Revisiting the Discourse on Dynamism

Philadelphia Council for Business Economics
A Chapter of the National Association for Business Economics
Philadelphia, PA

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OF PHILADELPHIA

The views expressed today are my own and not necessarily those of the Federal Reserve System or the Federal Open Market Committee (FOMC).

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Almost exactly a year ago, I was addressing the New York chapter of NABE in Midtown Manhattan. And it strikes me that, much like show business and politics, a year is a long time in economics, but there are, in fact, some strong similarities between now and then: Both components of the Fed's dual mandate are in good health, my outlook is fairly positive, and I'm standing in front of a group of business economists. Although the commute was much shorter this time.

I've therefore been thinking a lot about the topic I addressed at that event, which is perhaps even more relevant today. Because, of course, while some aspects of the landscape have stayed the same, many others have changed.

So with your indulgence, I'd like to revisit that subject and discuss the continued decline of business dynamism in the American economy. Some new research out of the Philadelphia Fed adds an interesting dimension, and it's something I know business economists are thinking about right now.

Before I get to that, however, I'll start with an economic outlook and preface my thoughts with the one thing that never changes: the standard Fed disclaimer … The views I express here today are mine alone and do not necessarily reflect those of anyone else in the Federal Reserve System.

Labor Market

Turning first to employment, the labor market continues to show sustained strength. February's jobs numbers were significantly lower than both market forecasts and previous months. However, it would be a mistake to allow one month's data to obscure the robust growth and continued tightening of the

past several years. In fact, I always caution that a single data series or report should not, on its own, derail an outlook; we look at that information in context, and the Fed's mantra of "data driven" means thinking about how things unfold in the medium term.

For the past half-year, job creation has averaged 190,000 a month — showing stamina that has, frankly, surprised many of us. At some point, the number of net new jobs will necessarily fall, but even then, it should not be taken as a harbinger of economic doom. Somewhere around 100,000 a month will be more than sufficient to keep up with growth in the labor force.

Another metric that's surpassed expectations is the number of people coming off the sidelines, which is showing up in the data in various ways: In the instances that the unemployment rate ticked slightly upward in recent months, for example, it has been reflective of more people coming into the labor force.

All in all, I see a strong labor market, with unemployment continuing to move down, likely reaching a basement in the 3½ percent range this year before ticking back up a few tenths of a percentage point.

Inflation

After several years of running persistently below our preferred 2 percent target, inflation finally started running about that rate. In recent months, it's edged back down somewhat.

I see inflation averaging slightly higher than 2 percent this year and next, which is not out of line with how I view our target. Running a little higher after such a long period of underperformance is not, in my mind, a red flag. The Fed has a symmetrical target, which means I'm equally concerned about persistently low inflation as I would be about its opposite.

Again, my focus is on the medium term average, and what I'm watching in particular is inflation's trajectory — that is, not just its direction, but the speed at which it travels.

As with all things policy related, I'll be driven by the data. In particular, I'm giving weight to core inflation for a better view of the fundamentals, as fluctuations in energy prices are likely to affect the headline metric.

GDP

Turning to GDP, I see growth a bit above 2 percent for this year, returning to trend of around 2 percent some time in 2020.

There has been a good deal of discussion in recent days and weeks of what some call "disappointing" growth projections such as my own. When advance estimates for Q1 GDP are issued in a few weeks, those voices will likely be amplified: I expect Q1 of 2019 to come in around 1.5 percent. This actually reflects a pattern of several years' running, in which first quarters have consistently seen low or negative growth. However, those have balanced out when the following quarters pick up steam, which is what I foresee for 2019. Overall, it's important to remember that we are still looking at continued economic growth, and are on pace for the longest economic expansion in our history. That doesn't fall into the category of "disappointing" for me.

I also do not think the growth forecast should be entirely surprising, since it reflects well-documented structural forces, rather than transitory ones. The impact of demographics, for instance, has been central to discussions of labor force participation in recent years, and that impact, in turn, has played a part in the continued slowing of productivity.

Outlook and Policy Decisions

I still see the outlook as a net positive. That said, there are some risks I'm paying close attention to. First, although household spending continues at a strong, sustained pace, businesses report increasing uncertainty and decreasing confidence, dampening the investment outlook somewhat. Second, global factors continue to hold my attention, including growth forecasts abroad and trade developments.

And, of course, there is the renewed concern about the yield curve. While it has often been the case that inversions in the yield curve have preceded downturns, a couple of points bear mention, particularly because they offer some assurance.

First, as we all learned in econ classes, correlation does not equal causation, and while there appears to be a relationship between yield curve inversions and recessions, it's not a foolproof indicator. Second, the playing field is different this time around. The Fed's balance sheet is still historically large — something I'll touch on in a moment — which may be influencing long-term yields.

Ultimately, my views are shaped by multiple indicators, and there are certainly aspects of the economy — the strength of the labor market, for instance — that point to a fundamentally sound U.S. economy.

Accounting for all those factors — a strong labor market, muted inflation, sustained moderate growth, and the penumbra of uncertainty — I continue to be in wait-and-see mode, and my outlook for rates remains, at most, one hike for 2019 and one for 2020.

I will add here that much has been made of the FOMC's use of "patience" in discussing the future path of monetary policy. I agree that patience is necessary and would, in fact, draw in other of the Seven Virtues: Temperance guiding a moderated and thoughtful response to accumulated data; Diligence in watching and evaluating that data; and, of course, Humility, in knowing that as and when those data indicate, we are ready and willing to change our outlooks in accordance.

I ask for Charity only from audiences who think I'm being long-winded …

Before I turn to the subject for today, I do want to visit the topic of the balance sheet, as promised. My opening caveat here is that, while the balance sheet is clearly part of the discussion of monetary policy, it is not currently indicative of our monetary policy *stance*.

As noted after the March FOMC meeting, we intend to end the balance sheet runoff in September, resuming the reinvestment of all principal payments. Paydowns from MBS, subject to a cap of $20 billion per month, will be reinvested into Treasuries, which is consistent with our long-standing plans to hold primarily Treasuries in our portfolio.

This will not quite be the end of normalization. In September, when the runoff ends, reserves will likely still be somewhat above the level needed to efficiently and effectively implement monetary policy, and our ultimate goal for reserves is "no more than necessary."

We intend to keep the size of our aggregate securities holdings constant for some time after the September end to runoffs. During this period, we will see a very — and I do stress "very" — gradual decrease in average reserves, as currency and other non-reserve liabilities grow over time.

For me, a key issue is that we only have estimates of the demand for reserves, which means we should approach the "efficient and effective" level with caution.

This slow and steady approach, which is based on work by the Philadelphia Fed staff,[1] is not only the safer option, it has the additional advantage of reducing uncertainty about the evolution of asset redemptions, and proceeds in the FOMC's preferred "gradual and predictable manner."

Since we started unwinding in October of 2017, we stressed that the process would be entirely mundane — the balance sheet was put essentially on autopilot and moved to the background. Boredom may not be a virtue, though we might invoke Continence in its place. And it was, in fact, entirely

[1] I would like to thank Roc Armenter for his research and insight.

unremarkable — and unremarked upon — until earlier this year. While there will likely be continued discussion, particularly about composition, I do believe it will — and should — be entirely excitement-free.

In the vernacular of the FOMC's "toolkit" as we often refer to it: Balance sheet policy certainly remains an option should we need it — that is, should we again see a situation in which the federal funds rate alone cannot provide sufficient accommodation. But we've put it back in the toolbox, and stored it in the basement — within arm's reach, but out of sight for now.

Business Dynamism

This brings me, somewhat meanderingly, to the subject I want to address.

The U.S. economy has historically been characterized by an elevated level of dynamism. For the uninitiated, the U.S. is certainly "dynamic" in the colloquial sense of being innovative and imaginative, but in this case, "dynamism" refers to the economic measure that is defined by turnover: New businesses enter the market and others leave, workers move from job to job, and people come in and out of the workforce.

This perpetual churn makes resources more fluid. Labor and capital are freed to flow from the least to the most productive firms, and productivity, wages, and overall economic growth increase.

Over the past three decades or so, dynamism has been in decline. In particular, the data show lower business start-up activity, slowing labor reallocation, and much less worker mobility. During much of that time — roughly the past 20 years — there's also been a drop in productivity growth.

We don't know the strength of the relationship between these two, or, indeed, if there is one. But these and other economic trends raise interesting possibilities and points for consideration.

Dynamism in Decline

To set the stage, we can see the decline in both dynamism and entrepreneurship since the early 1980s in a variety of measures.

On the firm side, the new start-up rate has deteriorated by close to 40 percent, while the exit rate has been more or less flat.[2] The result is a net start-up rate that has not just slowed, but has moved into negative territory.

I know this runs completely counter to intuition. For most of us, that time is inextricably linked to start-up culture. That's when companies that would eventually become giants started with a couple of people in a garage. That's when the landscape of business was changed by the dot-com boom — and saw its subsequent bust — then rebounded to fundamentally alter the way we communicate and generated a world of tech start-ups and angel investors. But activity in start-ups reaches far wider than technology, and entrepreneurship is not confined to Silicon Valley. We're also talking about mom-and-pop shops and local small businesses.

The IPO rate — a measure that has been linked to encouraging entrepreneurship and start-up activity — is also falling, while M&A activity has been strong, particularly over the past decade. The end result here is that industries are becoming increasingly concentrated, and the average listed company is bigger, older, and more profitable.[3]

On the worker side, people are now more likely to be employed at large, mature firms and are much less mobile than they used to be.

The share of employment at smaller and medium-sized younger firms has fallen from about 20 percent to 10 percent in the past few decades, while the proportion of workers at larger, older firms has risen from about 40 percent to 50 percent.[4]

The rate of job reallocation is falling as well — that is, the number of jobs added to and subtracted from the economy. We think of this churn as a central feature of the U.S. labor market, but the reallocation rate has actually fallen by about 22 percent since the early '90s.[5]

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[2] Ryan A. Decker, John Haltiwanger, Ron S. Jarmin, and Javier Miranda, "Declining Business Dynamism: Implications for Productivity?" Hutchins Center Working Paper 23 (September 2016).

[3] Credit Suisse, "The Incredible Shrinking Universe of Stocks, The Causes and Consequences of Fewer U.S. Equities" (March 2017).

[4] John Haltiwanger, "Top Ten Signs of Declining Business Dynamism and Entrepreneurship in the U.S.," a paper presented at Kauffman Foundation New Entrepreneurial Growth Conference (June 2015).

[5] John Haltiwanger (2015).

Workers are also much less mobile than they used to be. People aren't moving for work the way they used to, and when they do, they don't go as far. The rate of people moving out of state has dropped to less than half the average level we saw in the quarter century that followed the Second World War.[6]

The Impact of Dynamism

While the data clearly point to a decline in turnover and dynamism, there's a logical argument that asks, "So what?" Isn't it possible that this is the natural state of an economy settling into middle age? What's wrong with older, bigger, more profitable firms hiring people who stay around longer?

The very short answer is: innovation and jobs — in the case of the latter, both the number and the quality.

Taking those in turn, innovation intensity is more common in younger, smaller firms. Smaller companies spend more on R&D as a proportion of sales, and research shows that the quality of innovation — as measured by patent citations — is inversely proportionate to firm size.[7] Older, more staid organizations achieve productivity growth from entering and exiting markets, or from expanding and contracting their physical presence, like offices or factories. A significant portion of industry-level growth in manufacturing, for instance, is achieved this way.

High productivity firms also grow faster, contributing to overall productivity growth.

New firms additionally provide job opportunities. That's not to say that older firms don't produce jobs — generally through continued growth, acquisition, and consolidation across industries. But fast-growing businesses, which tend to be young, have historically accounted for a substantial portion of job creation, averaging about 70 percent of gross annual job creation in the decades spanning 1992–2011.[8] And overall, more fluid labor markets ease the path up the job ladder, allow workers to find better matches for their skills, and can encourage attachment to the labor force.

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[6] Tyler Cowen, "The Complacent Class: The Self-Defeating Quest for the American Dream," St. Martin's Press, New York, NY (2017).

[7] Ufuk Akcigit, "Firm Size, Innovation Dynamics and Growth," 2009 Meeting Papers 1267, Society for Economic Dynamics (2009).

[8] Decker, Haltiwanger, Jarmin, and Miranda (2016).

The Culprits

The fact that dynamism has slowed suggests that there has been some fundamental change in the economy.

One theory is that regulatory burden is discouraging new start-ups. And while it is true that regulation has generally increased in the U.S., that pace has not been constant or consistent across industries. We can, therefore, compare industry dynamism with industry regulation and get a sense of whether there's any correlation. The evidence so far indicates that the case is fairly weak, and where it does exist, it actually goes in the opposite direction.[9] The same holds true for start-up rates.

Another possibility is that it's simply too expensive to start a new business. However, if the fixed cost of starting a new business had risen, we would expect to see that new firms are larger, on average, than in the past — but the data don't bear that out either.[10] The inference, then, is that the amount of seed money necessary to get a new firm off the ground has not grown in any meaningful or outsized way.

It may be that regulation *is* affecting the business climate, just not in the way we usually think about it. It may be — to steal a phrase from another economist — more of a "death by a thousand cuts" than a single blow of the regulatory axe, with small changes and impediments combining to create a larger barrier.[11]

Inhibitors of local growth, such as zoning restrictions, could be impeding the flow of workers and capital to high productivity areas. The cost of relocating and attempting to start a new business in places like San Francisco or New York is all but prohibitive. By one estimate, lowering constraints — for instance, on housing supply — in high productivity cities would significantly expand their workforces and increase overall GDP by almost 10 percent.[12]

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[9] Nathan Goldschlag and Alexander Tabarrok, "Is Regulation to Blame for the Decline in American Entrepreneurship?" George Mason University Working Paper 15-11 (February 2015).

[10] John Haltiwanger, Ron S. Jarmin, and Javier Miranda, "Who Creates Jobs? Small versus Large versus Young," *Review of Economics and Statistics*, 95:2 (May 2013).

[11] John Haltiwanger called it "a death by a thousand cuts."

[12] Chang-Tai Hsieh and Enrico Moretti, "Why Do Cities Matter? Local Growth and Aggregate Growth," Kreisman Working Paper Series in Housing Law and Policy (2015).

Importantly, the fact that the decline in business dynamism is not confined to the United States, but is occurring across OECD countries, suggests that broader, systemic forces are likely playing a role.[13] The knock-on effects of technological advancement and demographics are almost certainly involved, as they play a role in a variety of economic measures.

A recent paper poses some interesting questions for the dynamism discussion.

The authors start with the groundwork: that economic activity is being concentrated in fewer firms; that entrepreneurship rates have been declining since the 1970s; and that there has been a decline in the share of GDP going to labor since 1975. Then they note that these trends share the underlying factor of firm demographics: Specifically that there is a shift in age distribution toward older firms — and older firms have higher employment concentration.

Fundamentally, a decline in labor force growth means lower entry rates for new firms. But since the 1970s, labor force growth has declined by 2 percentage points, while the entry rate of new businesses has declined by 6 percentage points — meaning labor force decline alone is not enough to account for the drop in start-ups.

But what if the decline in labor force growth also leads to changes in firm demographics, specifically in the average size and aggregate exit rate? In that instance, the effect of labor force growth on start-ups could be multiplied.[14] This is an active and interesting area of research that I'll be keeping an eye on.

Finally, there is new research by staff at the Philadelphia Fed, which looks at the effect of interest rates.

I want to make clear from the outset that I am not talking about the federal funds rate, which the Fed uses to execute monetary policy — and which we often refer to, as I have done today, simply by the shorthand of "rates." They're looking at natural rates of interest, which is an independent function of economic forces that is beyond the control of us mere mortals on the FOMC. We make our policy in the context set by that natural rate.

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[13] Chiara Criscuolo, Peter N. Gal, and Carlo Menon, "The Dynamics of Employment Growth: New Evidence from 18 Countries," OECD Science, Technology and Industry Policy Papers (May 2014).

[14] Hugo Hopenhayn, Julian Neira, and Rish Singhania, "From Population Growth to Firm Demographics: Implications for Concentration, Entrepreneurship, and the Labor Share," National Bureau of Economic Research Working Paper 25382 (2018).

Looking from the late 1990s to today, their research suggests that both the decline in the start-up rate and the rise in business concentration may be connected to the global decline in the natural rate over the same period.

Larger firms' cash flow is less volatile, allowing them to carry more debt against each dollar of asset. That advantage can make them more willing to buy up new ideas entering the market, particularly as borrowing costs decline. More research is needed, and there is no direct evidence that decreased interest rates have induced larger businesses to borrow with the specific intent of accumulating ideas. However, there is certainly a logical connection. If lower borrowing costs are causing more new ideas to be immediately absorbed into larger firms, then a drop in the start-up rate and growing concentration of sales in large firms are natural consequences.[15]

In fact, this research was sparked by a discussion we had a few years ago about the sluggishness of businesses' real fixed investment growth in an era of record-low interest rates. We thought then that the low-rate environment might be making it more profitable for large firms to grow by acquiring other businesses, rather than building new capacity. The same logic is at work here: Bigger firms can borrow more cheaply than start-ups, which makes it more profitable for the bigger businesses to borrow against the cash flow of a new idea and buy it from the creators.

I should also note here that measurement adds a level of complication to the mix. Creative destruction at the firm level isn't captured by dynamism statistics. Take, for example, IBM's reinvention in the early 1990s, after the collapse of the mainframe market. While it fundamentally remade itself into a different company, that shift wasn't captured in the dynamism data on entry and exit. Dynamism doesn't measure global activity very well either. In this case, Apple is the example. Apple constantly adds and drops suppliers as it continues its evolution in product development; in 2013, for instance, it had about 750 suppliers, but almost 90 percent of them were in Asia. That activity doesn't show up in the U.S. dynamism statistics.

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[15] Satyajit Chatterjee and Burcu Eyigungor, "The Firm Size and Leverage Relationship and Its Implications for Entry and Concentration in a Low Interest World," Federal Reserve Bank of Philadelphia Working Paper 19-18 (March 2019).

Conclusion

While we certainly have a measurement problem, it is still clear that dynamism is slowing and has been doing so steadily, not just in the U.S., but across mature economies. It is also the case that a number of factors are conspiring to keep it that way.

I should note here that dynamism, much like food or wine, should be taken in moderation, and an excess could lead to something of an economic hangover. The downside of dynamism, and the risk of overindulging in it, would be a glut of churn and all its attendant costs — frequent bankruptcies and business failures, high rates of firings and layoffs, too much job-hopping by workers. But in an environment with the right amount, it has its intended effect: Resources are channeled to more productive uses, workers are more engaged with the labor market, and innovation is nurtured.