Source: Annual averages of statistics computed from the Longitudinal Business Database from 1992–2011.
Notes: Figure 1 shows patterns of net employment growth of continuing firms and job destruction from firm exit for firms age 1 and older. Startups have firm age equal to zero, so this figure reports on the post-entry dynamics of firms. (See footnotes 2 and 3 and online Appendix for details.)

To explore post-entry dynamics, we need to track firm growth and survival as a function of firm age. We rely here on the methodology developed by Davis, Haltiwanger, Jarmin, and Miranda (2007) and Haltiwanger, Jarmin, and Miranda (2013). Firm age is measured using the age of the oldest establishment in the firm. For startups, all of the establishments of the new organization are entrants so firm age is zero. In this methodology, continuing firms age "naturally," one year at a time, as long as the organization stays in existence.[2] Consistent with this approach, firm exits represent legal entities that cease to exist and in which all of their associated establishments shut down. Thus, firm exits do not reflect legal entities that cease through organizational change or buyout activity and where at least some establishments continue operation in subsequent years.

Using this approach, Figure 1 shows patterns of net employment growth for continuing firms and job destruction from firm exits for firms age 1 and older.[3]

[2] As part of this same methodology for assigning firm age, Haltiwanger, Jarmin, and Miranda (2013) develop a method for capturing firm growth that focuses on organic growth rather than growth from merger and acquisition activity and other related changes in organization. We use that methodology here, and explain it in more detail in the Appendix available with this paper at http://e-jep.org.

[3] Reported statistics in this figure reflect the net employment growth for the cell using the growth rate methodology developed by Davis, Haltiwanger, and Schuh (1996). The growth rate concept at any level

Recall that startups have firm age equal to zero, and so Figure 1 provides insights on the post-entry dynamics of firms. The statistics are based on tabulations of pooled data from 1992–2011 from the Longitudinal Business Database. Conditional on survival, younger firms have much higher rates of job growth than more mature firms. Indeed, even the typical 10 year-old firm has net growth that is 1.4 percentage points higher than the typical 16+ year-old firm. The exit dynamics look different as well. Young firms have a substantially higher exit rate (job destruction from exit is an employment-weighted exit rate): 50 percent of the jobs generated by an entering cohort of firms will have been lost to exits by age five.

Thus, young firms exhibit a strong "up or out" dynamic (Haltiwanger, Jarmin, and Miranda 2013). For any given cohort, jobs lost due to the high failure rate of young firms are almost offset by the growth of the surviving firms. Five years after the entry of a typical cohort, total employment is about 80 percent of the original employment contribution of the cohort—in spite of losing about 50 percent of the original employment to business exits. In this sense, cohorts of startups do make a long-lasting contribution to net job creation. But the high volatility of young firms highlights that the contribution to net job creation from startups can't be simply understood from the immediate contribution upon starting up.

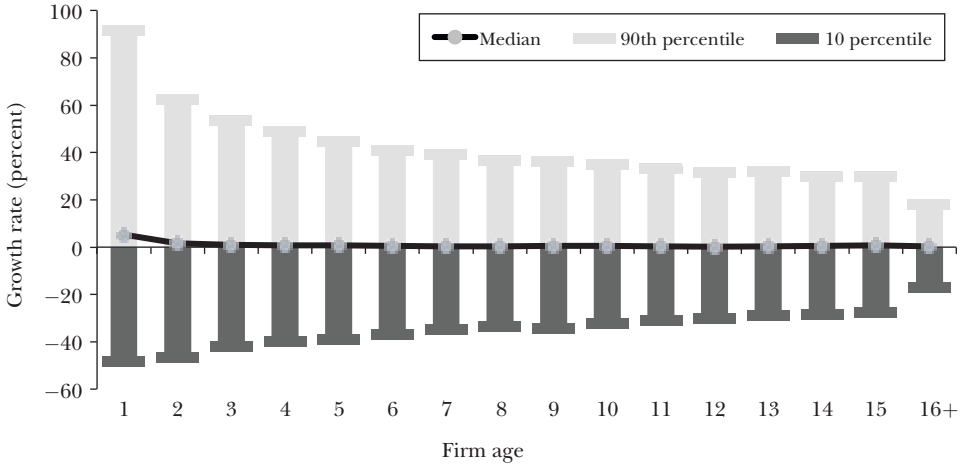
The high mean net employment growth of surviving young firms masks enormous heterogeneity among young surviving firms. Figure 2A shows the 90th, 50th, and 10th percentiles net job growth of surviving firms by firm age. Figure 2B shows the mean and median of net employment growth of surviving firms by firm age. The mean is the aggregate net growth rate for each age group. The 90th, 10th, and median are the employment-weighted percentiles, so they reflect the employment-weighted distribution underlying the aggregate mean. Young firms have very high dispersion of growth and also very high skewness. The skewness is seen in the relative magnitudes of the 90th and 10th percentiles where the growth rates of younger firms are much more skewed to the right (positive) compared to more mature firms. This accounts for the high mean growth rate of young firms relative to older firms that is evident in the lower panel of Figure 2. In short, the typical young firm (as captured by the median) exhibits little or no growth even conditional on survival (many of these are presumably the "subsistence" entrepreneurs discussed earlier), however, among all the young firms, a few do exhibit very high rates of growth which yields a high mean growth rate.

The skewed right tail of the growth rate distribution of young firms is important for understanding the contribution of startups and young firms to overall job creation. Startups account for less than 10 percent of firms and about 20 percent of firm-level gross job creation. But the contribution of startups to job creation does not stop at entry, at least for some firms. High-growth firms—defined here as firms expanding

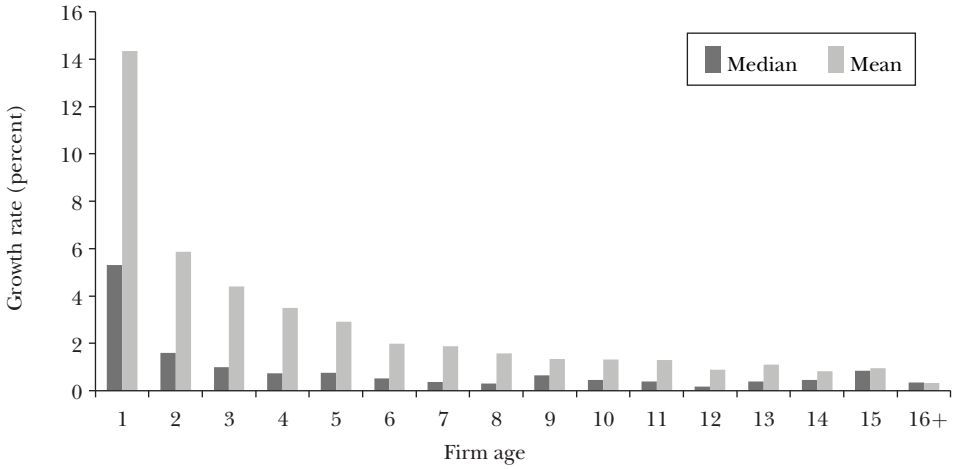
of aggregation is based on the change in the number of jobs for a cell from period $t-1$ to t divided by the average number of jobs in periods $t-1$ and t. This growth rate measure was developed originally by Törnqvist, Vartia, and Vartia (1985). Like log changes, this growth rate measure is symmetric but it has the advantage of accommodating zeroes (entry and exit). It is a second order Taylor approximation to the log first difference. See the online Appendix with this paper at http://e-jep.org for more details.

Figure 2
Net Employment Growth and Growth Rates for Surviving Firms

A: 90th, Median, and 10th Percentiles of Net Employment Growth for Surviving Firms



B: Mean and Median Net Employment Growth Rates for Surviving Firms



Notes: Annual averages of statistics computed from Longitudinal Business Database, from 1992–2011. The 90th, 10th, and median are all based on the employment-weighed firm level growth rate distribution for each firm age cell. The mean is the aggregate net growth rate of the firm age cell which is equivalent to the employment-weighted average of the firm level net growth rate in each cell.

their employment by more than 25 percent per year—account for about 15 percent of firms and 50 percent of firm-level gross job creation. Together, startups and high-growth firms (which are disproportionately young as seen in Figure 2) account for about 70 percent of firm-level gross job creation in a typical year. Balancing this positive contribution is the sharp job loss that occurs for many firms in the first several

Table 1
Estimates of Net Growth for Continuing Firms by Firm Size and Firm Age
(in percent)

	Firm size (number of employees)								
Firm age	*1–4*	*5–9*	*10–19*	*20–49*	*50–99*	*100– 249*	*250– 499*	*500+*	*All sizes*
1–2	6.7	9.0	11.5	12.9	14.9	14.5	14.3	17.9	11.8
3–4	2.0	2.5	4.4	5.6	7.4	6.8	6.7	10.1	4.5
5–6	−0.5	−0.2	1.8	2.9	4.6	3.9	3.7	7.0	3.0
7–8	−2.0	−1.2	0.8	2.1	3.7	3.0	2.9	6.0	2.4
9–10	−3.7	−2.4	−0.2	0.9	2.5	1.8	1.5	4.5	1.8
11–12	−2.1	−0.9	0.9	2.4	3.8	3.0	2.5	5.5	1.9
13–15	−0.8	0.0	3.0	3.5	4.4	4.0	3.2	5.7	1.8
16+	−2.4	−1.7	−0.9	−0.1	0.6	1.3	1.6	0.9	0.7
All ages	0.2	1.2	1.7	2.1	2.5	2.9	3.1	1.4	

Notes: Tabulations from the US Census Bureau. Details of methodology and results can be found in the online appendix of Haltiwanger, Jarmin, and Miranda (2013). The analysis covers the period 1992–2005.

years after startup entry. Overall, the evidence shows that most startups fail, and most that do survive do not grow. But among the surviving startups are high-growth firms that contribute disproportionately to job growth. These high-growth young firms yield the long-lasting contribution of startups to net job creation.

To understand the population of startups and their dynamics, it helps to realize that their size distribution is quite different from that of the overall distribution of firms. Startups are small; more than 90 percent of all startups have fewer than 20 employees, and these small startups account for about half of all startup employment. For purposes of comparison, about 50 percent of employment in the US private sector is accounted for by the less than 1 percent of US firms with more than 500 employees. Large startups are almost nonexistent and account for a very small share of startup activity; however, many small firms are old, accounting for about 30 percent of employment. This image is enriched by examining the average net employment growth rate by firm age and firm size class in Table 1. Table 1 focuses on continuing firms, to help link back to the evidence in Figure 1 regarding the high average net growth rate for young surviving firms. Average net job growth falls monotonically with firm age for all firm size groups. However, the average net growth for young firms is substantially higher for firms that are larger than 20 employees. Such patterns highlight that rapid employment growth among young surviving firms is especially present among larger—or at least not micro-sized—young firms.

Startups, Reallocation, and Productivity

The high pace of labor market reallocation with a critical role for startups and young firms raises a question: What is driving this reallocation? Considerable

evidence suggests that entry, exit, expansion, and contraction of firms are closely related to measures of productivity and profitability (for surveys and summaries, see Syverson 2011; Foster, Haltiwanger, and Krizan 2001; Bartelsman and Doms 2000).

Producers, even those within the same industry, display enormous differences in measured productivity and profitability. For example, within the same four-digit US manufacturing industry, the establishment at the 90th percentile of the productivity distribution produces almost twice as much output (measured by real revenue) with the same measured inputs as the 10th percentile establishment (Syverson 2004, 2011). These large differences are persistent, but not permanent, indicating that firms are subject to ongoing idiosyncratic productivity and profitability shocks.

These large differences in productivity and profitability are connected to the growth and survival dynamics of firms. As such, they underlie the reallocation dynamics we have discussed and documented above. For example, Foster, Grim, and Haltiwanger (2013) estimate, using data for the entire US manufacturing sector for the period 1980–2011, that the probability of exit for the establishment at the 90th percentile of the productivity distribution within an industry is 4 percentage points lower than the establishment at the 10th percentile (the average annual exit rate for manufacturing establishments is 8 percent per year). Conditional on survival and holding initial size constant, estimates from the same data imply that an establishment at the 90th percentile of productivity has a growth rate that is 3 percentage points higher than a plant at the 10th percentile. Finally, estimates from Syverson (2011) also show that entrants tend to start with productivity that is on average similar to incumbents. These estimated effects of productivity on growth and survival are very similar to those found in the literature. As stated in that paper: "[A] robust finding in the literature—virtually invariant to country, time period or industry—is that higher productivity producers are more likely to survive than their less efficient counterparts."[4]

When focusing on the relationship between reallocation of resources across the economy and firm-level measures of productivity, several issues arise. One issue is that much of the micro empirical literature in this area focuses on establishment-level rather than firm-level measures of productivity. Part of the reason for this focus reflects the complexity of measuring firm-level productivity for large, mature firms operating across several sectors. However, when the research looks just at establishments owned by young firms, as in Foster, Grim, and Haltiwanger (2013), the marginal effects of revenue-based measures of productivity on growth and survival (discussed above) are, if anything, larger. This is consistent with the up-and-out dynamics of young firms discussed earlier.

Another issue is that much of the literature in this area measures total factor productivity in terms of revenue. This choice is primarily due to data limitations as most sources of firm- and establishment-level data that are used to measure productivity do not include micro level measures of output and input prices. Instead, real

[4] We discuss the robustness of the findings in the literature further in section II of the online Appendix available with this paper at http://e-jep.org.

output and real inputs are measured as establishment- or firm-level revenues and costs divided by a price deflator. Such revenue-based measures of productivity will thus reflect some combination of the technical efficiency with which inputs are translated into outputs, together with demand and cost effects on prices.

Revenue-based measures of productivity may be a reasonable approximation for measures that adjust for price dispersion across producers. When Foster, Haltiwanger, and Syverson (2008) compare the revenue-based measures of total factor productivity with total factor productivity measured in physical quantities for a sample of manufacturing industries, they find that the correlation between these two measures of productivity is .75, which suggests that broad findings in the literature based on measures of revenue productivity would hold up reasonably well with measures of productivity based on quantities.[5] The industries for which physical quantity data are available in the US economy are limited, so there is some question as to the wider applicability of these findings across the whole economy. However, evidence for Colombia (where establishment-level price indices are available for all manufacturing establishments) suggests these patterns are robust for a much wider range of industries (Eslava, Haltiwanger, Kugler, and Kugler 2004, 2013).

To be clear, productivity growth in an economy is not only a matter of more-productive entering firms replacing less-productive exiting firms. A common finding in the literature about productivity growth in manufacturing is that about 60 percent of industry-level productivity growth happens within existing establishments and the rest comes from reallocation of productive resources resulting from entry, exit, and the expansion and contraction of existing establishments. For example, Foster, Haltiwanger, and Syverson (2008) find that entrants and young establishments have slightly higher total factor productivity (measured in quantity terms) than more mature incumbents, but the entrants have substantially higher productivity than exiting establishments. In their data, 35 percent of industry-level productivity growth is accounted for by net entry. However, their study looks over a five-year time period, and thus some of the 60 percent of productivity growth happening within existing establishments occurs in young firms. Foster, Haltiwanger, and Krizan (2001, 2006) provide evidence of such selection and learning dynamics and show that within-plant productivity growth is more rapid for surviving young establishments than more mature establishments.[6]

In sectors like retail trade, the evidence suggests that productivity growth within establishments is less important except in the case of young establishments

[5] In section II of the online Appendix available with this paper at http://e-jep.org, we discuss the evidence that shows the relationship between revenue productivity and growth and survival are very similar to the relationship between physical productivity and growth and survival.

[6] Foster, Haltiwanger, and Syverson (2008) also find that the role of net entry is substantially larger using total factor productivity measured in quantity terms as opposed to measuring it in revenue terms. The net entry component accounts for 35 percent of productivity growth with quantity-based productivity and 24 percent of productivity growth with revenue-based productivity. The difference must lie, of course, in price factors that differ between entrants and younger incumbents on the one hand and more mature incumbents on the other. They find that entrants and young establishments face substantially lower prices, which may reflect the challenges of becoming established and building reputation in a market.

that show productivity growth in their early years. Instead, most of the labor productivity growth in this sector has been attributed to net entry (Foster, Haltiwanger, and Krizan 2006). In many cases, existing firms improve productivity in retail trade primarily through adding new, more-productive retail locations rather than expanding existing establishments. Moreover, much of the exit of low-productivity retail establishments in the US economy has been dominated by the exit of "mom and pop" single-establishment firms. Doms, Jarmin, and Klimek (2004) find that more-intensive investment in information technology by large producers is related to both differences in the level of productivity across establishments and differences in the within-establishment growth rates of productivity, thus highlighting the link between technology, productivity, and business dynamics.

An important related question is the role of startups and young firms in innovative activity. Among innovative firms, young and small firms have higher innovation intensities than mature firms as measured by the ratio of research and development spending to sales (Acemoglu, Akcigit, Bloom, and Kerr 2013).

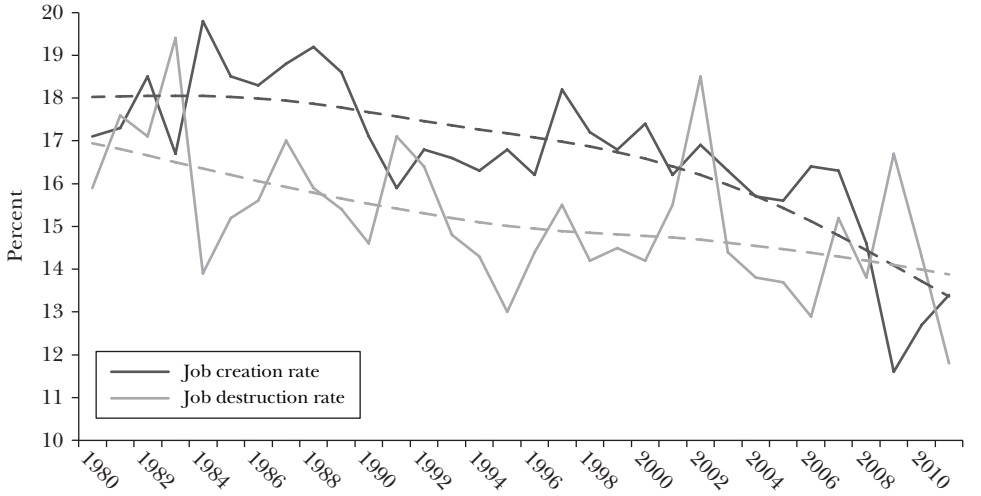
To sum up, while the evidence that startup firms are a powerful driver of job growth is quite clear, the evidence is less definitive for the contribution of startup firms to overall productivity growth. In addition to the limitations in relation to the studies discussed above, micro-based studies of productivity beyond the manufacturing and retail trade sectors are scarce. Measuring productivity in other industries is difficult, given the limitations on data on inputs other than labor in nonmanufacturing sectors. Still, the evidence that does exist for manufacturing and retail trade tends to support the existence of an up-or-out dynamic with high productivity (and high-profitability) young firms growing and low-productivity firms contracting and exiting. Moreover, young firms have a high innovation intensity, which suggests that young firms may be disproportionately important in terms of growth and productivity.

The Decline in the Startup Rate and Business Dynamism

The US economy displays a rapid pace of gross job creation and destruction, as depicted in Figure 3.[7] Even in 2009, when the economy experienced a large net employment decline due to the recession, expanding and new businesses added jobs at a rate equal to 12.4 percent of total employment. In absolute terms, the

[7] The online Appendix available with this paper at http://e-jep.org offers formal definitions of job creation and destruction and other related measures of dynamism in the job market. In this literature, "job reallocation" is the sum of job creation and destruction—it is a summary measure of all the changes in the location of jobs across producers. We also use that measure in the analysis in this section. Another summary measure often used in the literature is the "excess reallocation rate," which is job reallocation less the absolute value of net growth. The excess measure captures the reallocation over and above that needed to accommodate net growth. For the sake of brevity, we do not show patterns by excess reallocation here, but note that our patterns of declining trends carry over to excess reallocation. Davis et al. (2007) show patterns by excess reallocation.

Figure 3
US Annual Job Creation and Destruction Rates, 1980–2011



Source: Author calculations from the US Census Bureau's Business Dynamics Statistics.
Notes: The filter is Hodrick–Prescott with multiplier 400. The vertical axis does not begin at zero.

US private sector created more than 14 million new jobs between March 2008 and March 2009. The nature and pace of reallocation does change over the business cycle: specifically, job creation and job destruction tend to move in opposite directions during expansions and contractions. As Figure 3 shows, the decline in job creation during the 2007–2009 period was especially large.

But abstracting from the business cycle, the rates of job creation and destruction exhibit a general downward trend during the last few decades. Figure 3 illustrates this point by also showing smoothed trends. In particular, the job creation rate averaged 18.9 percent in the late 1980s and decreased in what appears to be a roughly stepwise pattern following recessions to an average of 15.8 percent in the 2004–2006 period just before the Great Recession. Meanwhile, the job destruction rate fell from an average of 16.1 percent in the late 1980s to an average of 13.4 percent in the 2004–2006 period. Moreover, the decline in the pace of job creation and destruction appears to have accelerated since about 2000.[8]

These declining trends appear in a wide range of data and settings. Using multiple measures of business dynamics from the Longitudinal Business Database, Davis, Haltiwanger, Jarmin, and Miranda (2007) found that the trend decline

[8] The annualized decline increases in magnitude from −0.15 to −0.22 of a percentage point for job creation and from −0.14 to −0.19 of a percentage point for job destruction.

is present in both firm-level and establishment-level measures.[9] Similarly, Davis, Faberman, Haltiwanger, Jarmin, and Miranda (2010), using the Bureau of Labor Statistics' Business Employment Dynamics data, show a declining pace of job flows over time. They find that the declining trend in the pace of job destruction is closely linked to the secular decline in the inflow rate to unemployment (at both the national and sectoral level). Davis, Faberman, and Haltiwanger (2012) show that this declining pace of job flows is matched by a declining pace of worker flows in the Job Openings and Labor Turnover (JOLTS) data. Specifically, the decline in the pace of hires exceeds that of the decline in job creation, and similarly the decline in the pace of separations exceeds that of the decline in job destruction. In other words, there is a decline in the pace of excess worker reallocation or worker churn. Lazear and Spletzer (2012) report similar findings using the JOLTS and BED data. Hyatt and Spletzer (2013) find similar patterns using the worker and job flows data from the Quarterly Workforce Indicators.

Job reallocation measures the change in the allocation of jobs across producers. In contrast, excess worker reallocation measures the change in the allocation of workers over a given set of jobs. Total worker reallocation is the sum of job reallocation and excess worker reallocation. It is striking that there have been secular declines in these related but distinct components of overall worker reallocation.

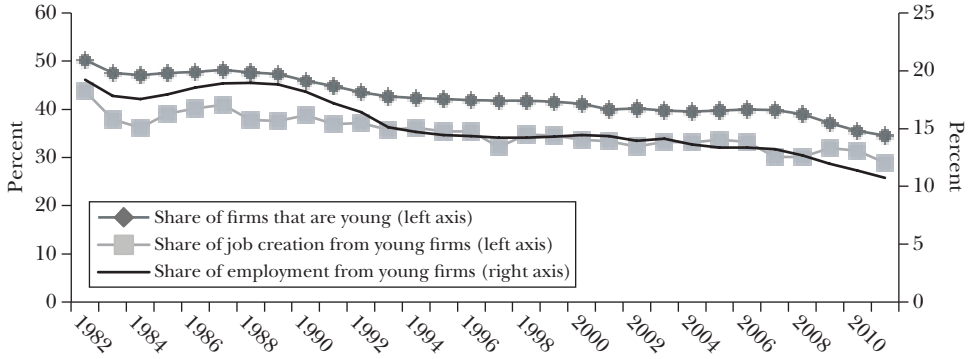
Secular Shifts: The Changing Distribution of Firm Age

A decline in the startup rate is one of the factors affecting the pace of reallocation in labor markets. The firm startup rate is measured by the number of new firms divided by the total number of firms. Our calculations based on the Business Dynamic Statistics data show that the annual startup rate declined from an average of 12.0 percent in the late 1980s to an average of 10.6 percent just before the Great Recession, when it plummeted below 8 percent. We also find that the startup rate has declined in all major sectors. We note, however, that in high-tech sectors (Haltiwanger, Hathaway, and Miranda 2014), the startup rate only began to decline in the post 2000 period.

Meanwhile, the average size of startups, as measured by employment, has either remained approximately the same over this time period as measured by the Census Bureau's Business Dynamics Statistics data (Haltiwanger, Jarmin, and Miranda 2013) or has declined as measured by the Bureau of Labor Statistics' Business Employment

[9] Davis et al. (2007) also show that the trend decline is present in within-firm and within-establishment measures of volatility as well as cross sectional dispersion measures such as the pace of job creation and destruction. The decline in the pace of overall firm volatility does mask an increase in the pace of firm volatility among publicly traded firms through 2000 (Comin and Philippon 2005). Davis et al. (2007) confirm the Comin and Philippon findings using data that have both privately held and publicly traded firms. They show that the decline in the pace of business volatility among privately held firms overwhelms the rise in firm volatility for publicly traded firms. Their findings suggest that the difference in patterns between publicly and privately held firms through 2000 primarily reflects a change in the composition of publicly held firms. In particular, the 1980s and 1990s cohorts of new publicly traded firms are younger when going public and also grow more rapidly after going public than earlier cohorts.

Figure 4
Declining Share of Activity from Young Firms (Firms Age 5 or Less)



Source: Author calculations from the US Census Bureau's Business Dynamics Statistics.
Note: Employment shares in each period based on the average of employment in period $t - 1$ and t (the denominator of the Davis, Haltiwanger, and Schuh (1996) growth rate).

Dynamics (Reedy and Litan 2011; Choi and Spletzer 2012). Either way, the lower startup rate is not being offset by a larger size of startup firms.

A consequence of the declining startup rate and flat or declining startup size is that the share of young firms in the economy, and the share of activity for which they account, is declining. Figure 4 shows that firms aged five years or less made up about 47 percent of all firms in the late 1980s, but this number declined to 39 percent of all firms before the start of the Great Recession, and has declined further since then. Similarly, the share of employment at firms less than five years of age declined from an average of 18.9 percent in the late 1980s to an average of 13.4 percent at the cyclical peak before the Great Recession. Finally, firms that were five years old or less contributed 39 percent of all new jobs in the late 1980s, but about 33 percent of all new jobs before the Great Recession. Because rates of job creation and destruction are much higher at young firms, these changes will contribute to the decline in both job creation and job destruction rates (Fort, Haltiwanger, Jarmin, and Miranda 2013).

To quantify the contribution of the changing age structure of firms on the change in job reallocation, we apply a standard shift-share decomposition for seven unique firm age groups (ages 0 through 5, and then 6 or more). To abstract from business cycle effects, we focus on the long-run change between two cyclical peaks. Specifically, we measure the difference between three-year averages of job flows for the periods of 1987–89 and 2004–06. Using a three-year average allows us to avoid issues that can arise in looking at particular years.

Our shift-share approach decomposes the change in job flows between 1987–89 and 2004–06 into three components: 1) the contribution from within-age group changes in job flows holding constant the employment-weighted firm age distribution at the initial levels; 2) the contribution from changes in the employment

distribution across firm age groups holding constant the job flows by firm age at the initial levels; and 3) the contribution of a cross term relating changes in shares with changes in flows. Doing this, we find that the shifting age composition of firms towards older businesses accounts for 32 percent of the observed decline in job creation, 20 percent of the decline in job destruction, and 26 percent of the decline in job reallocation.

Secular Shifts: The Changing Industrial Structure of Firm Activity

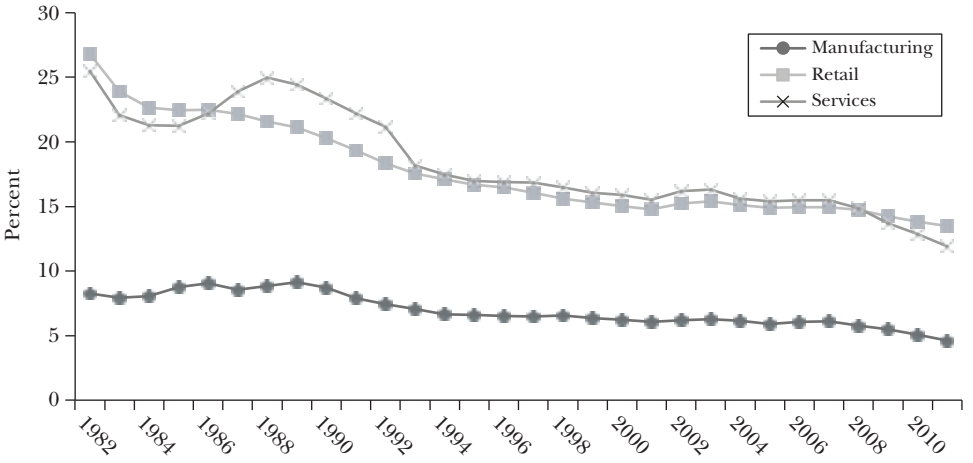
Unlike the changing age distribution of firms, shifts in the industrial composition of the economy would be expected to lead to increases in the pace of job reallocation. For example, the sectoral shift from manufacturing (relatively low pace of reallocation) to services (relatively high pace of reallocation) suggests that we should have expected an increase in the overall pace of business dynamics rather than a decline. In 1980, manufacturing accounted for 28 percent of all US jobs, while retail and services accounted for 24 percent. By 2011, manufacturing accounted for only 11 percent of all jobs, while retail and services accounted for 43 percent (using the broad sector definitions in the Business Dynamic Statistics).

To quantify the contribution shifts in the industry structure of the US economy have on job reallocation, we use the same type of shift-share analysis, but now look at 282 unique four-digit NAICS (2002) industries.[10] We find that the changing industrial share of firm activity indeed dampened the decline in the pace of job reallocation. If the industrial structure had remained the same from 1987–89 to 2004–06, the decline in job creation rates would have been greater by 21 percent, the decline in job destruction would have been greater by 3 percent, and the decline in job reallocation would have been greater by 12 percent.

Given the offsetting effect of the change in industrial composition, we considered a richer shift-share decomposition where we take into account the changes in industrial composition, the age structure, and other firm characteristics that have been associated with systematic differences in the pace of reallocation. In particular, a common finding is that establishments belonging to large firms are less volatile than those that belong to small firms. We consider a shift share decomposition with fully interacted cells defined by 282 unique four-digit NAICS (2002) industries, seven unique firm age groups (ages 0 through 5, and 6+), and eight firm-size groups (1–9, 10–19, 20–49, 50–99, 100–249, 250–499, 500–999, and 1000+ employees). In combination, the changing composition by industry, firm age, and firm size account for 9 percent of the decline in job creation, 18 percent of the decline in job destruction, and 14 percent of the decline in job reallocation. These findings suggest that unexplained within-group variation must account for most of the observed decline in job flows.

[10] We thank Teresa Fort for the development of a methodology that reclassifies all establishments in the Longitudinal Business Database to a consistent NAICS (2002) industry classification system. See Fort (2013) for details. Having a consistent classification system for our entire panel is critical for our analysis. These consistent NAICS codes have not yet been incorporated into the Business Dynamics Statistics.

Figure 5
Share of Employment from Young Firms (Firms Age 5 or Less), Selected Sectors



Source: Author calculations from the US Census Bureau's Business Dynamics Statistics.
Notes: Sector definitions are on an Standard Industrial Classification basis. Employment shares in each period are based on the average of employment in period $t-1$ and t (the denominator of the Davis, Haltiwanger, and Schuh (DHS) growth rate).

Looking for Clues in Sectoral and Geographic Changes in Startups

Insights into the unexplained within-group declines in job flows can be gained from exploring entrepreneurial activity within groups. Figure 5 shows the share of total employment for young firms (five years or less in age) for the retail, services, and manufacturing sectors. The share of employment in young firms has declined in all three sectors, suggesting that factors that are not sector-specific are causing the decline in entrepreneurial activity. Consistent with this view, we find this decline in the share of employment at young firms in every major sector. Figure 5 also shows that the drop is much larger for young retail and services firms than it is for young manufacturing firms. For whatever reason, incentives to start new businesses appear to be declining in all sectors, but disproportionately so in certain sectors such as retail trade, and this has contributed substantially to the declines in the pace of business dynamics.

The especially large decline in entrepreneurial activity in retail trade is consistent with the fundamental transformations ongoing in this sector over many decades. The expansion of "big box" retailers and, more generally, large national firms has dramatically changed the characteristics of the firms and establishments in the industry. Jarmin, Klimek, and Miranda (2005) report that the share of US retail activity accounted for by single-establishment ("mom-and-pop") firms fell from 70 percent in 1948 to 60 percent in 1967, and further still to 39 percent in 1997. If the decline in reallocation were confined to retail trade only, then we might guess that changing retail business models play a dominant role in accounting for

observed decreases in dynamism. But since we observe decreased dynamism in virtually all sectors, additional factors must be at work.

Additional clues might be found by exploring the changing pattern of entrepreneurial activity by US regions and states. We find that the share of employment by young firms has declined in all 50 states. The decline is more pronounced in states in the South and West compared to the declines in the Midwest and the Northeast. Such geographic variation can potentially capture different changes in the business climate, as states differ in regulations across a range of dimensions including occupational licensing requirements, banking regulations, tax burden for businesses and households, employment protection regulations, minimum wages, and others. However, we have found that, for example, states with business climates as different as California and Texas exhibit large and similar declines in entrepreneurial activity. More generally, since all states exhibit a decline in entrepreneurial activity, this suggests that factors other than state-specific business climate effects must be at work.

Understanding the Causes and Consequences of the Decline in Entrepreneurial Activity

We do not yet fully understand the causes of the decline in indicators of business dynamism and entrepreneurship, nor in turn, their consequences. Improving our understanding of the causes and consequences should be a high priority. A straightforward way of considering these issues is to ask whether either the structure of shocks affecting firms or changes in how firms are responding to these shocks can account for the findings. While both possibilities deserve inquiry in future research, we think the latter line of inquiry is likely to prove of greater value. Our prior is that the variance of idiosyncratic shocks affecting firms due to factors like technological change and globalization has, if anything, increased rather than decreased over time.[11] To the extent that such shocks have increased, then the decline in the pace of labor market reallocation is an even greater puzzle.

If the magnitude of economic shocks has not changed in a way that would tend to reduce the amount of labor market reallocation, then any such declines are driven by the way firms respond to shocks. One possibility is that the business climate, broadly defined, has changed in ways that impede job reallocation—that is to say, by impeding entry, exit, expansion, and contraction. Moreover, if the cause of the decline is an increase in the costs of adjustment on one or more of these margins, this can imply adverse consequences for growth, productivity, and welfare. The seminal work of Hopenhayn and Rogerson (1993) offers guidance here. They show that if an economy experiences an increase in adjustment costs for job destruction (for example, due to increased regulation), then not only will there be a decline in job destruction but also a decline in job creation (including a decline in startups)

[11] It is the trend in the pace of second moment shocks impacting firms that matters here and not so much the pace of first moment shocks. The period of the Great Moderation of business cycles is within our sample period, but that should have primarily impacted aggregate volatility and not firm-level volatility.

and ultimately in both productivity and welfare. The loss in welfare and productivity arises because the increase in adjustment frictions reduces the pace at which resources move away from less-productive to more-productive businesses. The same logic applies to changes in regulations or institutions that affect the costs of starting up or expanding a business, including regulations that raise the costs associated with expanding beyond some threshold of size.

A very different possibility is that firms are increasingly able to respond to shocks without as much churning of jobs and firms. After all, the churning of jobs and firms have no social value per se—it only has value to the extent that churning facilitates allocating outputs and inputs to their highest-valued use. Technological changes combined with globalization may have changed how businesses are organized and respond to shocks. For example, information and communications technology has arguably provided greater advantage for large, multinational firms in all sectors since these technologies can facilitate the coordination of production and distribution networks in multiple locations.[12] This change could help to explain the shift away from young firms to large, mature firms. In addition, it might help to explain the especially large declines in the share of startups and the decline in the pace of reallocation in specific sectors and geographic regions where information and communication technology has been especially relevant. Even with this more benign view, there might be a tradeoff between economies of scale induced by information and communications technology and flexibility in terms of how quickly the economy can adjust to changing economic conditions.

Yet another possibility is a hybrid of the first two explanations. Perhaps technological changes have induced changes in costs of hiring and training workers. For example, Cairó (2013) offers evidence that the training requirements of jobs have increased due to both the changing occupational mix of jobs and increases in training requirements within jobs. She develops a model where increased training requirements reduce the pace of job reallocation in the economy. She models this change in training requirements as an increase in adjustment costs, so that it is related to the first explanation above. However, it is an open question as to whether the increased training requirements of jobs is due to changes in technology, as Cairó hypothesizes, or to changing regulations or institutions, such as increased requirements for occupational licensing examined in Kleiner and Krueger (2013).

This discussion illustrates a few of many possible alternative causes, each with different consequences for trends in business dynamism. If the more sluggish pace of adjustment is due to increasingly burdensome regulation and institutions, this has potentially large adverse consequences for intermediate and long-run US job and productivity growth. Alternative explanations, like the notion of information and communications technology favoring large, multi-national firms suggest more benign consequences. Evaluating the productivity and welfare implications

[12] Evidence in support of the hypothesis that information and communications technology has favored large, multi-establishment firms for retail trade can be found in Doms, Jarmin, and Klimek (2004) and Foster, Haltiwanger, and Krizan (2006).

of the change toward lower levels of business dynamics and labor market reallocation will depend critically on the underlying causes of these changes.

Evidence about the role of startups from the rest of the world offers some useful perspective, too. Both the academic literature and international organizations such as the World Bank discuss the importance of entrepreneur-friendly business climates for economic growth; the 2013 *World Development Report* from the World Bank, focused on the theme of jobs, offers an excellent summary of the recent work in this area. But these issues are complicated and sometimes counterintuitive. For example, the evidence suggests that poorly performing emerging economies have plenty of entry—perhaps too much. Most startups in emerging economies are informal micro-enterprises with few if any paid employees. A high startup rate has little value per se. Instead, the problem in many emerging economies is that there is little or no evidence of post-entry growth (Hsieh and Klenow 2012). Using Schoar's (2010) characterization, poorly performing economies seem to have too many subsistence entrepreneurs and too few high-growth transformational entrepreneurs. Translating this issue back to the US context, the open question is whether the observed decline in startups and the associated decline in indicators of business dynamism imply fewer transformational entrepreneurs in the US economy.

Concluding Remarks

Startups and young firms are important contributors to job creation and productivity growth. The patterns for the US economy are roughly consistent with canonical heterogeneous firm models that place an important role for the reallocation of resources away from low-productivity (or low-profitability) businesses to high-productivity businesses. Entry and exit are important components of that ongoing reallocation. However, the contribution of startups and young businesses to jobs and productivity is a noisy and complex process. While startups contribute substantially to jobs immediately, most startups fail or, even if they survive, do not grow, while a small fraction of high-growth young firms contribute disproportionately to job creation in the United States. These findings pose challenges to policymakers seeking to promote job creation by encouraging entrepreneurship, because most young and small businesses are not in fact primary creators of jobs.

The rate of business startups in the US economy has been declining in recent decades, and business dynamism, as measured by the pace of job creation and job destruction, has declined as well. We do not have an explanation for the decline in the pace of entrepreneurship. Some of the structural changes we have observed in the economy such as the shift in the industrial composition actually increase the puzzle rather than provide an explanation since the shift has been towards sectors with higher paces of reallocation historically. The decline in entrepreneurial activity is present in all broad industrial sectors and in all US states. This finding suggests there are some common factors that are not sector- or region-specific accounting for the decline in entrepreneurial activity.

The decline in startups and accompanying decline in the pace of reallocation is a legitimate concern, although the causes of the decline and whether it is having or will have adverse consequences remain open questions for research. In considering these issues, it is worth noting that the declining pace of startups, job creation, and job destruction is mirrored in other measures of the dynamism of American society. In this journal in 2011, Molloy, Smith, and Wozniak noted that internal migration has been declining since a peak in the early 1980s. Like us, they failed to find simple explanations for these trends in changing demographics or broad economic factors. In a related fashion, the churn of workers over and above the job reallocation that we have emphasized here has exhibited a pronounced decline. The building of a career path and finding a good match has traditionally involved a high pace of job switching for workers (especially young workers). The evidence on worker churning implies that the process of building careers through job switching has slowed down. Taken together, there appears to be less scope for the US economy to adjust to changing economic conditions through the migration of workers, the reallocation of jobs across producers, and through the switching of workers across a given allocation of jobs.

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References

Acemoglu, Daron, Ufuk Akcigit, Nicholas Bloom, and William R. Kerr. 2013. "Innovation, Reallocation, and Growth." NBER Working Paper 18993.

Bartelsman, Eric J., and Mark Doms. 2000. "Understanding Productivity: Lessons from Longitudinal Microdata." *Journal of Economic Literature* 38(3): 569–94.

Cairó, Isabel. 2013. "The Slowdown in Business Employment Dynamics: The Role of Changing Skill Demands." At http://www.econ.upf.edu/eng/graduates/gpem/jm/cairo.html.

Choi, Eleonor J., and James R. Spletzer. 2012. "The Declining Average Size of Establishments: Evidence and Explanations." *Monthly Labor Review*, March, pp. 50–65.

Comin, Diego A., and Thomas Philippon. 2005. "The Rise in Firm-Level Volatility: Causes and

Consequences." Chap. 3 in *NBER Macroeconomics Annual 2005,* edited by Mark Gertler and Kenneth Rogoff. MIT Press.

Davis, Steven J., R. Jason Faberman, and John Haltiwanger. 2012. "Labor Market Flows in the Cross Section and Over Time." *Journal of Monetary Economics* 59(1): 1–18.

Davis, Steven J., R. Jason Faberman, John Haltiwanger, Ron Jarmin, and Javier Miranda. 2010. "Business Volatility, Job Destruction, and Unemployment." *American Economic Journal: Macroeconomics* 2(2): 259–87.

Davis, Steven J., John Haltiwanger, Ron Jarmin, and Javier Miranda. 2007. "Volatility and Dispersion in Business Growth Rates: Publicly Traded versus Privately Held Firms." Chap. 2 in *NBER Macroeconomics Annual 2006* edited by Daron Acemoglu, Kenneth Rogoff, and Michael Woodford. Cambridge, MA: MIT Press.

Davis, Steven J., John C. Haltiwanger, and Scott Schuh. 1996. *Job Creation and Destruction*. Cambridge, MA: MIT Press.

Doms, Mark, Ron S. Jarmin, and Shawn Klimek. 2004. "Information Technology Investment and Firm Performance in U.S. Retail Trade." *Economics of Innovation and New Technology* 13(7): 595–613.

Drozd, Lukasz A., and Jaromir B. Nosal. 2012. "Understanding International Prices: Customers as Capital." *American Economic Review* 102(1): 364–95.

Eslava, Marcela, John Haltiwanger, Adriana Kugler, and Maurice Kugler. 2004. "The Effects of Structural Reforms on Productivity and Profitability Enhancing Reallocation: Evidence from Colombia." *Journal of Development Economics* 75(2): 333–72.

Eslava, Marcela, John Haltiwanger, Adriana Kugler, and Maurice Kugler. 2013. "Trade and Market Selection: Evidence from Manufacturing Plants in Colombia." *Review of Economic Dynamics* 16(1): 135–58.

Fort, Teresa. 2013. "NAICS 2002 Code Assignments to the Longitudinal Business Database." Unpublished paper, Center for Economic Studies.

Fort, Teresa C, John Haltiwanger, Ron S. Jarmin, and Javier Miranda. 2013. "How Firms Respond to Business Cycles: The Role of the Firm Age and Firm Size." *IMF Economic Review* 61(3): 520–59.

Foster, Lucia, Cheryl Grim, and John Haltiwanger. 2013. "Reallocation in the Great Recession: Cleansing or Not?" CES Working Paper 13-42, Center for Economic Studies, US Census Bureau.

Foster, Lucia, John Haltiwanger, and C. J. Krizan. 2001. "Aggregate Productivity Growth: Lessons from Microeconomic Evidence." In *New Developments in Productivity Analysis* (NBER Book Series Studies in Income and Wealth), edited by Charles R. Hulten, Edwin R. Dean, and Michael J. Harper, pp. 303–72. Chicago, IL: National Bureau of Economic Research, University of Chicago Press.

Foster, Lucia, John Haltiwanger, and C. J. Krizan. 2006. "Market Selection, Reallocation, and Restructuring in the US Retail Trade Sector in the 1990s." *Review of Economics and Statistics* 88(4): 748–58.

Foster, Lucia, John Haltiwanger, and Chad Syverson. 2008. "Reallocation, Firm Turnover, and Efficiency: Selection on Productivity or Profitability?" *American Economic Review* 98(1): 394–425.

Haltiwanger, John. 2012. "Job Creation and Firm Dynamics in the U.S." In *Innovation Policy and the Economy,* edited by Josh Lerner and Scott Stern, pp. 17–38. NBER/Chicago Press.

Haltiwanger, John, Ian Hathaway, and Javier Miranda. 2014. "Declining Business Dynamism in the U.S. High-Technology Sector." The Kauffman Foundation.

Haltiwanger, John, Ron Jarmin, and Javier Miranda. 2009. "Business Dynamics Statistics: An Overview." Kauffman Foundation: Other Research. Available at SSRN: http://ssrn.com/abstract=1456465.

Haltiwanger, John, Ron Jarmin, and Javier Miranda. 2011. "Historically Large Decline in Job Creation from Startups and Existing Firms in the 2008–09 Recession." Business Dynamics Statistics Briefing No. 5, The Kauffman Foundation. Available at SSRN: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1793167.

Haltiwanger, John, Ron S. Jarmin, and Javier Miranda. 2013. "Who Creates Jobs? Small vs. Large vs. Young." *Review of Economics and Statistics* 95(2): 347–61.

Hopenhayn, Hugo, and Richard Rogerson. 1993. "Job Turnover and Policy Evaluation: A General Equilibrium Analysis." *Journal of Political Economy* 101(5): 915–38.

Hsieh, Chang-Tai, and Peter J. Klenow. 2012. "The Life Cycle of Plants in India and Mexico." NBER Working Paper 18133.

Hurst, Erik, and Benjamin Wild Pugsley. 2011. "What Do Small Businesses Do?" *Brookings Papers on Economic Activity,* no. 2, pp. 73–142.

Hyatt, Henry R., and James R. Spletzer. 2013. "The Recent Decline in Employment Dynamics." *IZA Journal of Labor Economics* 2(5): 1–21.

Jarmin, Ronald S., Shawn Klimek, and Javier Miranda. 2005. "The Role of Retail Chains: National, Regional and Industry Results." CES Working Paper 05-30, Center for Economic Studies, US Census Bureau.

Kleiner, Morris M., and Alan B. Krueger. 2013. "Analyzing the Extent and Influence of

Occupational Licensing on the Labor Market." *Journal of Labor Economics* 31(2, Part 2): S173–S202.

Lazear, Edward P., and James R. Spletzer. 2012. "Hiring, Churn, and the Business Cycle." *American Economic Review* 102(3): 575–79.

Molloy, Raven, Christopher L. Smith, and Abigail Wozniak. 2011. "Internal Migration in the United States." *Journal of Economic Perspectives* 25(3): 173–96.

Reedy, E. J., and Robert E. Litan. 2011. "Starting Smaller; Staying Smaller: America's Slow Leak in Job Creation." Kauffman Foundation Research Series: Firm Foundation and Economic Growth. At http://www.kauffman.org/research-and-policy/starting-smaller-staying-smaller-americas-slow-leak-in-job-creation.aspx.

Schoar, Antoinette. 2010. "The Divide between Subsistence and Transformational Entrepreneurship." In *Innovation Policy and the Economy*, vol. 10, edited by Joshua Lerner and Scott Stern, pp. 57–81. National Bureau of Economic Research.

Syverson, Chad. 2004. "Product Substitutability and Productivity Dispersion." *Review of Economics and Statistics* 86(2): 534–50.

Syverson, Chad. 2011. "What Determines Productivity?" *Journal of Economic Literature* 49(2): 326–65.

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18. Dustin Chambers, Patrick A. McLaughlin, Oliver Sherouse. 2022. Regulation, entrepreneurship, and dynamism. *Empirical Economics* **11**. . [Crossref]

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29. João Granja, Sara Moreira. 2022. Product Innovation and Credit Market Disruptions. *The Review of Financial Studies* **124**. . [Crossref]
30. Wenjian Xu. 2022. Social insurance and entrepreneurship: The effect of unemployment benefits on new-business formation. *Strategic Entrepreneurship Journal* **16**:3, 522-551. [Crossref]
31. Sari Pekkala Kerr, William R. Kerr, Ramana Nanda. 2022. House prices, home equity and entrepreneurship: Evidence from U.S. census micro data. *Journal of Monetary Economics* **130**, 103-119. [Crossref]
32. Romina Gómez-Prado, Aldo Alvarez-Risco, Berdy Briggitte Cuya-Velásquez, Maria de las Mercedes Anderson-Seminario, Shyla Del-Aguila-Arcentales, Jaime A. Yáñez. 2022. Product Innovation, Market Intelligence and Pricing Capability as a Competitive Advantage in the International Performance of Startups: Case of Peru. *Sustainability* **14**:17, 10703. [Crossref]
33. Monica Gamez-Djokic, Maryam Kouchaki, Adam Waytz. 2022. Virtuous Startups: The Credentialing Power of the Startup Label. *Academy of Management Discoveries* **8**:3, 441-458. [Crossref]
34. ALI DAVARI, LEILA SEFIDBARI, MEHDI KHAZAEI, KAMAL SAKHDARI, YEGANEH MOUSAVI JAHROMI. 2022. CAUSAL RELATIONSHIPS BETWEEN ENTREPRENEURSHIP, UNEMPLOYMENT AND ECONOMIC GROWTH IN SELECTED COUNTRIES. *Journal of Developmental Entrepreneurship* **27**:03. . [Crossref]
35. Yunzhi Hu. 2022. A dynamic theory of bank lending, firm entry, and investment fluctuations. *Journal of Economic Theory* **204**, 105515. [Crossref]
36. Andrew J. Van Leuven, Sarah A. Low, Edward (Ned) Hill. 2022. What side of town? How proximity to critical survival factors affects rural business longevity. *Growth and Change* **4**. . [Crossref]
37. Diego Matricano. 2022. Economic and social development generated by innovative startups: does heterogeneity persist across Italian macro-regions?. *Economics of Innovation and New Technology* **31**:6, 467-484. [Crossref]

38. Jarkko Harju, Aliisa Koivisto, Tuomas Matikka. 2022. The effects of corporate taxes on small firms. *Journal of Public Economics* **212**, 104704. [Crossref]
39. Elissa Dwi Lestari, Nosica Rizkalla, Purnamaningsih Purnamaningsih. 2022. THE EFFECT OF PERCEIVED UNIVERSITY SUPPORT, ENTREPRENEURIAL SELF-EFFICACY AND PROACTIVE PERSONALITY IN PROMOTING STUDENT ENTREPRENEURIAL INTENTION IN INDONESIA. *Journal of Management and Business Education* **5**:2, 169-197. [Crossref]
40. Shujun Sun, Haiwei Jiang. 2022. CEO turnover and corporate innovation: What can we learn from Chinese listed companies. *Frontiers in Psychology* **13**. . [Crossref]
41. Christian Bjørnskov, Nicolai J Foss, Tianjiao Xu. 2022. The role of institutions in the early entrepreneurial process. *Industrial and Corporate Change* **31**:4, 905-933. [Crossref]
42. Francisco Queiró. 2022. Entrepreneurial Human Capital and Firm Dynamics. *The Review of Economic Studies* **89**:4, 2061-2100. [Crossref]
43. Julian Neira, Rish Singhania. 2022. The role of corporate taxes in the decline of the startup rate. *Economic Inquiry* **60**:3, 1277-1295. [Crossref]
44. Steven Bond-Smith. 2022. Discretely innovating: The effect of limited market contestability on innovation and growth. *Scottish Journal of Political Economy* **69**:3, 301-327. [Crossref]
45. Sunasir Dutta, Daniel Erian Armanios, Jaison D. Desai. 2022. Beyond Spatial Proximity: The Impact of Enhanced Spatial Connectedness from New Bridges on Entrepreneurship. *Organization Science* **33**:4, 1620-1644. [Crossref]
46. Marcela Eslava, John Haltiwanger, Álvaro Pinzón. 2022. Job Creation in Colombia Versus the USA: 'Up-or-out Dynamics' Meet 'The Life Cycle of Plants'. *Economica* **89**:355, 511-539. [Crossref]
47. Steven A. Gedeon. 2022. Empowering Students for Future Work and Productive Citizenry Through Entrepreneurship Education. *Public Affairs Quarterly* **36**:3, 197-210. [Crossref]
48. Patia J. McGrath, Tian Chen, Atul Nerkar. 2022. Pipes, prisms, and patent sales: How personal wealth expands and contracts the gender gap in entrepreneurship. *Strategic Entrepreneurship Journal* **16**:2, 355-380. [Crossref]
49. Sergio A. Contreras. 2022. One size does not fit all: evaluating the impact of microenterprise measurement on policy evaluation. *The Annals of Regional Science* **68**:3, 587-613. [Crossref]
50. Ruiqing Cao, Marco Iansiti. 2022. Digital transformation, data architecture, and legacy systems. *Journal of Digital Economy* **1**:1, 1-19. [Crossref]
51. Gerald F. Davis. Taming Corporate Power in the 21st Century **67**, . [Crossref]
52. Xuan Tian, Jiajie Xu. 2022. Do Place-Based Policies Promote Local Innovation and Entrepreneurship? *. *Review of Finance* **26**:3, 595-635. [Crossref]
53. Ieva Pakšytė, Daiva Jurevičienė. STUDY ON THE ELIGIBILITY OF VENTURE CAPITAL FUNDS IN THE UNITED STATES MARKET . [Crossref]
54. S. Martínez, M. Rueda, M. Illescas. 2022. The optimization problem of quantile and poverty measures estimation based on calibration. *Journal of Computational and Applied Mathematics* **405**, 113054. [Crossref]
55. Gurjeet Kaur Sahi, Rita Devi, Mahesh C. Gupta, T.C.E. Cheng. 2022. Assessing co-creation based competitive advantage through consumers' need for differentiation. *Journal of Retailing and Consumer Services* **66**, 102911. [Crossref]
56. Steven Deller, Brian Whitacre, Tessa Conroy. 2022. Rural broadband speeds and business startup rates. *American Journal of Agricultural Economics* **104**:3, 999-1025. [Crossref]

57. Nurin Asyikin Ahmad, Mohamad Sattar Rasul, Norasmah Othman, Nur Atiqah Jalaludin. 2022. Generating Entrepreneurial Ideas for Business Development. *Sustainability* **14**:9, 4905. [Crossref]
58. Dustin Chambers, Patrick A. McLaughlin, Tyler Richards. 2022. Regulation, entrepreneurship, and firm size. *Journal of Regulatory Economics* **61**:2, 108-134. [Crossref]
59. Hongyu Chen, Alfons Weersink, Martin Beaulieu, Yu Na Lee. 2022. Dynamics of farm entry and exit in Canada. *Agricultural and Resource Economics Review* **51**:1, 86-104. [Crossref]
60. Evguenia Bessonova, Anna Tsvetkova. 2022. Do Productivity Laggards Ever Catch Up With Leaders? †. *Review of Income and Wealth* **68**:S1. . [Crossref]
61. Joan Torrent-Sellens, Ángel Díaz-Chao, Albert-Pol Miró-Pérez, Jorge Sainz. 2022. Towards the Tyrell corporation? Digitisation, firm-size and productivity divergence in Spain. *Journal of Innovation & Knowledge* **7**:2, 100185. [Crossref]
62. Christian Heyerdahl-Larsen, Johan Walden. 2022. Distortions and Efficiency in Production Economies with Heterogeneous Beliefs. *The Review of Financial Studies* **35**:4, 1775-1812. [Crossref]
63. Victor V. Claar. 2022. In search of a fertile entrepreneurial landscape: how to keep it on the level. *Journal of Entrepreneurship and Public Policy* **11**:1, 82-89. [Crossref]
64. A-Reum Jung, Do-Jin Jung. 2022. The effects of size-dependent policy on the sales distortion reporting: Focusing on the discretionary sales management of Korean SMEs. *Managerial and Decision Economics* **43**:2, 301-320. [Crossref]
65. Helu Jiang, Faisal Sohail. 2022. Skill-biased entrepreneurial decline. *Review of Economic Dynamics* **vol. 4**. . [Crossref]
66. Craig W. Carpenter, Anders Van Sandt, Rebekka Dudensing, Scott Loveridge. 2022. Profit Pools and Determinants of Potential County-Level Manufacturing Growth. *International Regional Science Review* **45**:2, 188-224. [Crossref]
67. David B. Audretsch, Petra Moog. 2022. Democracy and Entrepreneurship. *Entrepreneurship Theory and Practice* **46**:2, 368-392. [Crossref]
68. Christos Ziakis, Maro Vlachopoulou, Konstantinos Petridis. 2022. Start-Up Ecosystem (StUpEco): A Conceptual Framework and Empirical Research. *Journal of Open Innovation: Technology, Market, and Complexity* **8**:1, 35. [Crossref]
69. Charles Mwatsika. 2022. Reflecting on the Entrepreneurship Paradox in Sub-Saharan Africa. *Management & Economics Research Journal* **4**:1, 18-37. [Crossref]
70. RJ Andrews, Catherine Fazio, Jorge Guzman, Yupeng Liu, Scott Stern. 2022. The Startup Cartography Project: Measuring and mapping entrepreneurial ecosystems. *Research Policy* **51**:2, 104437. [Crossref]
71. Kim Kaivanto, Peng Zhang. 2022. Is business formation driven by sentiment or fundamentals?. *The European Journal of Finance* **6**, 1-27. [Crossref]
72. Massimo G. Colombo, Massimiliano Guerini, Cristina Rossi-Lamastra, Andrea Bonaccorsi. 2022. The "first match" between high-tech entrepreneurial ventures and universities: the role of founders' social ties. *The Journal of Technology Transfer* **47**:1, 270-306. [Crossref]
73. René A. Belderbos, Michał Kazimierczak, Micheline Goedhuys. 2022. Trademarks, patents and the appropriation strategies of incumbents: the scope of new firm formation in European regions. *Regional Studies* **56**:2, 210-226. [Crossref]
74. Sascha O Becker, Hans K Hvide. 2022. Entrepreneur Death and Startup Performance. *Review of Finance* **26**:1, 163-185. [Crossref]
75. Wim Naudé. 2022. From the entrepreneurial to the ossified economy. *Cambridge Journal of Economics* **46**:1, 105-131. [Crossref]

76. Simon Stephens, Clementine Hegarty. 2022. Retirees from public service: the journey to small enterprise ownership. *Small Enterprise Research* **29**:1, 52-67. [Crossref]
77. Francesco Manaresi, Carlo Menon, Pietro Santoleri. 2022. Supporting innovative entrepreneurship: an evaluation of the Italian "Start-up Act". *Industrial and Corporate Change* **30**:6, 1591-1614. [Crossref]
78. Saerom (Ronnie) Lee. 2022. The myth of the flat start-up: Reconsidering the organizational structure of start-ups. *Strategic Management Journal* **43**:1, 58-92. [Crossref]
79. Swati Bhatt. Introduction 3-29. [Crossref]
80. Flavio Calvino, Daniele Giachini, Mattia Guerini. 2022. The age distribution of business firms. *Journal of Evolutionary Economics* **32**:1, 205-245. [Crossref]
81. Alex Coad, Martin Andersson, Magnus Henrekson, Sarah Jack, Mikael Stenkula, Karin Thorburn, Karl Wennberg, Ivo Zander. 2022. John Haltiwanger: recipient of the 2020 Global Award for Entrepreneurship Research. *Small Business Economics* **58**:1, 15-25. [Crossref]
82. John Haltiwanger. 2022. Entrepreneurship in the twenty-first century. *Small Business Economics* **58**:1, 27-40. [Crossref]
83. Stephen J. Redding. Trade and geography 147-217. [Crossref]
84. John C. Haltiwanger. 2022. Entrepreneurship during the COVID-19 Pandemic: Evidence from the Business Formation Statistics. *Entrepreneurship and Innovation Policy and the Economy* **1**, 9-42. [Crossref]
85. Craig Wesley Carpenter, Anders Van Sandt, Scott Loveridge. 2022. Measurement error in US regional economic data. *Journal of Regional Science* **62**:1, 57-80. [Crossref]
86. Ted Hayduk. 2022. Who Benefitted From the PyeongChang Olympic Announcement? Evidence From the South Korean Stock Market. *Journal of Sports Economics* **23**:1, 39-75. [Crossref]
87. Hugo Hopenhayn, Julian Neira, Rish Singhania. 2022. From Population Growth to Firm Demographics: Implications for Concentration, Entrepreneurship and the Labor Share. *Econometrica* **90**:4, 1879-1914. [Crossref]
88. Daniel M. Mayerhoffer, Jan Schulz. Marginalisation and Misperception: Perceiving Gender and Racial Wage Gaps in Ego Networks 768-779. [Crossref]
89. Mahmoud M. Abdellatif, Binh Tran-Nam. Tax Versus Non-tax Incentives to Stimulate Innovation and Entrepreneurship: An International Perspective 13-38. [Crossref]
90. Kaleb G. Abreha, Woubet Kassa, Emmanuel K. K. Lartey, Taye A. Mengistae, Solomon Owusu, Albert G. Zeufack. Drivers of Manufacturing Job Growth 43-66. [Crossref]
91. XIAOHUA LIN, AKIN KOÇAK, ALAN CARSRUD. 2021. CONTEXTUALIZING ENTREPRENEURIAL INTENTIONS: ECONOMIC DYNAMISM AND CULTURE IN MULTILAYERED RELATIONSHIPS. *Journal of Developmental Entrepreneurship* **26**:04. . [Crossref]
92. Charles Mwatsika. 2021. Reflecting on perceived failure of entrepreneurship development initiatives to help ignite economic development in Malawi. *Journal of Innovation and Entrepreneurship* **10**:1. . [Crossref]
93. Moreno Bonaventura, Luca Maria Aiello, Daniele Quercia, Vito Latora. 2021. Predicting urban innovation from the US Workforce Mobility Network. *Humanities and Social Sciences Communications* **8**:1. . [Crossref]
94. Robert P. Bartlett, Adair Morse. 2021. Small-Business Survival Capabilities and Fiscal Programs: Evidence from Oakland. *Journal of Financial and Quantitative Analysis* **56**:7, 2500-2544. [Crossref]

95. Matthias Schulz, Christian Schwens, Christian Fisch. 2021. Bankruptcy Regulation and Self-Employment Entry: The Moderating Roles of Income Share, Parenthood, and Hybrid Entrepreneurship. *Entrepreneurship Theory and Practice* **45**:6, 1522-1549. [Crossref]
96. John Donovan. 2021. Financial Reporting and Entrepreneurial Finance: Evidence from Equity Crowdfunding. *Management Science* **67**:11, 7214-7237. [Crossref]
97. Odysseas Pavlatos, Hara Kostakis. Budgeting in Start-up Companies: European Survey-based Evidence 97-125. [Crossref]
98. Jing Dong, Wanyu Xu, Jun Cha. 2021. Rural entrepreneurship and job creation: the hybrid identity of village-cadre-entrepreneurs. *China Economic Review* **91**, 101704. [Crossref]
99. Kaiji Chen, Patrick Higgins, Tao Zha. 2021. Cyclical lending standards: A structural analysis. *Review of Economic Dynamics* **42**, 283-306. [Crossref]
100. Bin Huang, Massimiliano Tani, Yu Zhu. 2021. Does higher education make you more entrepreneurial? Causal evidence from China. *Journal of Business Research* **135**, 543-558. [Crossref]
101. Martin Alfaro, Frederic Warzynski. 2021. Trade Liberalization with Granular Firms. *Economic Modelling* **80**, 105650. [Crossref]
102. Saras D. Sarasvathy. 2021. The Middle Class of Business: Endurance as a Dependent Variable in Entrepreneurship. *Entrepreneurship Theory and Practice* **45**:5, 1054-1082. [Crossref]
103. Lilia Cavallari, Simone Romano, Paolo Naticchioni. 2021. The original sin: Firms' dynamics and the life-cycle consequences of economic conditions at birth. *European Economic Review* **138**, 103844. [Crossref]
104. Lauren Lanahan, Amol M. Joshi, Evan Johnson. 2021. Do public R&D subsidies produce jobs? Evidence from the SBIR/STTR program. *Research Policy* **50**:7, 104286. [Crossref]
105. Federica Rossi, Ning Baines, Helen Lawton Smith. 2021. Which regional conditions facilitate university spinouts retention and attraction?. *Regional Studies* **91**, 1-17. [Crossref]
106. Yuliya Pin'koveckaya. 2021. Gender Differences in Business Structures Operating in Trade, Information and Communication Services. *Bulletin of Kemerovo State University. Series: Political, Sociological and Economic sciences* **2021**:2, 248-255. [Crossref]
107. Indra Kurniawan. 2021. Pengembangan Konsep Entrepreneurial Orientation Dengan Pendekatan Islamic Entrepreneurial Orientation. *JMD : Jurnal Riset Manajemen & Bisnis Dewantara* **4**:2, 125-146. [Crossref]
108. Donncha Kavanagh, Geoff Lightfoot, Simon Lilley. 2021. Are we living in a time of particularly rapid social change? And how might we know?. *Technological Forecasting and Social Change* **169**, 120856. [Crossref]
109. Chun Jiang, Amei Feng, Chunhuan Xiao. 2021. Does Capital Account Liberalization Spur Entrepreneurship: The Role of Financial Development. *Sustainability* **13**:16, 9238. [Crossref]
110. Björn Döhring, Atanas Hristov, Christoph Maier, Werner Roeger, Anna Thum-Thysen. 2021. COVID-19 acceleration in digitalisation, aggregate productivity growth and the functional income distribution. *International Economics and Economic Policy* **18**:3, 571-604. [Crossref]
111. Nikodem Szumilo, Enrico Vanino. 2021. Mortgage affordability and entrepreneurship: Evidence from spatial discontinuity in Help-to-Buy equity loans. *Journal of Business Venturing* **36**:4, 106105. [Crossref]
112. Lukas Jan Aaldering, Chie Hoon Song. 2021. Of leaders and laggards - Towards digitalization of the process industries. *Technovation* **105**, 102211. [Crossref]
113. Catherine Buffington, Daniel Chapman, Emin Dinlersoz, Lucia Foster, John Haltiwanger. 2021. High-frequency data from the U.S. Census Bureau during the COVID-19 pandemic: small vs. new businesses. *Business Economics* **56**:3, 155-167. [Crossref]

114. Natalia FILIMONOVA, Svetlana BOLTUNOVA, Victoria FILIMONOVA. 2021. Small and Medium Entrepreneurship: Bibliometric Analysis. *Public Administration and Civil Service* :2-77, 53-60. [Crossref]
115. Ankita Sarmah, Bedabrat Saikia, Dhananjay Tripathi. 2021. Can unemployment be answered by Micro Small and Medium Enterprises? Evidences from Assam. *Indian Growth and Development Review* **14**:2, 199-222. [Crossref]
116. Francisco José Mendes Leote, Nuno Miguel Teixeira, Rosa Galvão. Entrepreneurship and Unemployment 20-40. [Crossref]
117. Lucio Fuentelsaz, Consuelo González, Juan P. Maícas. 2021. High-growth aspiration entrepreneurship and exit: the contingent role of market-supporting institutions. *Small Business Economics* **57**:1, 473-492. [Crossref]
118. Daniel L. Bennett. 2021. Local institutional heterogeneity & firm dynamism: Decomposing the metropolitan economic freedom index. *Small Business Economics* **57**:1, 493-511. [Crossref]
119. Sandro Brusco, Giuseppe Lopomo, Eva Ropero, Alessandro T. Villa. 2021. Optimal financial contracting and the effects of firm's size. *The RAND Journal of Economics* **52**:2, 446-467. [Crossref]
120. Hadiye Aslan, Praveen Kumar. 2021. Globalization and entrepreneurial entry and exit: Evidence from U.S. households. *Journal of Monetary Economics* **120**, 83-100. [Crossref]
121. Peter J. Klenow, Huiyu Li. 2021. Innovative Growth Accounting. *NBER Macroeconomics Annual* **35**, 245-295. [Crossref]
122. Ryo Makioka. 2021. The impact of anti-sweatshop activism on employment. *Review of Development Economics* **25**:2, 630-653. [Crossref]
123. Olav Sorenson, Michael S. Dahl, Rodrigo Canales, M. Diane Burton. 2021. Do Startup Employees Earn More in the Long Run?. *Organization Science* **32**:3, 587-604. [Crossref]
124. Ergete Ferede. 2021. Entrepreneurship and personal income tax: evidence from Canadian provinces. *Small Business Economics* **56**:4, 1765-1781. [Crossref]
125. Iuliia S. Pinkovetskaia. 2021. Gender differences in business structures created in the areas of production and transport in 2018. *Vestnik Voronezhskogo gosudarstvennogo universiteta. Ser.: Ekonomika i upravlenie = Proceedings of Voronezh State University. Series: Economics and Management* :1, 49-58. [Crossref]
126. Yuliya Pin'koveckaya. 2021. Alternative Financing of Small and Medium Businesses: Experience of Foreign Countries. *Bulletin of Kemerovo State University. Series: Political, Sociological and Economic sciences* **2021**:1, 109-122. [Crossref]
127. Fadil Sahiti. 2021. Institutions and entrepreneurial activity: a comparative analysis of Kosovo and other economies. *Journal of Entrepreneurship and Public Policy* **ahead-of-print**:ahead-of-print. . [Crossref]
128. Mihai Nica. 2021. Economic development and business creation. *Economic Change and Restructuring* **54**:1, 219-239. [Crossref]
129. John Appert, Ege Can, Frank M. Fossen. 2021. Entrepreneurship and Regional Growth Regimes in the United States. *Przegląd Organizacji* 24-33. [Crossref]
130. Edison Jolly Cyril, Harish Kumar Singla. 2021. The mediating effect of productivity on profitability in Indian construction firms. *Journal of Advances in Management Research* **18**:1, 152-169. [Crossref]
131. Ufuk Akcigit, Harun Alp, Michael Peters. 2021. Lack of Selection and Limits to Delegation: Firm Dynamics in Developing Countries. *American Economic Review* **111**:1, 231-275. [Abstract] [View PDF article] [PDF with links]
132. Liya Palagashvili. Silicon Valley vs. Main Street: Regulatory Impact on Entrepreneurial Ventures 171-201. [Crossref]

133. Cristina I. Fernandes, Pedro Mota Veiga, João J. M. Ferreira, Sérgio J. Teixeira, Hussain G. Rammal. The Impact of Innovation and Entrepreneurship on Competitiveness 97-117. [Crossref]
134. Yelena Larkin. 2021. Reliance on major customers and product market competition. *Finance Research Letters* **38**, 101436. [Crossref]
135. Akos Horvath, Peter Lang. 2021. Do loan subsidies boost the real activity of small firms?. *Journal of Banking & Finance* **122**, 105988. [Crossref]
136. Neil Mehrotra, Dmitriy Sergeyev. 2021. Financial shocks, firm credit and the Great Recession. *Journal of Monetary Economics* **117**, 296-315. [Crossref]
137. Evans Korang Adjei. 2021. Surviving start-ups: the importance of entrepreneurial capital. *Regional Studies, Regional Science* **8**:1, 239-258. [Crossref]
138. Francisco Queiro. 2021. Entrepreneurial Human Capital and Firm Dynamics. *SSRN Electronic Journal* **15**. . [Crossref]
139. Andrea Lanteri, Adriano A. Rampini. 2021. Constrained-Efficient Capital Reallocation. *SSRN Electronic Journal* **138**. . [Crossref]
140. Aleksandra Kacperczyk, Vera Rocha. 2021. Does More Entrepreneurship Benefit Society? The Effect on Community Crime Using a Quasi-Natural Experiment. *SSRN Electronic Journal* **59**. . [Crossref]
141. Jaan Masso, Amaresh Kumar Tiwari. 2021. PRODUCTIVITY IMPLICATIONS OF R&D, INNOVATION AND CAPITAL ACCUMULATION FOR INCUMBENTS AND ENTRANTS: THE CASE OF ESTONIA. *SSRN Electronic Journal* . [Crossref]
142. Joseph Engelberg, Jorge Guzman, Runjing Lu, William Mullins. 2021. Partisan Entrepreneurship. *SSRN Electronic Journal* **70**. . [Crossref]
143. Saerom (Ronnie) Lee. 2021. The Myth of the Flat Start-up: Reconsidering the Organizational Structure of Start-ups. *SSRN Electronic Journal* **113**. . [Crossref]
144. Ruiqing Cao, Marco Iansiti. 2021. Growth, Transformation and Digital Capital: The Importance of Technological and Organizational Architecture. *SSRN Electronic Journal* **43**. . [Crossref]
145. Jozefina Beke-Trivunac, Bojan Stoiljković, Drinka Peković. 2021. Investment in fixed assets impact on the employment growth in the Republic of Serbia. *Revizor* **24**:94, 17-23. [Crossref]
146. Henry Hyatt, Seth Murray, L. Kristin Sandusky. 2021. Business Income Dynamics and Labor Market Fluidity. *IZA Journal of Labor Economics* **10**:1. . [Crossref]
147. Daniel Örtqvist, Thomas Ejdemo. Does Unemployment Contribute to Self-employment and Productivity in Regions? A Causal Examination Adopting a Cross-Lagged Design 391-408. [Crossref]
148. Ryan A. Decker, John Haltiwanger, Ron S. Jarmin, Javier Miranda. 2020. Changing Business Dynamism and Productivity: Shocks versus Responsiveness. *American Economic Review* **110**:12, 3952-3990. [Abstract] [View PDF article] [PDF with links]
149. Oznur Ozdamar, Eleftherios Giovanis, Sahizer Samuk. 2020. State business relations and the dynamics of job flows in Egypt and Turkey. *Eurasian Business Review* **10**:4, 519-558. [Crossref]
150. Vu Hoang Nam, Minh Ngoc Nguyen, Duong Anh Nguyen, Hiep Ngoc Luu. 2020. The impact of corruption on the performance of newly established enterprises: Empirical evidence from a transition economy. *Borsa Istanbul Review* **20**:4, 383-395. [Crossref]
151. Gregory W. Huffman. 2020. An analysis of the importance of both destruction and creation to economic growth. *Journal of Monetary Economics* **116**, 166-183. [Crossref]
152. Claudio Michelacci, Fabiano Schivardi. 2020. Are they all like Bill, Mark, and Steve? The education premium for entrepreneurs. *Labour Economics* **67**, 101933. [Crossref]

153. Jorge Guzman, Scott Stern. 2020. The State of American Entrepreneurship: New Estimates of the Quantity and Quality of Entrepreneurship for 32 US States, 1988–2014. *American Economic Journal: Economic Policy* **12**:4, 212-243. [Abstract] [View PDF article] [PDF with links]
154. Alex Coad, Julian S. Frankish, Albert N. Link. 2020. The Economic Contribution of a Cohort of New Firms Over Time. *Review of Industrial Organization* **57**:3, 519-536. [Crossref]
155. Alexander Edwards, Maximilian Todtenhaupt. 2020. Capital gains taxation and funding for start-ups. *Journal of Financial Economics* **138**:2, 549-571. [Crossref]
156. Hussain Mohammed A AlObaid. 2020. Examining the motivation factors for individuals choosing self-employment: An assessment on Saudi labor market. *International Journal of Research in Business and Social Science (2147- 4478)* **9**:5, 150-159. [Crossref]
157. Zuzana Virglerova, Felice Addeo, Eliska Zapletalikova. 2020. Business dynamism in the world economy. *Problems and Perspectives in Management* **18**:3, 160-169. [Crossref]
158. M. A. Martín-Lara. 2020. Integrating entrepreneurial activities in chemical engineering education: a case study on solid waste management. *European Journal of Engineering Education* **45**:5, 758-779. [Crossref]
159. Tania Babina. 2020. Destructive Creation at Work: How Financial Distress Spurs Entrepreneurship. *The Review of Financial Studies* **33**:9, 4061-4101. [Crossref]
160. Steven Hamilton. 2020. A Tale of Two Wage Subsidies: The American and Australian Fiscal Responses to COVID-19. *National Tax Journal* **73**:3, 829-846. [Crossref]
161. Moon Young Kang. 2020. Sustainable Profit versus Unsustainable Growth: Are Venture Capital Investments and Governmental Support Medicines or Poisons?. *Sustainability* **12**:18, 7773. [Crossref]
162. Agustín J. Sánchez-Medina, Jesús Arteaga-Ortiz, Rodrigo M. Naumchik, Mónica Pellejero. 2020. The intention to quit entrepreneurship in tourism SMEs: The effect of work addiction. *International Journal of Hospitality Management* **89**, 102400. [Crossref]
163. Bhaskar Jyoti Neog, Bimal Kishore Sahoo. 2020. Job Reallocation Dynamics in India: Evidence from Large Manufacturing Plants. *Oxford Bulletin of Economics and Statistics* **82**:4, 934-959. [Crossref]
164. Gary A. Wagner, Jamie Bologna Pavlik. 2020. Patent intensity and concentration: The effect of institutional quality on MSA patent activity. *Papers in Regional Science* **99**:4, 857-898. [Crossref]
165. Francesco Ducci. Natural Monopolies in Digital Platform Markets **32**, . [Crossref]
166. Youssef Benzarti, Jarkko Harju, Tuomas Matikka. 2020. Does Mandating Social Insurance Affect Entrepreneurial Activity?. *American Economic Review: Insights* **2**:2, 255-268. [Abstract] [View PDF article] [PDF with links]
167. Yusuf Emre Akgündüz, Huzeyfe Torun. 2020. Two and a half million Syrian refugees, tasks and capital intensity. *Journal of Development Economics* **145**, 102470. [Crossref]
168. Pietro Santoleri. 2020. Innovation and job creation in (high-growth) new firms. *Industrial and Corporate Change* **29**:3, 731-756. [Crossref]
169. Leo Sleuwaegen, Sander Ramboer. 2020. Regional competitiveness and high growth firms in the EU: the creativity premium. *Applied Economics* **52**:22, 2325-2338. [Crossref]
170. David S. Lucas, Christopher J. Boudreaux. 2020. National regulation, state-level policy, and local job creation in the United States: A multilevel perspective. *Research Policy* **49**:4, 103952. [Crossref]
171. David B. Audretsch, Donald S. Siegel, Siri Terjesen. 2020. Entrepreneurship in the Public and Nonprofit Sectors. *Public Administration Review* **80**:3, 468-472. [Crossref]
172. Craig Wesley Carpenter, Scott Loveridge. 2020. Business, Owner, and Regional Characteristics in Latino-owned Business Growth: An Empirical Analysis Using Confidential Census Microdata. *International Regional Science Review* **43**:3, 254-285. [Crossref]

173. Catherine Fazio, Jorge Guzman, Scott Stern. 2020. The Impact of State-Level Research and Development Tax Credits on the Quantity and Quality of Entrepreneurship. *Economic Development Quarterly* **34**:2, 188-208. [Crossref]
174. Simon Firestone. 2020. The Geography of Small Business Dynamics. *FEDS Notes* **2020**:2580. . [Crossref]
175. Nuri Ersahin, Rustom M Irani, Katherine Waldock. 2020. Can Strong Creditors Inhibit Entrepreneurial Activity?. *The Review of Financial Studies* **102**. . [Crossref]
176. Yuliya Pin'koveckaya. 2020. Social Significance of Entrepreneurship in Different Countries. *Bulletin of Kemerovo State University. Series: Political, Sociological and Economic sciences* **2020**:1, 53-61. [Crossref]
177. Jianmin Tang, Weimin Wang, Zhihao Yu. 2020. Globalisation, ICT Investment and Firm Dynamism. *Transnational Corporations Review* **12**:2, 193-202. [Crossref]
178. Yu. S. Pinkovetskaya. 2020. Comprehensive Indexes of Social Significance and Development Potential of Entrepreneurship in Modern Countries. *Vestnik NSUEM* :1, 139-151. [Crossref]
179. Gert Bijnens, Jozef Konings. 2020. Declining business dynamism in Belgium. *Small Business Economics* **54**:4, 1201-1239. [Crossref]
180. María García-Vega, Óscar Vicente-Chirivella. 2020. Do university technology transfers increase firms' innovation?. *European Economic Review* **123**, 103388. [Crossref]
181. Xiang Hui. 2020. Facilitating Inclusive Global Trade: Evidence from a Field Experiment. *Management Science* **66**:4, 1737-1755. [Crossref]
182. Roy Suddaby, Diego Coraiola, Charles Harvey, William Foster. 2020. History and the micro-foundations of dynamic capabilities. *Strategic Management Journal* **41**:3, 530-556. [Crossref]
183. Katherina Kuschel, Kerstin Ettl, Cristina Díaz-García, Gry Agnete Alsos. 2020. Stemming the gender gap in STEM entrepreneurship – insights into women's entrepreneurship in science, technology, engineering and mathematics. *International Entrepreneurship and Management Journal* **16**:1, 1-15. [Crossref]
184. Chris Akroyd, Ralph Kober. 2020. Imprinting founders' blueprints on management control systems. *Management Accounting Research* **46**, 100645. [Crossref]
185. Jungho Lee, Jianhuan Xu. 2020. Why do businesses grow faster in urban areas than in rural areas?. *Regional Science and Urban Economics* **81**, 103521. [Crossref]
186. Rok Lee, Ju Gyeong Park, Sung Hyeon Park. 2020. Effects of System Management on Value Creation and Global Growth in Born Startups: Focusing on Born Startups in Korea. *Journal of Open Innovation: Technology, Market, and Complexity* **6**:1, 19. [Crossref]
187. Lisa Meehan. 2020. Productivity in New Zealand: the role of resource allocation among firms. *New Zealand Economic Papers* **54**:1, 39-66. [Crossref]
188. Henry Edison. Lean Internal Startups: Challenges and Lessons Learned 251-268. [Crossref]
189. Jacqueline El-Sayed. Building the Entrepreneurial Mindset Through Experiential Learning 205-218. [Crossref]
190. Vishal K. Gupta. Small Firms 17-41. [Crossref]
191. Alexander Styhre. Governing Innovation-Led Economies: The Role of Business Creation and Creativity 37-77. [Crossref]
192. Alexander Styhre. Passionate Production in the Shadow of the Market: The Prospects of Innovation-Led Growth 219-243. [Crossref]
193. Bernardo Reisdorfer-Leite, Michele Marcos de Oliveira, Marcelo Rudek, Anderson Luis Szejka, Osiris Canciglieri Junior. Startup Definition Proposal Using Product Lifecycle Management 426-435. [Crossref]

194. Diego Matricano. The performance of entrepreneurial firms 33-59. [Crossref]
195. Diego Matricano. Entrepreneurship trajectories 109-124. [Crossref]
196. Nathan Goldschlag, Javier Miranda. 2020. Business dynamics statistics of High Tech industries. *Journal of Economics & Management Strategy* **29**:1, 3-30. [Crossref]
197. Fabrizio Core. 2020. Maternity Risk and the Gender Gap in Entrepreneurship. *SSRN Electronic Journal* . [Crossref]
198. Tania Babina, Alex Xi He, Sabrina Howell, Elisabeth Perlman, Joseph Staudt. 2020. Does Funding Source Matter for University R&D? The Effect of Government vs. Industry Grants. *SSRN Electronic Journal* . [Crossref]
199. Patrick A. McLaughlin, Tyler Richards. 2020. Small Business Recovery after Covid-19. *SSRN Electronic Journal* . [Crossref]
200. Bulent Unel, Gregory Upton. 2020. Effects of the Shale Boom on Entrepreneurship in the U.S. *SSRN Electronic Journal* . [Crossref]
201. Ali Mohammadi, Kourosh Shafi. 2020. Entrepreneurs' Cognitive Ability and New Ventures' Performance. *SSRN Electronic Journal* . [Crossref]
202. C. Y. Kelvin Yuen. 2020. Unemployment Risk and Entrepreneurship. *SSRN Electronic Journal* **9**. . [Crossref]
203. Dae Soo Choi, Chang Soo Sung, Joo Y. Park. 2020. How Does Technology Startups Increase Innovative Performance? The Study of Technology Startups on Innovation Focusing on Employment Change in Korea. *Sustainability* **12**:2, 551. [Crossref]
204. Michael Peters. 2020. Heterogeneous Markups, Growth, and Endogenous Misallocation. *Econometrica* **88**:5, 2037-2073. [Crossref]
205. Panagiotis A. Tsaknis, Alexandros G. Sahinidis. An Investigation of Entrepreneurial Intention Among University Students Using the Theory of Planned Behavior and Parents' Occupation 149-166. [Crossref]
206. Tami Gurley-Calvez, Josephine Lugovskyy. 2019. The role of entrepreneurial risk in financial portfolio allocation. *Small Business Economics* **53**:4, 839-858. [Crossref]
207. J David Brown, John S Earle, Mee Jung Kim, Kyung Min Lee. 2019. Start-ups, job creation, and founder characteristics. *Industrial and Corporate Change* **28**:6, 1637-1672. [Crossref]
208. Martha de Jesús Beltrán Hernández de Galindo, Luis M. Romero-Rodriguez, Maria Soledad Ramirez Montoya. 2019. Entrepreneurship competencies in energy sustainability MOOCs. *Journal of Entrepreneurship in Emerging Economies* **11**:4, 598-616. [Crossref]
209. Can Chen, Shaoming Cheng. 2019. The Effects of Corruption and Regulation on Business Entrepreneurship: Evidence from American States. *Public Performance & Management Review* **42**:6, 1481-1506. [Crossref]
210. Cihan Artunç, Timothy W Guinnane. 2019. Partnership as Experimentation. *The Journal of Law, Economics, and Organization* **35**:3, 455-488. [Crossref]
211. Seyil NAJIMUDINOVA, Zamira ÖSKÖNBAEVA. 2019. GİRİŞİMCİLİK VE İSTİHDAM ARASINDAKİ İLİŞKİ: GEÇİŞ EKONOMİLERİ ÖRNEĞİ / The Relationship Between Entrepreneurship And Employment: The Case Of Transition Economies. *Uluslararası Ekonomi, İşletme ve Politika Dergisi* **3**:2, 311-322. [Crossref]
212. Yu. S. Pinkovetskaya. 2019. The Impact of Entrepreneurial Capital of The Region on Small Business Activities. *Vestnik NSUEM* :3, 119-131. [Crossref]

213. Emin M. Dinlersoz, Henry R. Hyatt, Hubert P. Janicki. 2019. Who works for whom? Worker sorting in a model of entrepreneurship with heterogeneous labor markets. *Review of Economic Dynamics* **34**, 244-266. [Crossref]

214. Rodrigo Basco. 2019. What kind of firm do you owner-manage? An institutional logics perspective of individuals' reasons for becoming an entrepreneur. *Journal of Family Business Management* **9**:3, 297-318. [Crossref]

215. Thomas F. Hellmann, Paul H. Schure, Chloe Tergiman, Dan H. Vo. 2019. Ownership dynamics within founder teams: The role of external financing. *Strategic Entrepreneurship Journal* **13**:3, 256-287. [Crossref]

216. Christopher J. Boudreaux, Monica P. Escaleras, Mark Skidmore. 2019. Natural disasters and entrepreneurship activity. *Economics Letters* **182**, 82-85. [Crossref]

217. Daniel L. Bennett. 2019. Infrastructure investments and entrepreneurial dynamism in the U.S. *Journal of Business Venturing* **34**:5, 105907. [Crossref]

218. Ian Appel, Joan Farre-Mensa, Elena Simintzi. 2019. Patent trolls and startup employment. *Journal of Financial Economics* **133**:3, 708-725. [Crossref]

219. Ivan Jureta. Requirements Engineering Challenges in the First 1000 Days of a Venture Capital-Backed US Startup 504-505. [Crossref]

220. Evan Starr, Justin Frake, Rajshree Agarwal. 2019. Mobility Constraint Externalities. *Organization Science* **30**:5, 961-980. [Crossref]

221. Fredrik Heyman, Pehr-Johan Norbäck, Lars Persson, Fredrik Andersson. 2019. Has the Swedish business sector become more entrepreneurial than the US business sector?. *Research Policy* **48**:7, 1809-1822. [Crossref]

222. Tomaz Cajner, Leland D. Crane, Ryan A. Decker, Adrian Hamins-Puertolas, Christopher Kurz. 2019. Improving the Accuracy of Economic Measurement with Multiple Data Sources: The Case of Payroll Employment Data. *Finance and Economics Discussion Series* **2019**:065. . [Crossref]

223. Nor Azizan Che Embi, Haruna Babatunde Jaiyeoba, Sheila Ainon Yussof. 2019. The effects of students' entrepreneurial characteristics on their propensity to become entrepreneurs in Malaysia. *Education + Training* **61**:7/8, 1020-1037. [Crossref]

224. Andrew Atkeson, Ariel T. Burstein, Manolis Chatzikonstantinou. 2019. Transitional Dynamics in Aggregate Models of Innovative Investment. *Annual Review of Economics* **11**:1, 273-301. [Crossref]

225. Philippe Aghion, Antonin Bergeaud, Timo Boppart, Peter J. Klenow, Huiyu Li. 2019. Missing Growth from Creative Destruction. *American Economic Review* **109**:8, 2795-2822. [Abstract] [View PDF article] [PDF with links]

226. Geraldo Cerqueiro, María Fabiana Penas, Robert Seamans. 2019. Debtor Protection and Business Dynamism. *The Journal of Law and Economics* **62**:3, 521-549. [Crossref]

227. Mary Donegan, Allison Forbes, Paige Clayton, Alyse Polly, Maryann Feldman, Nichola Lowe. 2019. The tortoise, the hare, and the hybrid: effects of prior employment on the development of an entrepreneurial ecosystem. *Industrial and Corporate Change* **28**:4, 899-920. [Crossref]

228. Gustavo Grullon, Yelena Larkin, Roni Michaely. 2019. Are US Industries Becoming More Concentrated?*. *Review of Finance* **23**:4, 697-743. [Crossref]

229. Joel A. Elvery. 2019. Changes in the Occupational Structure of the United States: 1860 to 2015. *Economic Commentary (Federal Reserve Bank of Cleveland)* 1-8. [Crossref]

230. Daniel L. Bennett. 2019. Local economic freedom and creative destruction in America. *Small Business Economics* **30**. . [Crossref]

231. Thomas G. Wollmann. 2019. Stealth Consolidation: Evidence from an Amendment to the Hart-Scott-Rodino Act. *American Economic Review: Insights* **1**:1, 77-94. [Abstract] [View PDF article] [PDF with links]

232. Mizan Rahman, Sunny Bose, Mujahid Mohiuddin Babu, Bidit Lal Dey, Sanjit Kumar Roy, Ben Binsardi. 2019. Value Co-Creation as a Dialectical Process: Study in Bangladesh and Indian Province of West Bengal. *Information Systems Frontiers* **21**:3, 527-545. [Crossref]

233. Thorsten Drautzburg. 2019. Entrepreneurial tail risk: Implications for employment dynamics. *Journal of Monetary Economics* **104**, 85-100. [Crossref]

234. Jason DeBacker, Bradley T. Heim, Shanthi P. Ramnath, Justin M. Ross. 2019. The impact of state taxes on pass-through businesses: Evidence from the 2012 Kansas income tax reform. *Journal of Public Economics* **174**, 53-75. [Crossref]

235. Peter Brummund, Laura Connolly. 2019. Who Creates Stable Jobs? Evidence from Brazil. *Oxford Bulletin of Economics and Statistics* **81**:3, 540-563. [Crossref]

236. IULIIA PINKOVETSKAIA, ANTON LEBEDEV. 2019. ENTREPRENEURIAL CAPITAL AND THE VOLUME OF SMALL ENTERPRISES PRODUCTION: RUSSIAN REGIONS DATA. *Journal of Developmental Entrepreneurship* **24**:02, 1950013. [Crossref]

237. Thomas Hellmann, Veikko Thiele. 2019. Fostering Entrepreneurship: Promoting Founding or Funding?. *Management Science* **65**:6, 2502-2521. [Crossref]

238. Katherina Kuschel. 2019. Women Founders in the Technology Industry: The Startup-Relatedness of the Decision to Become a Mother. *Administrative Sciences* **9**:2, 30. [Crossref]

239. Philip Cooke. 2019. World Turned Upside Down: Entrepreneurial Decline, Its Reluctant Myths and Troubling Realities. *Journal of Open Innovation: Technology, Market, and Complexity* **5**:2, 22. [Crossref]

240. Gregory Wolcott. 2019. Restricting Choices: Decision Making, the Market Society, and the Forgotten Entrepreneur. *Journal of Business Ethics* **156**:2, 293-314. [Crossref]

241. Tim Tully. 2019. BKLYN fashion academy: a case study of a public library program supporting fashion entrepreneurs. *Journal of Business & Finance Librarianship* **24**:1-2, 30-53. [Crossref]

242. Jared Ashworth, Tyler Ransom. 2019. Has the college wage premium continued to rise? Evidence from multiple U.S. surveys. *Economics of Education Review* **69**, 149-154. [Crossref]

243. Annamaria Conti, Nishant Dass, Francesco Di Lorenzo, Stuart J.H. Graham. 2019. Venture capital investment strategies under financing constraints: Evidence from the 2008 financial crisis. *Research Policy* **48**:3, 799-812. [Crossref]

244. Jolanda Hessels, Wim Naudé. 2019. THE INTERSECTION OF THE FIELDS OF ENTREPRENEURSHIP AND DEVELOPMENT ECONOMICS: A REVIEW TOWARDS A NEW VIEW. *Journal of Economic Surveys* **33**:2, 389-403. [Crossref]

245. Thomas E Lambert. 2019. Monopoly capital and entrepreneurship: whither small business?. *Cambridge Journal of Economics* **28**. . [Crossref]

246. Benjamin Wild Pugsley, Ayşegül Şahin. 2019. Grown-up Business Cycles. *The Review of Financial Studies* **32**:3, 1102-1147. [Crossref]

247. Sasan Bakhtiari. 2019. Entrepreneurship Dynamics in Australia: Lessons from Micro-data. *Economic Record* **95**:308, 114-140. [Crossref]

248. Keongtae Kim, Il-Horn Hann. 2019. Crowdfunding and the Democratization of Access to Capital—An Illusion? Evidence from Housing Prices. *Information Systems Research* **30**:1, 276-290. [Crossref]

249. Arti Grover Goswami, Denis Medvedev, Ellen Olafsen. The Appeal of High Growth 1-30. [Crossref]

250. Ron S. Jarmin. 2019. Evolving Measurement for an Evolving Economy: Thoughts on 21st Century US Economic Statistics. *Journal of Economic Perspectives* **33**:1, 165-184. [Abstract] [View PDF article] [PDF with links]
251. Eric Bartelsman, Paloma Lopez-Garcia, Giorgio Presidente. 2019. Labour Reallocation in Recession and Recovery: Evidence for Europe. *National Institute Economic Review* **247**, R32-R39. [Crossref]
252. Zhenzhong Ma, Jinwei Zhu, Yong Meng, Ying Teng. 2019. The impact of overseas human capital and social ties on Chinese returnee entrepreneurs' venture performance. *International Journal of Entrepreneurial Behavior & Research* **25**:1, 67-83. [Crossref]
253. Alexander Styhre. Salaried Work in a Financial Economy: Market Risk 193-233. [Crossref]
254. Stella Zilian, Laura Zilian. Die vierte Industrielle Revolution – eine neue Hoffnung? Technologischer Fortschritt und Ungleichheit 145-164. [Crossref]
255. Stephen Barkoczy, Tamara Wilkinson. Establishing a Comparative Framework of Tax Incentives for Start-Up Investors 1-9. [Crossref]
256. Jason Furman, Robert Seamans. 2019. AI and the Economy. *Innovation Policy and the Economy* **19**, 161-191. [Crossref]
257. Julieta Caunedo, Emircan Yurdagul. 2019. WHO QUITS NEXT? FIRM GROWTH IN GROWING ECONOMIES. *Economic Inquiry* **57**:1, 33-49. [Crossref]
258. Zhao Jin. 2019. How do Large Companies Affect Entrepreneurial Entry: Evidence From Amazon HQ2 Search. *SSRN Electronic Journal* . [Crossref]
259. Steven J. Davis, John C. Haltiwanger. 2019. Dynamism Diminished: The Role of Housing Markets and Credit Conditions. *SSRN Electronic Journal* . [Crossref]
260. Bruno Pellegrino. 2019. Product Differentiation, Market Power and Resource Allocation. *SSRN Electronic Journal* **80**. . [Crossref]
261. Daniel Bennett. 2019. Local Economic Freedom & Creative Destruction in America. *SSRN Electronic Journal* . [Crossref]
262. Warwick J. McKibbin, Adam Triggs. 2019. Stagnation Vs Singularity: The Global Implications of Alternative Productivity Growth Scenarios. *SSRN Electronic Journal* . [Crossref]
263. Omer Faruk Koru. 2019. Automation and Top Income Inequality. *SSRN Electronic Journal* . [Crossref]
264. Dan Cao, Henry R. Hyatt, Toshihiko Mukoyama, Erick Sager. 2019. Firm Growth Through New Establishments. *SSRN Electronic Journal* . [Crossref]
265. Christos Makridis, Stephen Strosko. 2019. Refined by Fire: The Great Depression and Entrepreneurship. *SSRN Electronic Journal* . [Crossref]
266. Sebastian Doerr. 2019. Unintended Side Effects: Stress Tests, Entrepreneurship, and Innovation. *SSRN Electronic Journal* . [Crossref]
267. Fatih Karahan, Benjamin W. Pugsley, Aysegul Sahin. 2019. Demographic Origins of the Startup Deficit. *SSRN Electronic Journal* . [Crossref]
268. Wenjian Xu. 2019. Entrepreneurship Among the Unemployed: The Effects of Unemployment Benefits. *SSRN Electronic Journal* . [Crossref]
269. Matthew Denes, Ran Duchin, John Hackney. 2019. Does Size Matter? Evidence from Changes in Small Business Size Standards. *SSRN Electronic Journal* . [Crossref]
270. John Donovan. 2019. Financial Reporting and Entrepreneurial Finance: Evidence from Equity Crowdfunding. *SSRN Electronic Journal* . [Crossref]
271. Sabrina Howell, Filippo Mezzanotti. 2019. Financing Entrepreneurship through the Tax Code: Angel Investor Tax Credits. *SSRN Electronic Journal* . [Crossref]

272. Sabrina Howell, J. David Brown. 2019. Do Cash Windfalls Affect Wages? Evidence from R&D Grants to Small Firms. *SSRN Electronic Journal* **84**. . [Crossref]
273. Joao Granja, Sara Moreira. 2019. Product Innovation and Credit Market Disruptions. *SSRN Electronic Journal* **100**. . [Crossref]
274. Rasmus Koss Hartmann, Anders D. Krabbe, André Spicer. 2019. Towards an Untrepreneurial Economy? The Entrepreneurship Industry and the Rise of the Veblenian Entrepreneur. *SSRN Electronic Journal* . [Crossref]
275. Michael Peters, Conor Walsh. 2019. Declining Dynamism, Increasing Markups and Missing Growth: The Role of the Labor Force. *SSRN Electronic Journal* . [Crossref]
276. Yochai Benkler. 2019. Power and Productivity: Institutions, Ideology, and Technology in Political Economy. *SSRN Electronic Journal* **28**. . [Crossref]
277. Has van Vlokhoven. 2019. Estimating the Cost of Capital and the Profit Share. *SSRN Electronic Journal* . [Crossref]
278. Vladimir Smirnyagin. 2019. Compositional Nature of Firm Growth and Aggregate Fluctuations. *SSRN Electronic Journal* **117**. . [Crossref]
279. Daniel Garcia-Macia, Chang-Tai Hsieh, Peter J. Klenow. 2019. How Destructive Is Innovation?. *Econometrica* **87**:5, 1507-1541. [Crossref]
280. Umut Kılınç. 2018. Productivity slowdown and misallocation in the post-recession: What prevents recovery?. *The Journal of Technology Transfer* **43**:6, 1542-1570. [Crossref]
281. Chao Miao, Shanshan Qian, Ronald H. Humphrey. 2018. Senior Leaders in Small Enterprises: Insights Into the Field of Entrepreneurship. *Industrial and Organizational Psychology* **11**:4, 663-669. [Crossref]
282. Jason DeBacker, Lucas Goodman, Bradley T. Heim, Shanthi P. Ramnath, Justin M. Ross. 2018. Pass-Through Entity Responses to Preferential Tax Rates: Evidence on Economic Activity and Owner Compensation in Kansas. *National Tax Journal* **71**:4, 687-706. [Crossref]
283. Pratim Datta, Jessica Ann Peck, Ipek Koparan, Cecile Nieuwenhuizen. 2018. Entrepreneurial continuance logic. *Management Decision* **58**:7, 1247-1282. [Crossref]
284. Mayank Jaiswal. 2018. Black vs white owned new venture performance: a study of mediating effects. *New England Journal of Entrepreneurship* **21**:2, 81-100. [Crossref]
285. Alina Schnake-Mahl, Jessica A. R. Williams, Barry Keppard, Mariana Arcaya. 2018. A public health perspective on small business development: a review of the literature. *Journal of Urbanism: International Research on Placemaking and Urban Sustainability* **11**:4, 387-411. [Crossref]
286. Joern H Block, Christian O Fisch, Mirjam van Praag. 2018. Quantity and quality of jobs by entrepreneurial firms. *Oxford Review of Economic Policy* **34**:4, 565-583. [Crossref]
287. Colin Mayer, Donald S Siegel, Mike Wright. 2018. Entrepreneurship: an assessment. *Oxford Review of Economic Policy* **34**:4, 517-539. [Crossref]
288. Zhenzhong Ma, Lei Wang, Keith Cheung. 2018. The paradox of social capital in China: venture capitalists and entrepreneurs' social ties and public listed firms' technological innovation performance. *Asian Journal of Technology Innovation* **26**:3, 306-324. [Crossref]
289. Muhammad Jufri, Hillman Wirawan. 2018. Internalizing the spirit of entrepreneurship in early childhood education through traditional games. *Education + Training* **60**:7/8, 767-780. [Crossref]
290. Ralph Nyadu-Addo, Mavis Serwah Benneh Mensah. 2018. Entrepreneurship education in Ghana – the case of the KNUST entrepreneurship clinic. *Journal of Small Business and Enterprise Development* **25**:4, 573-590. [Crossref]

291. Flavio Calvino, Chiara Criscuolo, Carlo Menon. 2018. A cross-country analysis of start-up employment dynamics. *Industrial and Corporate Change* **27**:4, 677-698. [Crossref]
292. Mwatsika Charles, Kambewa Patrick, Chiwaula Levison. 2018. Untangling the concept of entrepreneurship towards a common perspective. *African Journal of Business Management* **12**:14, 451-470. [Crossref]
293. Craig Silvernagel, George Langelett, Brian Tande. 2018. The new intellectual property race. *Journal of Entrepreneurship and Public Policy* **7**:2, 106-116. [Crossref]
294. Kevin L. Kliesen, John A. Tatom. 2018. Is American manufacturing in decline?. *Business Economics* **53**:3, 107-123. [Crossref]
295. Dany Bahar. 2018. The middle productivity trap: Dynamics of productivity dispersion. *Economics Letters* **167**, 60-66. [Crossref]
296. James Bailey, Douglas Webber. 2018. Health Insurance Benefit Mandates and Firm Size Distribution. *Journal of Risk and Insurance* **85**:2, 577-595. [Crossref]
297. Lucia Foster, Patrice Norman. 2018. The annual survey of entrepreneurs. *Journal of Economic and Social Measurement* **42**:3-4, 199-224. [Crossref]
298. Alexander Styhre. 2018. What we talk about when we talk about fiduciary duties: the changing role of a legal theory concept in corporate governance studies. *Management & Organizational History* **13**:2, 113-139. [Crossref]
299. J. Daniel Kim. 2018. Is there a startup wage premium? Evidence from MIT graduates. *Research Policy* **47**:3, 637-649. [Crossref]
300. Antoine Gervais. 2018. MULTIREGIONAL FIRMS AND REGION SWITCHING IN THE U.S. MANUFACTURING SECTOR. *Economic Inquiry* **56**:2, 955-982. [Crossref]
301. Darush Yazdanfar, Peter Öhman. 2018. Growth and job creation at the firm level: Swedish SME data. *Management Research Review* **41**:3, 345-358. [Crossref]
302. Iuliia Pinkovetskaia, Vladislava Slepova. 2018. Estimation of Fixed Capital Investment in SMEs: the Existing Differentiation in the Russian Federation. *Business Systems Research Journal* **9**:1, 65-78. [Crossref]
303. Can Tian. 2018. Firm-level entry and exit dynamics over the business cycles. *European Economic Review* **102**, 298-326. [Crossref]
304. Romano Audhoe, Neil Thompson, Karen Verduijn. Expanding Entrepreneurial, Innovative and Sustainable (EIS) Ecosystems: A Cultural-Historical Activity Theory Perspective 67-89. [Crossref]
305. Giulio Bosio, Annalisa Cristini. Is the Nature of Jobs Changing? The Role of Technological Progress and Structural Change in the Labour Market 15-41. [Crossref]
306. Alex Coad. 2018. Firm age: a survey. *Journal of Evolutionary Economics* **28**:1, 13-43. [Crossref]
307. Michael Anyadike-Danes, Mark Hart. 2018. All grown up? The fate after 15 years of a quarter of a million UK firms born in 1998. *Journal of Evolutionary Economics* **28**:1, 45-76. [Crossref]
308. Alex Coad, Sven-Olov Daunfeldt, Daniel Halvarsson. 2018. Bursting into life: firm growth and growth persistence by age. *Small Business Economics* **50**:1, 55-75. [Crossref]
309. Titan Alon, David Berger, Robert Dent, Benjamin Pugsley. 2018. Older and slower: The startup deficit's lasting effects on aggregate productivity growth. *Journal of Monetary Economics* **93**, 68-85. [Crossref]
310. David Argente, Munseob Lee, Sara Moreira. 2018. Innovation and product reallocation in the great recession. *Journal of Monetary Economics* **93**, 1-20. [Crossref]
311. Nathan Goldschlag, Alex Tabarrok. 2018. Is regulation to blame for the decline in American entrepreneurship?. *Economic Policy* **33**:93, 5-44. [Crossref]

312. Xuan Tian, Jiajie Xu. 2018. Do Place-Based Programs Affect Local Innovation and Entrepreneurship?. *SSRN Electronic Journal* . [Crossref]

313. Francesco Manaresi, Nicola Pierri. 2018. Credit Supply and Productivity Growth. *SSRN Electronic Journal* . [Crossref]

314. Christos Makridis. 2018. Housing Market Regulation and Labor Market Dynamism. *SSRN Electronic Journal* . [Crossref]

315. Jason Furman, Robert Seamans. 2018. AI and the Economy. *SSRN Electronic Journal* **22252**. . [Crossref]

316. John A. Dove, Daniel J. Smith. 2018. Alabama at the Crossroads: An Economic Guide to a Fiscally Sustainable Future. *SSRN Electronic Journal* . [Crossref]

317. Donald J. Boudreaux, Liya Palagashvili. 2018. An Economic Analysis of Overtime Pay Regulations. *SSRN Electronic Journal* . [Crossref]

318. Jason Furman, Peter R. Orszag. 2018. Slower Productivity and Higher Inequality: Are They Related?. *SSRN Electronic Journal* **1**. . [Crossref]

319. Eric J. Bartelsman, Paloma Lopez-Garcia, Giorgio Presidente. 2018. Cyclical and Stuctural Variation in Resource Reallocation: Evidence for Europe. *SSRN Electronic Journal* **29**. . [Crossref]

320. Wei Chen, Mingfeng Lin, Bryan Zheng Zhang. 2018. Lower Taxes, Smarter Crowd? The Impact of Tax Incentives on Equity Crowdfunding. *SSRN Electronic Journal* . [Crossref]

321. J. David Brown, John S. Earle, Mee Jung Kim, Kyung Min Lee. 2018. High-Growth Entrepreneurship. *SSRN Electronic Journal* . [Crossref]

322. David Lucas, Christopher Boudreaux. 2018. Federal Regulation, Job Creation, and the Moderating Effect of State Economic Freedom: Evidence From the United States. *SSRN Electronic Journal* **113**. . [Crossref]

323. Diana Farrell, Chris Wheat, Chi Mac. 2018. Growth, Vitality, and Cash Flows: High-Frequency Evidence from 1 Million Small Businesses. *SSRN Electronic Journal* . [Crossref]

324. Tunde Cserpes. 2018. When Liability Becomes Potential: Intermediary Entrepreneurship in Dynamic Market Contexts. *SSRN Electronic Journal* . [Crossref]

325. J. Daniel Kim. 2018. Predictable Exodus: Startup Acquisitions and Employee Departures. *SSRN Electronic Journal* . [Crossref]

326. Vladimir Smirnyagin. 2018. Uncertainty Driven Entry and Exit Over the Business Cycle. *SSRN Electronic Journal* . [Crossref]

327. Tania Babina, Sabrina Howell. 2018. Entrepreneurial Spillovers from Corporate R&D. *SSRN Electronic Journal* **108**. . [Crossref]

328. Bharat Mehra, Bradley Wade Bishop, Robert P. Partee II. 2017. How Do Public Libraries Assist Small Businesses in Rural Communities? An Exploratory Qualitative Study in Tennessee. *Libri* **67**:4. . [Crossref]

329. Grant H. Lewis. 2017. Effects of federal socioeconomic contracting preferences. *Small Business Economics* **49**:4, 763-783. [Crossref]

330. Ashantha Ranasinghe. 2017. Innovation, firm size and the Canada-U.S. productivity gap. *Journal of Economic Dynamics and Control* **85**, 46-58. [Crossref]

331. Thomas Åstebro, Joacim Tåg. 2017. Gross, net, and new job creation by entrepreneurs. *Journal of Business Venturing Insights* **8**, 64-70. [Crossref]

332. Keith Barnatchez, Leland D. Crane, Ryan A. Decker. 2017. An Assessment of the National Establishment Time Series (NETS) Database. *Finance and Economics Discussion Series* **2017**:110. . [Crossref]

333. Aidin Salamzadeh, Hiroko Kawamorita Kesim. 2017. The enterprising communities and startup ecosystem in Iran. *Journal of Enterprising Communities: People and Places in the Global Economy* **11**:4, 456-479. [Crossref]

334. Pankaj C. Patel, Maria João Guedes, John A. Pearce. 2017. The Role of Service Operations Management in New Retail Venture Survival. *Journal of Retailing* **93**:2, 241-251. [Crossref]

335. MANUEL ADELINO, SONG MA, DAVID ROBINSON. 2017. Firm Age, Investment Opportunities, and Job Creation. *The Journal of Finance* **72**:3, 999-1038. [Crossref]

336. Chad Syverson. 2017. Challenges to Mismeasurement Explanations for the US Productivity Slowdown. *Journal of Economic Perspectives* **31**:2, 165-186. [Abstract] [View PDF article] [PDF with links]

337. Sasan Bakhtiari. 2017. Corporate credit ratings: Selection on size or productivity?. *International Review of Economics & Finance* **49**, 84-101. [Crossref]

338. 2017. Symposium: Entrepreneurship in the Public and Nonprofit Sectors. *Public Administration Review* **77**:3, 474-475. [Crossref]

339. Raven Molloy, Christopher L. Smith, Abigail Wozniak. 2017. Job Changing and the Decline in Long-Distance Migration in the United States. *Demography* **54**:2, 631-653. [Crossref]

340. Keith Barnatchez, Robert Lester. 2017. THE RELATIONSHIP BETWEEN ECONOMIC FREEDOM AND ECONOMIC DYNAMISM. *Contemporary Economic Policy* **35**:2, 358-372. [Crossref]

341. Semih Tumen. 2017. Entrepreneurship in the shadows. *Economics of Transition* **25**:2, 239-269. [Crossref]

342. Alison Weingarden. 2017. Job Reallocation and Unemployment in Equilibrium. *FEDS Notes* **2017**:1964. . [Crossref]

343. Thor Berger, Carl Benedikt Frey. 2017. Industrial renewal in the 21st century: evidence from US cities. *Regional Studies* **51**:3, 404-413. [Crossref]

344. R. Jason Faberman. 2017. Job flows, jobless recoveries, and the Great Moderation. *Journal of Economic Dynamics and Control* **76**, 152-170. [Crossref]

345. Rodrigo Pérez Artica, Leandro Brufman, Lisana Belén Martinez. 2017. Delving into the Secular Stagnation Hypothesis: A Firm-Level Analysis of the Private Sector's Excess Savings in Advanced Economies. *Comparative Economic Studies* **59**:1, 77-106. [Crossref]

346. Tania Babina, Paige Ouimet, Rebecca Zarutskie. 2017. Going Entrepreneurial? IPOs and New Firm Creation. *Finance and Economics Discussion Series* **2017**:022. . [Crossref]

347. Antoine Imberti. 2017. Quelle est la contribution des entrepreneurs à la croissance ?. *Regards croisés sur l'économie* **n° 19**:2, 58-61. [Crossref]

348. Swati Bhatt. The Three Trends: Granularity, Behemoths and Cooperation 29-55. [Crossref]

349. Tessa Conroy, Stephan Weiler. Entrepreneurship, Growth, and Gender 85-94. [Crossref]

350. Alexander Styhre. Investor Capitalism and the Decline of the Public Corporation and the Middle Class 43-108. [Crossref]

351. Alexander Styhre. The New Forms of Professional Work: Entrepreneurialism and Precarious Professional Work 109-160. [Crossref]

352. Peter Huber, Harald Oberhofer, Michael Pfaffermayr. 2017. Who creates jobs? Econometric modeling and evidence for Austrian firm level data. *European Economic Review* **91**, 57-71. [Crossref]

353. Ilan Bijaoui. Global Market and SMEs 1-12. [Crossref]

354. Nuri Ersahin, Rustom M. Irani, Katherine Waldock. 2017. Creditor Rights and Entrepreneurship: Evidence from Fraudulent Transfer Law. *SSRN Electronic Journal* . [Crossref]

355. Daniel Garcia-Macia, Chang-Tai Hsieh, Peter J. Klenow. 2017. How Destructive is Innovation?. *SSRN Electronic Journal* . [Crossref]

356. Joseph Kopecky. 2017. An Aging Dynamo: Demographic Change and the Decline of Entrepreneurial Activity in the United States. *SSRN Electronic Journal* . [Crossref]

357. Thomas F. Hellmann, Veikko Thiele. 2017. Fostering Entrepreneurship: Promoting Founding or Funding?. *SSRN Electronic Journal* . [Crossref]

358. Thomas B. Astebro, Joacim TTg. 2017. Gross, Net, and New Job Creation by Entrepreneurs. *SSRN Electronic Journal* . [Crossref]

359. Tania Babina. 2017. Destructive Creation at Work: How Financial Distress Spurs Entrepreneurship. *SSRN Electronic Journal* . [Crossref]

360. Tania Babina, Paige Ouimet, Rebecca Zarutskie. 2017. Going Entrepreneurial? IPOs and New Firm Creation. *SSRN Electronic Journal* . [Crossref]

361. Sasan Bakhtiari. 2017. Entrepreneurship Dynamics in Australia: Lessons from Micro-Data. *SSRN Electronic Journal* . [Crossref]

362. Christophe Cahn, William Mullins. 2017. Unconventional Monetary Policy and Bank Lending Relationships. *SSRN Electronic Journal* **55**. . [Crossref]

363. Can Tian. 2017. Firm-Level Entry and Exit Dynamics over the Business Cycles. *SSRN Electronic Journal* . [Crossref]

364. Ashantha Ranasinghe. 2017. Innovation, Firm Size and the Canada-U.S. Productivity Gap. *SSRN Electronic Journal* . [Crossref]

365. Fabiano Schivardi, Claudio Michelacci. 2017. Are They All Like Bill, Mark, and Steve? The Education Premium for Entrepreneurs. *SSRN Electronic Journal* . [Crossref]

366. Hadiye Aslan, Praveen Kumar. 2017. Import Competition and the Decline in U.S. Entrepreneurship. *SSRN Electronic Journal* **117**. . [Crossref]

367. Sasan Bakhtiari. 2017. Do Manufacturing Entrepreneurs in Australia Have (or Develop) a Productivity Advantage?. *SSRN Electronic Journal* . [Crossref]

368. Philippe Aghion, Antonin Bergeaud, Timo Boppart, Peter J. Klenow, Huiyu Li. 2017. Missing Growth from Creative Destruction. *SSRN Electronic Journal* . [Crossref]

369. Hassan Arouri, Adel Ben Youssef, Francesco Quatraro. 2016. Entry, exit and net job creation in Tunisia: an exploratory analysis. *Eurasian Business Review* **6**:3, 323-337. [Crossref]

370. Karen Geurts, Johannes Van Biesebroeck. 2016. Firm creation and post-entry dynamics of de novo entrants. *International Journal of Industrial Organization* **49**, 59-104. [Crossref]

371. Henry R. Hyatt, James R. Spletzer. 2016. The shifting job tenure distribution. *Labour Economics* **41**, 363-377. [Crossref]

372. Christian Bjørnskov, Nicolai J. Foss. 2016. Institutions, Entrepreneurship, and Economic Growth: What Do We Know and What Do We Still Need to Know?. *Academy of Management Perspectives* **30**:3, 292-315. [Crossref]

373. Ryan A. Decker, John Haltiwanger, Ron S. Jarmin, Javier Miranda. 2016. Where has all the skewness gone? The decline in high-growth (young) firms in the U.S. *European Economic Review* **86**, 4-23. [Crossref]

374. Sidney G. Winter. 2016. The place of entrepreneurship in “The Economics that Might Have Been”. *Small Business Economics* **47**:1, 15-34. [Crossref]

375. Ryan A. Decker, John Haltiwanger, Ron S. Jarmin, Javier Miranda. 2016. Declining Business Dynamism: What We Know and the Way Forward. *American Economic Review* **106**:5, 203-207. [Abstract] [View PDF article] [PDF with links]

376. Wiebke Bartz, Adalbert Winkler. 2016. Flexible or fragile? The growth performance of small and young businesses during the global financial crisis — Evidence from Germany. *Journal of Business Venturing* **31**:2, 196-215. [Crossref]
377. Alex Coad, Agustí Segarra, Mercedes Teruel. 2016. Innovation and firm growth: Does firm age play a role?. *Research Policy* **45**:2, 387-400. [Crossref]
378. Javier Miranda, Lars Vilhuber. 2016. Using partially synthetic microdata to protect sensitive cells in business statistics. *Statistical Journal of the IAOS* **32**:1, 69-80. [Crossref]
379. G.D. Hansen, L.E. Ohanian. Neoclassical Models in Macroeconomics 2043-2130. [Crossref]
380. A. Coskun Samli. The Needed Entrepreneurial Culture 79-91. [Crossref]
381. Lucia Foster, Cheryl Grim, John Haltiwanger. 2016. Reallocation in the Great Recession: Cleansing or Not?. *Journal of Labor Economics* **34**:S1, S293-S331. [Crossref]
382. Christian Bjjrnskov, Nicolai J. Foss. 2016. Institutions, Entrepreneurship, and Economic Growth: What Do We Know? And What Do We Still Need to Know?. *SSRN Electronic Journal* . [Crossref]
383. Javier Miranda, Lars Vilhuber. 2016. Using Partially Synthetic Microdata to Protect Sensitive Cells in Business Statistics. *SSRN Electronic Journal* . [Crossref]
384. Henry R. Hyatt, James R. Spletzer. 2016. The Shifting Job Tenure Distribution. *SSRN Electronic Journal* . [Crossref]
385. Annamaria Conti, Stuart J.H. Graham. 2016. Venture Capital Investment Strategies Under Financing Constraints: Evidence from the 2008 Financial Crisis. *SSRN Electronic Journal* **42**. . [Crossref]
386. Isaac Hacamo, Kristoph Kleiner. 2016. Finding Success in Tragedy: Forced Entrepreneurs after Corporate Bankruptcy. *SSRN Electronic Journal* . [Crossref]
387. Nuri Ersahin, Rustom M. Irani. 2016. Creditor Rights and Entrepreneurship: Evidence from Fraudulent Transfer Law. *SSRN Electronic Journal* . [Crossref]
388. Karen Mills. 2016. The State of Small Business Lending: Innovation and Technology and the Implications for Regulation. *SSRN Electronic Journal* . [Crossref]
389. Nathan Goldschlag, Javier Miranda. 2016. Business Dynamics Statistics of High Tech Industries. *SSRN Electronic Journal* **14**. . [Crossref]
390. Ian Appel, Joan Farre-Mensa, Elena Simintzi. 2016. Patent Trolls and Small Business Employment. *SSRN Electronic Journal* . [Crossref]
391. Francesco Manaresi, Nicola Pierri. 2016. Credit Constraints and Firm Productivity: Evidence from Italy. *SSRN Electronic Journal* . [Crossref]
392. Laura Anne Lindsey, Luke C.D. Stein. 2016. Angels, Entrepreneurship, and Employment Dynamics: Evidence from Investor Accreditation Rules. *SSRN Electronic Journal* . [Crossref]
393. Algirdas Giedraitis, Jurgita Kasnauskė. 2015. „Startuolių“ (Start up) steigimo regiono modelis. *Management Theory and Studies for Rural Business and Infrastructure Development* **37**:4, 490-450. [Crossref]
394. Mikaela Backman, Johanna Palmberg. 2015. Contextualizing small family firms: How does the urban–rural context affect firm employment growth?. *Journal of Family Business Strategy* **6**:4, 247-258. [Crossref]
395. Ali Hortaçsu, Chad Syverson. 2015. The Ongoing Evolution of US Retail: A Format Tug-of-War. *Journal of Economic Perspectives* **29**:4, 89-112. [Abstract] [View PDF article] [PDF with links]
396. Fabiana Moreno, Alex Coad. High-Growth Firms: Stylized Facts and Conflicting Results 187-230. [Crossref]
397. John Haltiwanger. 2015. Job Creation, Job Destruction, and Productivity Growth: The Role of Young Businesses. *Annual Review of Economics* **7**:1, 341-358. [Crossref]

398. Arthur B. Kennickell, Myron L. Kwast, Jonathan Pogach. 2015. Small Businesses and Small Business Finance during the Financial Crisis and the Great Recession: New Evidence From the Survey of Consumer Finances. *Finance and Economics Discussion Series* **2015**:039, 1-94. [Crossref]

399. Michael Anyadike-Danes, Carl-Magnus Bjuggren, Sandra Gottschalk, Werner Hölzl, Dan Johansson, Mika Maliranta, Anja Myrann. 2015. An international cohort comparison of size effects on job growth. *Small Business Economics* **44**:4, 821-844. [Crossref]

400. Jorge Guzman, Scott Stern. 2015. Where is Silicon Valley?. *Science* **347**:6222, 606-609. [Crossref]

401. John Haltiwanger. 2015. Comment. *NBER Macroeconomics Annual* **29**:1, 60-65. [Crossref]

402. Amar Bhide. 2015. The Demise of US Dynamism Is Vastly Exaggerated – But Not All Is Well. *SSRN Electronic Journal* . [Crossref]

403. Adam D. Thierer. 2015. The Connected World: Examining the Internet of Things. *SSRN Electronic Journal* . [Crossref]

404. Emin Dinlersoz, Henry R. Hyatt, Hubert P. Janicki. 2015. Who Works for Whom? Worker Sorting in a Model of Entrepreneurship with Heterogeneous Labor Markets. *SSRN Electronic Journal* . [Crossref]

405. Lucia Foster, John Haltiwanger, Shawn D. Klimek, C.J. Krizan, Scott Ohlmacher. 2015. The Evolution of National Retail Chains: How We Got Here. *SSRN Electronic Journal* . [Crossref]

406. Antoine Gervais. 2015. Multiregional Firms and Region Switching in the US Manufacturing Sector. *SSRN Electronic Journal* **68**. . [Crossref]

407. Alex Coad, Sven-Olov Daunfeldt, Daniel Halvarsson. 2015. Bursting into Life: Firm Growth and Growth Persistence by Age. *SSRN Electronic Journal* . [Crossref]

408. Sari Pekkala Kerr, William R. Kerr, Ramana Nanda. 2015. House Money and Entrepreneurship. *SSRN Electronic Journal* . [Crossref]

409. Xiang Hui. 2015. Entry Costs and SMEs' Exports: A Randomized Field Experiment. *SSRN Electronic Journal* . [Crossref]

410. Christopher F. Goetz, Henry R. Hyatt, Erika McEntarfer, Lee Kristin Sandusky. 2015. The Promise and Potential of Linked Employer-Employee Data for Entrepreneurship Research. *SSRN Electronic Journal* . [Crossref]

411. Peter Huber, Harald Oberhofer, Michael Pfaffermayr. 2015. Who Creates Jobs? Econometric Modeling and Evidence for Austrian Firm Level Data. *SSRN Electronic Journal* . [Crossref]

412. Benjamin W. Pugsley, Aysegul Sahin. 2015. Grown-Up Business Cycles. *SSRN Electronic Journal* . [Crossref]

413. Tania Babina. 2015. Destructive Creation at Work: How Financial Distress Spurs Entrepreneurship. *SSRN Electronic Journal* . [Crossref]

414. Arthur B. Kennickell, Myron L. Kwast, Jonathan Pogach. 2015. Small Businesses and Small Business Finance During the Financial Crisis and the Great Recession: New Evidence from the Survey of Consumer Finances. *SSRN Electronic Journal* . [Crossref]

415. Ryan Decker, John Haltiwanger, Ron S. Jarmin, Javier Miranda. 2015. Where Has All the Skewness Gone? The Decline in High-Growth (Young) Firms in the U.S. *SSRN Electronic Journal* . [Crossref]

416. Fabiana Moreno, Alex Coad. 2015. High-Growth Firms: Stylized Facts and Conflicting Results. *SSRN Electronic Journal* . [Crossref]

417. Francesco Manaresi. 2015. Net Employment Growth by Firm Size and Age in Italy. *SSRN Electronic Journal* . [Crossref]

418. Timothy Terrell. 2015. Uncertainty, Asset Specificity, and Entrepreneurial Adaptation. *SSRN Electronic Journal* . [Crossref]

419. John J. Horton. 2014. A Price Theory of Silicon Valley. *SSRN Electronic Journal* . [Crossref]

420. Karen Geurts, Johannes Van Biesebroeck. 2014. Job Creation, Firm Creation, and De Novo Entry. *SSRN Electronic Journal* . [Crossref]

421. Sasan Bakhtiari. 2014. Corporate Credit Ratings: Selection on Size or Productivity?. *SSRN Electronic Journal* **45**. . [Crossref]

422. Michael Anyadike-Danes, Carl Magnus Bjuggren, Sandra Gottschalk, Werner HHlzl, Dan Johansson, Mika Maliranta, Anja Grinde Myrann. 2014. An International Cohort Comparison of Size Effects on Job Growth. *SSRN Electronic Journal* . [Crossref]

423. Benjamin W. Pugsley, Aysegul Sahin. 2014. Grown-Up Business Cycles. *SSRN Electronic Journal* . [Crossref]

424. Nathan Goldschlag, Alexander T. Tabarrok. 2014. Is Regulation to Blame for the Decline in American Entrepreneurship?. *SSRN Electronic Journal* . [Crossref]

425. Sascha O. Becker, Hans K. Hvide. 2013. Do Entrepreneurs Matter?. *SSRN Electronic Journal* . [Crossref]

426. Keongtae Kim, Il-Horn Hann. 2013. Does Crowdfunding Democratize Access to Capital? A Geographical Analysis. *SSRN Electronic Journal* . [Crossref]