INTERVIEW

Valerie Ramey

On fiscal stimulus, technological lull, and the rug-rat race

One of the foremost economic researchers in the United States on fiscal policy, and fiscal stimulus in particular, is Valerie Ramey of the University of California, San Diego. For much of the 21st century, macroeconomic research has tended to be dominated by monetary policy rather than fiscal policy — because, Ramey has joked, the Fed sponsors more economics conferences than the Treasury Department. But fiscal stimulus came to the forefront of policy debates in 2020 as the SARS-CoV-2 coronavirus led to shutdown measures to slow its spread, as well as catastrophic drops in demand in sectors like travel. Ramey's research on the effects of fiscal stimulus thus gained new relevance and urgency.

Ramey has also been highly active in researching changes in the ways Americans use their time, including the ebbs and flows of their leisure time. Some of this work has been in collaboration with economist Garey Ramey, a colleague at UCSD and also her collaborator in raising two children and in 39 years of marriage. Other areas of her research include the business cycle, economic growth, and labor markets.

David A. Price interviewed Ramey via videoconference in October 2020.

PHOTOGRAPHY: MICHELLE RAMEY

EF: How did you become interested in economics?

Ramey: Mostly by accident. When I was in high school, my father suggested that I should be a lawyer because he saw how much lawyers charged. I said, "OK, that sounds good." That career plan naturally attracted me to debate, so I joined the debate team in high school and in college.

The year I started college, the national debate topic was "Resolved: that the federal government should implement a program which guarantees employment opportunities for all United States citizens in the labor force." At the beginning, I didn't know anything about economics or statistics, what the Federal Reserve was, or what an R-squared was. But while gathering evidence for debate cases, I became a mini expert in the area, which is typical of debaters. I also came out of it thinking that economics was interesting.

I met my now husband, Garey, on the debate circuit. He wanted to be a lawyer as well and had heard that economics was a good major for law. So we both became economics majors and thought the classes were interesting. We were still thinking of being lawyers, but then we heard from more senior debaters who went to law school that they didn't like the profession.

So we wondered what to do. We thought about earning MBAs, but our economics professors said, "Oh, you'll be bored with an MBA, you should get a Ph.D." We took their advice and, as my husband explains, "We quit debate and joined economics."

EF: In your research, you've looked at the effects of fiscal stimulus. You've found that the effects vary depending on the circumstances, such as what kind of stimulus is applied and what the economy is looking like. How would you characterize the transfer payments made in response to the coronavirus pandemic? And what do you think we'll find out about their effects?

Ramey: The transfer payments have been very important for supporting the economy. The COVID-19 recession is different from a standard recession because everything is happening much more quickly than usual. Because of this, it was more important to distribute the payments quickly than to take extra time to target them more precisely.

In my view, the government needed to throw out lifelines to help keep households afloat, so that they could

pay their bills, and businesses afloat, so that employment relationships and supplier relationships could be preserved. We know that these relationships are really important. If they're broken, it can take a long time for workers to find a new job and for businesses to establish new networks. Preserving them means that we have a better chance for a faster recovery from the recession.

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EF: You've found that looking at news records is a helpful way to measure the historical effects of stimulus. Why is that?

Ramey: I started looking at news records when I realized that changes in government spending are often announced at least several quarters before the government spending actually occurs. That's really important, because the empirical techniques that researchers were using previously to measure the effect of government spending implicitly assumed that any change in government spending was essentially unanticipated. But our models tell us that individuals and firms are forward-looking and therefore will react as soon as the news arrives about a future event. This means that the previously used techniques had the timing wrong and therefore couldn't accurately estimate the effects of government spending.

So I needed to create measures of expectations of what was going to happen to government spending. To do that, I read mostly *Businessweek*, but also the *Wall Street Journal*, the *New York Times*, and the *Washington Post*, to see what the business press was saying week after week about what they expected to happen to government spending. I then paired that information with a political or military event that started changing expectations.

One historical case was the start of World War II, when Germany invaded Poland in September 1939. Events happened over the subsequent months that kept changing expectations. Even though the United States was supposedly not going to enter the war, many businesses knew that they would be increasing their production of defense goods and people knew the military draft was coming because FDR was making many speeches on the importance of building up defenses. To assess the effects of spending, it was important to figure out the exact timing of when the news arrived about future increases in government spending rather than when the spending actually occurred.

You may wonder whether individuals and businesses really do change their behavior based on anticipations of future changes. A perfect example is the start of the Korean War in June 1950, when North Korea invaded South Korea. Consumers, who remembered the rationing of consumer durable goods during World War II, and firms, which remembered the price controls, reacted quickly: Consumers immediately went out and bought consumer durables like refrigerators and washing machines, and firms immediately started raising their prices. All of this happened before there were any changes in government spending or any policies on rationing or price controls.

EF: In your research into economic growth, you've said that although we've seen dramatic jumps in technology in some areas, we're in a period overall of what you call "technological lull." Tyler Cowen similarly has labeled our age the Great Stagnation. Why are we in a period of slow productivity growth?

Ramey: Alvin Hansen, who coined the term "secular stagnation," described the nature of productivity growth in a famous speech in 1938. He argued that technology tends to progress not just bit by bit, slowly, steadily, but rather with irregular transformative revolutions.

The pattern has been that a big, new technology arrives and then it takes several decades to exploit it. We had the Industrial Revolution in England, the diffusion of electricity in the U.S., and more recently, the information technology revolution.

After a revolution, productivity growth will go up and stay up for quite a while as we exploit and further develop these new technologies. But then we hit diminishing returns. There are further improvements, but the marginal product of those improvements is lower. We then fall into a lull until there's another big revolution.

Researchers have studied what leads to more innovation. We know a few things, such as the value of having an educated workforce and having an environment that promotes research and development, but it's not clear how much extra oomph you can get from government policies.

I wish we had better answers for how to get out of a technological lull. Part of the challenge is that creativity comes about randomly. Sometimes, by chance, a group of people who interact suddenly spark ideas in each other and that leads to another technology revolution.

EF: Another area of your research is the use of time in households. You've noted that John Maynard Keynes predicted in 1930 that as productivity went up, we'd have more leisure time, so much so that we wouldn't be able to figure out what to do with it. What happened?

Ramey: Keynes was a very good economist, and I have to say that that essay, "Economic Possibilities for our Grandchildren," is one of my favorite writings of his. But his prediction was based on an implicit assumption, which was about income versus substitution effects.

Valerie Ramey

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To explain, when productivity increases, wages increase. Suppose your wage increases. Should you respond by working more or less? On the one hand, you have an urge to work more because the returns to working have increased, so the opportunity cost of staying home and playing computer games has risen. That's the substitution effect.

On the other hand, if your wage has gone up, you're earning more for the hours you already work, so therefore you feel wealthier. If leisure is what we call a normal good, then you should demand more of it and therefore work less. That's the income effect. The substitution and income effects work in opposite directions.

Keynes was obviously thinking that the income effect was much bigger than the substitution effect. Neville Francis and I wrote a paper called "A Century of Work and Leisure" to try to figure out exactly what had happened to hours worked in the market and to leisure time over the course of the 20th century in the United States. To measure leisure, we used time diaries to measure hours spent working in the market, in home production, education, and commuting time and then we subtracted them from the total hours available in a week to back out leisure hours. We found that the leisure time for what we call prime-age individuals — ages 25 to 54 — didn't change much over the 20th century.

Where we did see leisure time change was among the young, particularly teenagers and early 20s, and among older people, over 54 and particularly over 65. In 1900, many people worked until they were just too sick to work and then passed away, whereas now people retire and then enjoy their golden years of leisure after retirement.

So there was an increase in leisure over the 20th century in the U.S., but the increase was relatively small compared to the huge increase in wages over that time period. That suggests that the income effect is only slightly bigger than the substitution effect.

EF: Do you think Keynes was wrong in 1930 about people's idea of the good life? Or did our idea of the good life change?

Ramey: I think he didn't foresee how cool all of the new consumer gadgets would be. (*Laughs*.) If all we did with our higher productivity was produce more Model T cars, people would get tired of those goods and say, "I'd rather have more leisure." But much of the rise of productivity has been directed toward inventing and producing brand-new, exciting goods. Now we can travel around the world on jet planes, at least when there is no pandemic; we have great smartphones and many other fun new products we can buy.

Perhaps the most important new type of product has been created by medical research, generating innovations that have improved the quality of life, such as hip replacement surgery, and innovations that have increased the quantity of life, such as cancer treatments. Good health care can now give us many more years of feeling well enough to enjoy life and can extend our lifespan. However, good health care isn't free, at least at a societal level, and it now consumes 18 percent of U.S. GDP. We wouldn't be able to produce great health care for everyone if most of the population followed Keynes' prediction and enjoyed abundant leisure rather than working.

EF: Of course, people also spend time on parenthood. In your 2010 article "The Rug Rat Race," you and Garey looked at the time parents spend on child care. You found it increased starting in the mid-1990s. For mothers with a four-year degree, you found it increased by more than nine hours per week. What made you interested in this?

Ramey: There were two things that sparked my interest. One was the patterns I observed in my earlier time-use research and the other was what was happening in our own lives.

In my research for "A Century of Work and Leisure" with Neville, and also in my solo paper on time spent in home production in the 20th century in the United States in the *Journal of Economic History*, one of the puzzling things I saw was that the amount of time that people, particularly women, spent on domestic work was going down in almost every category — cleaning their houses, cooking, and chores — except for child care. Time spent on child care had been falling in the 1970s and 1980s but then started rising in the 1990s. Trends in time spent on child care were a puzzle because they looked so different from other home production categories.

The second motivation was that we had two children ourselves. We started out in a neighborhood where most people didn't have college degrees, because that's where we could afford a house. Then in 1998, we moved to an area where most people had college degrees and often graduate degrees. We noticed a big step up in anxiety about children and the amount of time that parents were putting into them, particularly the extracurricular activities. We had grown up during the baby boom where we were all free-range kids who ran out on the street. We didn't see that happening in our new neighborhood.

So we asked each other, "What the heck is going on?" I knew a number of the other mothers had quit wonderful careers as architects and engineers specifically so they

could drive their kids to soccer practice. They had found it too stressful to do all these activities when both parents worked. We kept hearing from the other parents that, "Oh, you've gotta have these activities to get into a good college," and "you've got to be top in your sport," and "you can't just do the sport during the regular season, you have to do the offseason to make first string." And that's what led us to write the paper.

EF: Is that what seems to be behind the shift? College preparation?

Ramey: We think so, yes. There were other hypotheses, such as parents worrying about the safety of their children. We methodically went through these other hypotheses and just could not find evidence consistent with them. For example, the trends didn't match up with the observed trends in child care time.

So we researched whether there was evidence consistent with our new hypothesis about the competition to get into college. Our story is as follows. Since the 1980s, the propensity to go to college has risen, in large part because of the rise in wages of a college graduate relative to a high school graduate. However, the numbers of students applying to college didn't increase much from 1980 to the early 1990s because there had been a baby bust 18 years earlier. In the second half of the 1990s, the number of students applying to college rose significantly because of a previous baby boomlet. Thus, the demand for college slots rose in the mid-1990s.

The result was what John Bound and others have called cohort crowding. They found that the better the college, the less elastic the supply of slots to the size of the cohort trying to be admitted. For instance, Harvard and Yale barely change how many students they admit to their entering class. The flagship public universities are a little bit more elastic, but they're not elastic enough to keep up with the demand to get into those top colleges. It's only if you go down the hierarchy of universities that you find a supply elasticity of any size.

Our hypothesis was that during earlier times when you didn't have this cohort crowding, most college-educated parents felt as though their kids could get into a good college. So they were pretty relaxed about it. But then as you started having the cohort crowding, the parents became more competitive and put more effort into polishing their children's resumes because they realized it was harder and harder to get into the top colleges.

EF: You've said that UC San Diego, where you teach, is an outlier among top economics departments in the share of undergraduate majors who are female, 42 percent. Why is that?

Ramey: We're not quite sure. We have two hypotheses. One is something that was started long ago: One of our previous department chairs thought it was a good idea to put big-name professors who could teach well in principles classes. So he gave extra teaching credit for teaching principles and a few of us signed up. Kate Antonovics and I were the ones who taught principles the longest; Kate taught micro and I taught macro.

We both ended up winning prestigious university-wide teaching awards. So I think we were effective in teaching, and the fact that we were female might have had an effect on how many female students decided to continue economics. That's one possibility.

Another possibility relates to the huge fraction of students we have who are Asian Americans, and, more recently, foreign students from Asia. I have noticed that many American students will start out in economics and say, "Ugh, this is really hard," because it's technical. Then they'll decide to major in one of the other social sciences that is not so demanding mathematically. This seems to happen more often among female students than among male students.

But when I talk to many of my Asian American students, I hear that their parents often say, "No, you've got to stick with a major that is going to give you success and that will be lucrative." And if it's hard, that's one of the reasons it does turn out to be lucrative. They understand supply and demand. This might be why more Asian American students, both male and female, are more likely to stick it out.

Those are just hypotheses. We haven't been able to run a randomized control trial.

EF: Is part of the picture persuading people that economics is a good career?

Ramey: Certainly. In my introductory macro classes, sometimes students don't do well on the first midterm. That's the perfect time for me to make my case for persevering. I present the results of a study that shows the distribution of lifetime salaries by major. What's surprising is that even the median of the salary distribution for econ majors is above the salary for the top 20 percent for many other majors. I compare economics to some of the softer business majors, where most students end up earning less than the median econ student. I explain yes, it's hard, and then I tell them the wonderful story of John Bogle, who started Vanguard; he found economics to be very hard, but he stuck with it and then ended up doing great things with his economics degree. I tell them about all the opportunities in economics, and that even if you aren't at the top of the curve in economics, you can still have a great career in economics.

EF: You've been an economics researcher and teacher since you finished your Ph.D. in 1987. What do you think has changed for women economists in that time?

Ramey: Until recently, hardly anything had changed in macro. There were never many of us. When I was a grad student at Stanford, in the macro seminar, one day I

was a little bored with the talk and looked around and I suddenly realized I was the only woman there. (*Laughs.*) I think there were only three women out of the 25 grad students in my Ph.D. cohort. It didn't bother me so much because I was married to an economist, which made it a lot easier. But there were few women in macro back then, and there were few women in macro until just recently.

Now we have the Women in Macro Conference, which has been wonderful for helping women in macro network. Other changes certainly include the Me Too movement and the steps taken by the American Economic Association and other organizations, which have made the economics profession a kinder, gentler profession. Those changes may make it more appealing to women considering going into the field.

The opportunities for women have just exploded. It's nice, but I get invited to so many things now that I have to say no very often. For a while, I didn't say no enough and then I found myself overscheduled. Now I feel better saying no because that means another woman will get the invitation.

EF: You mentioned that being married to Garey made a big difference to your graduate school experience. Do you think that had an effect on your experience in the profession overall?

Ramey: Oh, yes, definitely. We enjoyed co-authoring and discussing economics with each other. Also, it made my life as a female economist much easier. I heard some real horror stories from the single women in the profession. It was just never a problem for me because everybody knew my husband.

EF: What are you working on now?

Ramey: I am working on a couple of things. One is with Garey again. It's called "The Value of Statistical Life Meets the Aggregate Resource Constraint." There's a concept called the value of statistical life that is used by regulatory agencies; researchers estimate how much wage people are willing to give up not to work in a more dangerous occupation. Ten million dollars for the equivalent of a lost life is a typical estimate. And regulatory agencies in government use those numbers to decide how much to spend to prevent death.

People then started using those numbers to think about COVID-19. One thing we wondered was whether you could actually take those numbers and use them for bigger risks of death.

Here's the kind of stark example we can use for illustration. Suppose that Martians took the 330 million people in the U.S. hostage and said, "If you want them back, you need to pay a ransom of $10 million because we know that's how much you value a statistical life." Well, that would add up to $3.3 quadrillion. But the GDP is only $21 trillion. The total value of the wealth in the United States — if you add up all the capital stock, the minerals, and land — is about $125 trillion. This extreme example illustrates the importance of considering the resources available.

Another project I'm working on is called "Anatomy of a Dynamic Labor Market: The U.S. from 1940 to 1950." I became interested in that era because I wanted to understand why the unemployment rate rose to only 4.5 percent at the end of World War II despite the largest decrease in government spending in U.S. history.

Somehow the U.S. economy was so dynamic that it was able to absorb all of the veterans coming back from the war and people switching occupations out of the defense industries. I was also interested in that period because inequality fell dramatically at the beginning of the 1940s and stayed low until the very late 1970s.

I had been wanting to answer these questions and had been looking for data. In the process, I found a discussion in one of Claudia Goldin's papers of an old dataset that was collected in 1951. I asked her about it, as well as Bill Collins who did follow-up work using the data, and I went to the archives to see it myself.

It turned out Claudia and Bill had only used the information on the front of the interview cards. But when I turned the cards over, I saw the entire history of individuals' employment, when they were in school, when they were unemployed or deciding to stay at home, when they were in the military. I knew the reason that they had left every job, I knew their industry, I knew their occupation, I knew their geographic area and even the company they worked for. And each card told a story.

For example, one of the people in the sample was working at the Alcoa factory in Los Angeles when he was interviewed in 1951. He was an African American man who was originally from Mississippi. His first job was working as a chauffeur for a wealthy family in Mississippi. Later, he worked in logging, then joined the military during World War II and received training there, and then ended up working in a factory in Los Angeles after the war. So we could see the path he took from chauffeur in Mississippi to factory worker in Los Angeles 10 years later. Chances are he had seen the West Coast when he shipped out in the military and thought, "Wow, this is a great place to be," and decided to settle here after the war.

There were all kinds of stories like that in these cards, and we have them for 13,000 people. I have a great team of undergraduate research assistants who input all that data, and then we spent months and months and months cleaning it. Now we have the full dataset put together, and we're analyzing the data.

We hope to learn many things from the data, such as what features of the economy and society during the 1940s led to so much upward mobility and such a vibrant labor market. We also want to compare the experiences of individuals at the end of World War II to those of individuals at the end of the Cold War. **EF**