Steven Davis

On remote work, changes in recruiting, and business startups after the pandemic

As a student at Central Catholic High School in Portland, Ore., in the mid-1970s, Steven Davis took an elective course on economics that piqued his interest. When he went on to college at Portland State University, he initially picked economics as his major but figured he might switch to sociology or international relations. In the end, however, economics won out. "Those fields struck me as interesting," he says, "but economics seemed to offer a more useful set of tools for understanding social and economic issues."

Graduate school at Brown University followed. "I liked thinking and writing and research," he explained. And if academia didn't pan out, he reasoned, he could take his training and make lots of money in business or on Wall Street.

Academia worked out fine. Today, Davis is a leading business and labor economist at the University of Chicago's Booth School of Business and Stanford's Hoover Institution. He is best known for his use of surveys and other detailed data to study business behavior, entrepreneurship, productivity, innovation, and policy uncertainty, among other topics. Recently, he has also looked at the effects of the COVID-19 pandemic on such issues as working arrangements, recruiting behavior, labor force participation, and the challenges facing cities. In some of this research, he has collaborated with economists at the Richmond Fed and the Atlanta Fed.

David A. Price interviewed Davis by videoconference in October 2022.

IMAGE: COURTESY OF THE UNIVERSITY OF CHICAGO BOOTH SCHOOL OF BUSINESS

EF: Your research over the past couple years has looked extensively at remote work. Do you think the hybrid model that's become widespread is going to stay with us? Or is some other arrangement likely to win in the long term?

Davis: I think hybrid work is here to stay for many knowledge workers and many back office and administrative support staff. And for some activities — call center employees, software engineers, and IT support, for example — many of those people will work in a mostly or fully remote capacity. So I don't think we're going back to the pre-pandemic norm in those respects. Some firms will decide that it's best for their organization to have everybody work onsite most of the time, and some people prefer that, so they will gravitate to those firms. But on average, across the economy as a whole, increased levels of hybrid work, and to a lesser extent fully remote work, are here to stay.

In a new paper coming out in *Brookings Papers on Economic Activity* titled "Working from Home Around the World," a group of us found that this big shift to work from home is a global phenomenon among college-educated workers. Now, richer countries have a lot more college-educated workers than poorer countries, so partly for that reason, a bigger share of the workforce in rich countries is in jobs that offer some scope for remote work. You see a clear relationship between the level of economic development and the size of this shift to remote work for that reason.

We also found that employers plan higher work-from-home levels in the future in countries that went through stricter and longer lockdowns during the pandemic. This pattern suggests that government-mandated lockdowns during the pandemic contributed to the stickiness of the shift to working from home. That's layered on top of the other effect I described, which has to do with the education level of the workforce and the mix of jobs.

ECONOMIC SURVEYS

EF: You've created or helped to create a number of economic survey programs, such as the Survey of Business Uncertainty and the Survey of Working Arrangements and Attitudes. Is there anything in particular that has drawn you to this type of data?

Davis: Yes, a couple of things. One is that I came to the view — it took me a long time — that much of our theorizing about economic behavior involves expectations and attitudes of people, which reside inside their heads. And for a long time, most economists resisted the notion of asking people directly about their expectations, their subjective views of uncertainty, their perceptions, their attitudes.

Economists tended to take more of a "revealed preference" approach: We're not going to ask you what you think or believe; we'll infer what you think or believe from the actions you take given the circumstances you face. And that revealed preference approach is certainly one that you want to make use of.

But it's often quite difficult to get a clear understanding of what's happening without having some direct observations on, say, what businesspeople expect about the risks facing their businesses in the next year. Or what workers perceive with respect to the risks of catching an infectious disease if they go back to the workplace. So there is enormous value in trying to quantify people's expectations and perceptions using survey data — and then coupling that data with more standard data sources that economists have long used.

The other thing that's happened is that at least when it comes to surveying workers and consumers, and maybe small-business owners, there have been huge advances in survey economics in the last 15 years. It's become a lot cheaper. There's a whole commercial ecosphere that has grown up largely to do commercial marketing studies, but also to do studies about political attitudes and so on. It's scale economies at work.

The economic profession has, with few exceptions, been slow to recognize how cost-effective it has become to run these surveys now. I expect the use of researcher-designed surveys to grow by leaps and bounds over the next 10 years in academic research, economics in particular.

If you want to survey businesses and you want a broad cross section of businesses, that is still a major undertaking — I would say beyond the resources of a small academic team operating on its own because it's hard to get the attention of senior business executives and get them to respond. That's where partnership with a Reserve Bank within the Fed, for example, can be extremely valuable.

BUSINESS DYNAMICS

EF: Much of your work has been in the area of business dynamics. For those who don't know what it is, could you please explain what economists mean by that term?

Davis: It's an umbrella term. It covers the market process through which some companies thrive and others fail. It covers the institutions, laws, policies, and regulations that influence how that market process plays out and what its implications are for innovation, growth, unemployment, and upward mobility. It looks at the role of entrepreneurship. So it's not a narrowly or sharply defined term.

EF: A shorthand that one sometimes runs across is that it's about firm entry and exit.

Davis: That's a metric for getting a handle on business dynamics. But it's just one of many. It's a useful one because it's easy to grasp. People have an idea of what it means to start a business, so when you talk about business formation rates as an indicator of business dynamics, that's a way to connect with a broader audience quickly.

EF: Why do economists care about business dynamics?

Davis: Well, there are several reasons. We think that at least some kinds of innovative activity have a lot to do with entrepreneurship and the capacity to displace old, moribund firms with new, dynamic ones. Or at least to allow enough scope for new dynamic firms that older ones can acquire them and ingest their innovations and perhaps some of their vibrancy, too. That's the innovation angle, which is probably the most commonly understood reason why economists care about business dynamics. And I agree that's important.

But there's another reason, which I put a lot of weight on. Economies that are characterized by a lot of business entry and exit, up-and-out type behavior, also tend to generate opportunities for people all along the earnings distribution. So in economies that are characterized by lots of dynamism and fluidity among businesses and in labor markets, it's easier to get a job if you want one — and at least get a toehold on what might, with hard work, become a career path, even if you're somebody who doesn't have strong credentials at the outset.

If you're some guy who didn't really like school that much — you've got some basic skills and you graduated from high school — what's the path to upward mobility for somebody who fits that profile? In the United States after World War II, the answer was often to go get a job in a local manufacturing plant. That rarely happens these days.

But you can start a landscaping business or work for somebody else for a couple of years in a landscaping business and then start your own. Or you might become a hairstylist or a tree trimmer or set up your own dog-walking business. There are many ways that the regulatory process can make that easy or hard. Having an economic system that makes it relatively easy to start new businesses and to grow some businesses if you have something to offer to consumers is a good path to upward mobility for a broad population. That's a positive social consequence of business dynamism.

EF: As you know, there have been reports of business dynamism starting to rebound in the United States in the past few years after a long period of decline. Is that how you see it? And what do you think is the future of business dynamism in this country?

Davis: Let's go back again to our metric for business dynamism, and I'll focus on that. Business formation rates rose sharply in the wake of the pandemic. And that's after, as you say, a long period of decline. It's also entirely unlike the U.S. experience during and after the Great Recession of 2007 to 2009. Business formation rates tanked in that recession, they were very slow in recovering, and then they resumed a long downward slide.

Something quite different happened in the wake of the pandemic. In my view, there are three forces at work. First, the pandemic was a major reallocation shock. What I mean is that there was a big shift from spending at bricks-and-mortar retail outlets to online shopping, a shift from dining in restaurants to takeout and meal delivery, a lot of experimentation with remote delivery of health care and other services. There was a lot of reallocation across activities, often within industries, but just providing the same kinds of goods and services in different ways.

There was also a big geographic component to this reallocation. Workers and businesspeople now spend a lot of dollars in different places than before the rise of remote work. There's less spending downtown because you don't have so many people commuting into downtown and more spending in outlying areas closer to where people live.

The second force is that household balance sheets are in much better shape than they were after the Great Recession. Not only that, they're in great shape by the standards of recent decades in general. That's for several reasons. First, in the wake of the pandemic, we had a housing market boom as opposed to the bust we had in the 2006-2010 period. Instead of a stock market crash, the market rose — at least until fairly recently. So both in terms of home equity values and in terms of financial asset portfolios, households were in good shape. There was also government pandemic relief — really enormous, unprecedented amounts of cash funneled to households and businesses.

All of that left households, including current and prospective entrepreneurs, with the resources and the willingness to start new businesses and to grow existing businesses.

Then there is a third force, perhaps more important in the longer term: Business formation and development costs fell in the wake of the pandemic. Even before the pandemic, it typically was cheaper to start an online business than a bricks-and-mortar business. You don't need a building or at least you don't need nearly as much space. You can often start it out of your own home. Online businesses also face lighter regulatory costs and restrictions, partly because they run afoul of fewer zoning and permitting requirements and partly because they can very easily gravitate to business-friendly jurisdictions.

The pandemic, as I said earlier, brought an overall shift in the demand for goods and services to online sources coupled with direct delivery of consumer goods. That meant that the complexity and the average cost of starting a business fell. In addition, there have been advances in communication platforms, like the one we're using now. They make it easier to start a business and to operate a business on a small scale. You can hire somebody who is a hundred miles away to do your bookkeeping for you; you don't even necessarily need to meet your bookkeeper in person. All of these things make it easier to start businesses in smaller cities and in other out-of-the-way places where it's harder to get the ingredients of a company together.

Now, this third factor is one that, unlike the other two, may well persist indefinitely, leading to persistently higher rates of new business formation. In contrast, the adjustment to the reallocation shock is a one-time event; it might play out over several years, but once you've made that adjustment, then you're back to some steady-state level of business deaths and new business formation. And household balance sheets will probably revert to pre-pandemic patterns eventually, and as that happens, households will be no more flush with cash than they were before the pandemic. In contrast, the reduction in both the regulatory costs and the out-of-pocket costs of starting and running a small business seems likely to stick around for some time. That leads me to think that we will see an extended period of higher business formation rates than was the norm before the pandemic.

Steven J. Davis

PRESENT POSITIONS

William H. Abbott Distinguished Service Professor of International Business and Economics, Booth School of Business, University of Chicago

Senior Fellow, Hoover Institution, Stanford University

SELECTED ADDITIONAL AFFILIATIONS

IZA Research Fellow; Executive Committee, Asian Bureau of Finance and Economic Research; Panel of Economic Advisers, Congressional Budget Office; Visiting Scholar, Federal Reserve Bank of Atlanta; Research Associate, National Bureau of Economic Research

EDUCATION

Ph.D. (1986), Brown University; B.A. (1980), Portland State University

EF: You've looked at the interplay between housing markets and business dynamics. Do changes in housing markets have much effect on the entry and exit of businesses? That is, outside of obvious areas like construction?

Davis: John Haltiwanger and I have a paper on this called "Dynamism Diminished." We found that historically, U.S. housing market booms and busts have exerted powerful effects on business formation rates and young-firm employment. When the local housing market booms, people have a lot more equity in their home. That makes them wealthier and more risk tolerant. It also gives them a source of collateral that they can tap if they want to take out a bank loan and use the proceeds to operate or expand a business. As I mentioned earlier, the situation in this respect coming out of the pandemic was kind of a polar opposite of the Great Recession of 2007-2009 and its aftermath.

The spillover effect from what happens in the housing market to the rest of the local economy works partly through consumption demand. That's been stressed in well-known research by Atif Mian, Amir Sufi, and others. The idea is that if your house is worth more, you spend more on local goods and services. Or it's easier to get a second mortgage on your house and you can use the proceeds of the mortgage to increase your spending. What we've stressed and what's distinctive about our research is that increases in home equity values also mean that actual and prospective business owners are wealthier and therefore they're more willing and able to start businesses.

EF: Mortgage interest rates are elevated now compared to what they've been in recent years. Do you foresee that situation essentially making these channels start to work in the opposite direction if the interest rates stay that way?

Davis: Yes, higher mortgage interest rates lead to lower home values, other things equal. Lower home values reduce business formation and the activity of young firms. So higher mortgage interest rates are a negative for those aspects of business dynamism.

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THE MISSING WORKERS

EF: It's been reported that, statistically speaking, we still have a lot of workers missing from the labor force since the onset of the pandemic. What do you think is going on there?

Davis: Millions of people left the labor force in spring 2020 when the pandemic struck. Many of them lost their jobs. And we know that people who left the labor force were not on temporary layoff simply because of the way that the Current Population Survey defines a temporary layoff. If you tell the Current Population Survey that you're on a temporary layoff, they don't count you as out of the labor force; they count you as unemployed and waiting to be recalled.

Many other people who lost jobs stayed in the labor force but did not return to their old jobs. It would seem like a simple thing to know exactly how many, but it turns out not to be so easy with standard, readily available data sources. In time, we probably will get a definitive answer as to how many. But the data sources that actually track large numbers of people over time in a way that makes it possible to get a precise answer to this question don't become available for two or three years after the fact. And even then, they're hard to access.

As to why some people who worked before the pandemic have stayed out of the labor force, it's an issue I'm actively researching. There are a few things going on, but let me mention two that I think are important. One is that there is increasingly good evidence that out of the tens of millions of people who had COVID-19, a small fraction of them have symptoms that endure for months and months. For a portion of that small fraction, the symptoms are severe enough that they really aren't able to work effectively.

You might think well, how can this amount to much? But let's say you have a hundred million people who had COVID-19 — I'm just going to use round numbers here — and 15 percent of them have symptoms that last a long time. The numbers are in that ballpark. Of that 15 percent, let's say a third of them, just to make the arithmetic easy, have pretty serious debilitating conditions like shortness of breath or brain fog, that kind of thing. Now we're talking about 5 million people. Well, you take 5 million people out of the labor force, that's a reduction on the order of 3 percent. That's the long COVID impact on labor force participation, which others have worked on.

And then there's long social distancing, which is the subject of my recent paper with Nick Bloom and Jose Maria Barrero. We provide two kinds of evidence that some people who used to be in the labor force are now staying out of the labor force because they worry about infection risks associated in the workplace or on the commute to and from work. I think both long COVID and long social distancing are part of the story as to why labor force participation rates haven't recovered fully.

There's also something we talked about earlier, which is that household balance sheets are in great shape, and they are in unusually good shape in the bottom half of the income distribution.

In the past year or so, people felt less financial pressure than normal to go back to work. At some point, they may find that they don't have any more savings in their bank accounts, and they have to go back to work. That kind of effect may eventually bring more people back into the labor force.

EF: Together with Richmond Fed economists Sonya Waddell and Claudia Macaluso, you studied how employers recruit workers. Has recruitment been changing?

Davis: It has been changing. There's an important complementarity on the employer side between offering hybrid or remote work and how you recruit talent. If you've made the decision to let employees come into the office only two days a week, let's say, you can expand the geography of your recruiting activities. If you don't want them to come in at all, or just once a month, then you can probably hire from anywhere in the country.

Sonya, Claudia, and I asked firms whether they use the opportunity to work from home as a tool in recruiting new employees or retaining existing ones. And about 40 percent or so of firms said yes, we do — we recognize that it's helped recruitment and retention to offer at least some of our employees and prospective employees the opportunity to work remotely, at least some of the time.

For the firms that are allowing more remote work as a way to recruit and retain employees, we then asked whether that had changed the geographic domain over which they do recruiting. And we did find that the same firms that adopted the work-from-home model at least part of the week are also expanding the geographic reach of their recruiting efforts. I think that makes a heck of a lot of sense.

THE FUTURE OF AGGLOMERATION

EF: Historically, economists have talked a lot about agglomeration economies, including on the labor side — that you want to have centers where people in the same industry or the same sectors are crossing paths, exchanging information. In your view, based on what you've seen, does that seem likely to become less important?

Davis: Here's how I think about it. There are decades worth of evidence that many types of innovative scientific, engineering, and commercial activities were concentrated in dense urban areas. That's well established. It's that kind of observation that leads to the view that bringing a lot of people together into small geographic spaces is helpful to innovation activity.

But despite that, I am reasonably optimistic about what the pandemic and the whole shift to remote work means for the pace of innovation. That's because something else has also been happening, too: The opportunities for agglomeration economies in online settings have been growing by leaps and bounds. The possibilities for people to interact and do innovative things, even when they are not in the same physical location, has been expanding. It was happening before the pandemic, and the pandemic accelerated the process. Video conferencing platforms like Zoom have gotten a lot better since the pandemic started. More people know how to use them. Many other online collaboration tools have become improved as well. So there are two contending forces at work here — we might get less agglomeration benefits in physical space even as we get more agglomeration benefits in virtual space.

A recent paper by Chinchih Chen, Carl Frey, and Giorgio Presidente looks at co-authorship patterns in scientific publications in recent decades. And it shows that historically there was kind of a quality discount on articles that were written by teams of people who were located in different cities, very much in line with the notion that if you're not physically in the same place, it hurts the innovation process. But the quality discount shrank over time, and by around 2010 the quality discount vanished and became a quality premium. In other words, in the last decade or so, a disproportionate share of the big-hit scientific articles were actually prepared by teams of people who were in different geographical locations.

And you can see why that might be so. Research enterprises really require specialized knowledge of many different sorts. It's hard to get all of that in one place. If you have a co-author in Canada, one in Mexico, one in the United Kingdom, and another one in Japan, it's pretty hard to coordinate all of those people physically. But you can do it on the cloud, using Zoom, using online collaboration tools, and so on. So that's what you see in scientific publications.

Jeremy Pearce, a postdoc at Chicago, has shown that geographically dispersed teams have also become more prevalent over time for new U.S. patents. Currently, Jeremy and I are investigating whether geographically dispersed inventor teams are becoming a more or less important source of high-value, high-impact patents.

That's just some of the evidence that leaves me in a fairly positive state of mind. I am optimistic about what the pandemic and the shift to work from home means for the pace of innovation, even though, historically, physical proximity has been a huge deal in fostering innovation. **EF**