



**The Brookings Institution  
Recession Remedies Podcast**

**“How effective was aid to business during COVID-19?”  
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*Episode Summary:*

The U.S. responded to the COVID-19 recession with massive and unprecedented support for businesses. The business sector overall fared much better than had been expected at the outset. Is this evidence that the business aid had strong economic benefits? Why should policymakers think twice before redeploying the same toolkit during future recessions? Ben Iverson, associate professor of finance at Brigham Young University, and Gabriel Chodorow-Reich, associate professor of economics at Harvard University, join host David Wessel to discuss lessons learned about support for businesses.

**WESSEL:** Welcome to the Recession Remedies podcast, exploring lessons learned from the economic policy responses to the COVID-19 pandemic. I'm David Wessel.

The United States government responded to the COVID-19 recession with substantial support for businesses: loans, grants, bond buying, various subsidies, more than \$600 billion in the first year of the pandemic alone. And while there were obvious strains among some firms, overall businesses fared pretty well, much better than had been expected at the outset. Business bankruptcies declined during a recession year for the first time since 1980, and they remain low.

So, today we're going to talk about that with two of the coauthors of our chapter on support for businesses in our new *Recession Remedies* book. I'm happy to be joined by Ben Iverson from Brigham Young University.

**IVERSON:** Hi, and thanks for having me.

**WESSEL:** And Gabe Chodorow-Reich of Harvard University.

**CHODOROW-REICH:** Thanks a lot, David, it's great to be here.

**WESSEL:** Now you can read the whole chapter and the rest of our book online at Brookings dot edu slash Recession Remedies. But let's start right in. Ben, let's start by just outlining what were the major elements of the government's support for business during the pandemic, the big ones?

**IVERSON:** The first one that people think of probably is the PPP, the Paycheck Protection Program, which was a program designed to provide support for businesses so that they could continue to employ people during the pandemic while they were shut down. And I'm sure we'll talk more about that as we get into it.

But there were other programs as well that we talk about a little bit in the chapter. There was some disaster loan relief that came from the Small Business Administration that was fairly significant. There was encouragement by the Fed and others to for lenders to be lenient towards their borrowers. And then the Fed put in place a lot of different facilities as well to support financial markets kind of in the background, things where they said they're willing to purchase debt if they need to or expand their balance sheet if they need to. I think all those things kind of were directly aimed at supporting businesses.

And then, of course, there were the things that were aimed at supporting consumers. And that's like the other side of the equation for a lot of these businesses where businesses need customers, and if we can support the consumers, then that helps the business to stay, stay in business. And that's maybe not so much the direct focus of our chapter, but I think it's an important backdrop to the things that supported businesses as well.

**WESSEL:** Right. So, Gabe, the beginning of the pandemic was quite scary. I heard someone say that we put the economy into a medically induced coma, and it conjured up fears of business bankruptcies and empty storefronts and basically destroying the very foundations of the business sector of the economy. But that didn't happen. So, how did business fare during the pandemic and how does this compare to what people like you and others were expecting?

**CHODOROW-REICH:** It's a great question. If you go back to the spring of 2020 and what people were thinking then, and we can look back at what forecasters were expecting then—private sector forecasters, government forecasters like the Congressional Budget Office—there really were these fears that this temporary shutdown, which we knew already at the time was going to be very severe, would turn into a persistent, long lasting recession. And this was true even after people saw the initial policy response. The CARES Act was passed at the end of March of 2020. Even a forecast made after that saw a long and hard road ahead.

And what we've seen, in fact, in the macroeconomic recovery overall is much faster growth than was expected, and an unemployment rate that fell much faster than was expected, and growth that was faster than historical experience would have suggested as well—a faster decline in the unemployment rate.

The other big difference relative to the last several recessions is we didn't see this big wave of bankruptcies. Traditionally, when the unemployment rate goes up, so do business bankruptcies, and in the COVID year of 2020, and then it continued in 2021, despite the big increase in the unemployment rate, business bankruptcies actually fell.

And then, of course, we all know now as we've started to come out of this, businesses have emerged with a huge amount of capacity for demand, and probably the best and most high frequency way to see that is in the vacancy data where businesses have been extremely active in trying to hire new workers and build really since the last year after vaccines became available and demand came back.

So, in all of those measures, both relative to what people expected, relative to historical experience, businesses just fared much better than could have been the case.

**WESSEL:** So, Ben, does that mean that when we think about all the support we provided to the business sector on top of generous unemployment insurance and the stimulus checks and all the aid to state and local governments that we basically did too much for business given the size of the shock?

**IVERSON:** Yeah, it's a great question, and like all good questions it's hard to pin down an exact answer to that. Really to think about the answer to that question, you'd need to know what the counterfactual world would look like if we hadn't given all of that support. I think where we would come down on this is that the support was important, the support was helpful for a lot of businesses, but also I think it's important to remember that the underlying cause of the recession was different from most other recessions in the past as well, right. The underlying cause was a pandemic. And like you said a few minutes ago, we purposefully put the economy into a coma for a period of time, and that could potentially call for a different toolkit. Whether that toolkit was too much or too little, I think is going to be really, really hard to say. We think that the data sort of points towards some of that support going to the wrong businesses. But whether we did too much or too little overall, I think that's hard to say.

**WESSEL:** All right, but let me pick up on that because business is a broad category. We're talking about airlines and major manufacturing companies and banks, but also the corner sandwich shop, which is in trouble because so few people came to work. So, when you think about big business and small business, where was the need greatest and did we hit the balance wrong? Ben, do you want to try that?

**IVERSON:** Yeah, sure. When we think about big businesses, they have a lot of other sources of support that small businesses have a hard time accessing. And that's where, when you think about the role of the government coming in, what you would like is the government to come in where financial markets or just economic markets more broadly fail or aren't providing that kind of support. And so, big businesses if they need financing they have a lot of other resources available and are thinking about an airline company or even just a large like retail firm. Any of those businesses, they can access public bond markets or they can cut their dividends and save liquidity that way.

Small businesses don't have a lot of those types of opportunities. And so we would argue that the place where government can solve some of these frictions is usually in smaller businesses like you mentioned—the corner shop that might be just down the road that's owned by some local entrepreneur, they don't have as many external resources available to them. And that's where those frictions kind of make it harder for them to survive a temporary shutdown, a long-run downturn, whatever those things are, it's harder for them to withstand that.

And each one of those individual businesses might not be vital for the economy or even for the functioning of a local economy, but when you aggregate them, they aggregate up to a significant portion of the employment that's out there, and that's where that support would come into play. And definitely, I think targeting those smaller businesses would make more sense than blanket support.

**WESSEL:** So, Gabe, let's talk about the Paycheck Protection Program. That was probably the most prominent aspect of the federal government's response to the business hit during the pandemic. The PPP made five point one million loans, potentially forgivable loans, in just a few months of 2020, \$522 billion worth, you say in your chapter, although most of those loans were pretty small. Most of the money went to big loans, to big companies. So, the idea was, at least as I recall, we're going to give companies a lot of money and we're going to tell them as long as you hold onto your employees we'll forgive the loan. So, what do we know about what actually happened and what did we learn from it?

**CHODOROW-REICH:** Yeah, this is a really important question, and it's one that we go into quite a bit of depth in the chapter. So, the Paycheck Protection Program gave grants or loans that were forgivable if the funds were used for a particular purpose. So, effectively business grants to firms who had fewer than 500 employees—could be more if you were in the restaurant sector—and the amount was two-and-a-half times monthly payroll with a cap of \$10 million. As David just noted, there were five million of these loans that were given just in the first few months.

And there are a couple of quirks of how this program was designed that have allowed researchers to try and study the effects. The first is that 500 cutoff. So one thing you can do is look at employment outcomes and other outcomes at firms who had 495 employees and 505 employees, and those are pretty similar firms along many dimensions. But the four hundred and ninety-five employee firm would have been eligible, five hundred and five employee firm not eligible.

So, there have been a series of academic papers that looked at that and found that the firms just below the cutoff did have higher employment through the spring and summer of 2020. But they converged back and by the end of 2020, you really don't see much difference across those firms. And as a result, the cost per job that was saved at those firms was pretty high.

And the other quirk of the design was the initial appropriation for the Paycheck Protection Program didn't have enough money in it. And that's why we all remember these news stories of firms struggling to get their banks to approve the loan, and some did, and some didn't. So that gives rise to some variation in when firms got loans. And using that, you again see that the firms that got the loans a little bit earlier had better employment outcomes over the summer, but it was relatively costly.

And this goes to the difference between what is in the statute—Congress said, You have to spend 60 percent of your money on payroll—and the fact that in the world money is actually fungible. And so a firm can take these grants and it can maintain its payroll, but it can wind up using the money to do other things.

And so in another piece of evidence that we have for the larger recipients is what did they do with the money? And there's separate academic work I've done looking at how these firms pay down their other bank loans, and that in fact, for the larger recipients—again, we're really talking about these firms that got a million dollars, \$5 million, \$10 million PPP loans—by three months later they substantially paid down their non-PPP bank debt, which might have been a good thing for those firms, but does not suggest that it was really supporting employment.

So, in terms of targeting and what you might want to do next time—and of course, I'm sure we'll talk more about this—but one of the main purposes of this volume in writing this chapter was to try and think about how you might modify policies in the next recession. You know, if the PPP had been rolled out with a cap of \$250,000 instead of ten million, it would have cost about half as much and it would have affected the loan amounts of less than 8 percent of borrowers. And we think given the evidence we have, and given the theory that Ben mentioned that there's a good reason to think that larger firms wouldn't be so desperate for money anyways, that might be one place where such a program might be modified fruitfully.

**WESSEL:** Hmm. Interesting. So, Ben, you have some firm views in the chapter about the money that the federal government gave to airlines. Explain why you think that was not a great idea.

**IVERSON:** When you think about a particular industry like airlines, for example, the thing to think about is, first of all, why should the government support that particular industry over other industries? And I think there are arguments to be made there that the airline system is systematically important to the functioning of the country or things like that.

The reason why we come down a little bit more firmly on that maybe not being the best targeting of government funds, is that these big airline companies they almost all fall into this category of firms that have other options where they don't necessarily need the government support. But airlines in particular, we have a lot of examples of them successfully using other structures, whether that's reorganizing or restructuring their debt outside of court or using bankruptcy protection to restructure when they've hit financial troubles before.

Essentially, nearly all of the major airlines in the United States have been through bankruptcy in the last 20 years. American Airlines, Delta Airlines, United Airlines. They've all kind of gone through this process. And while bankruptcy and Chapter 11 have their costs—they're

not free, they would cause some disruptions—in general, we feel like it works fairly well for these large companies, like an American Airlines or a Delta Airlines, to be able to use that type of system. So rather than the government needing to come in and provide subsidies to these larger businesses, maybe we should have allowed the structures that were already in place that already appeared to have worked well to support them. And whatever support that went to the airlines could have been funneled to smaller businesses for whom out-of-court restructuring is harder, in-court restructuring is harder, finding financing is harder. It's mostly because they had other options available to them that appears to have worked fairly well.

**CHODOROW-REICH:** If I can just come in on that as well and just add two points. The first is how skewed the aid to the airline sector was. So, Congress authorized 58 billion in the CARES Act for air carriers. Obviously, air travel was severely affected by the pandemic. Of that, about twenty nine billion was disbursed in the first year. And of that twenty nine billion, twenty two billion went to the six largest U.S. airlines, the ones we all know. So it really did tilt not towards small companies that were involved with supplying meals for airlines or something, but the six large airlines.

And given that, with something like the Paycheck Protection Program, it would have just been infeasible for the U.S. to take equity stakes in all those businesses. They're not publicly traded. It would have been a huge portfolio. With six airlines an alternative, if they really did need government cash, would have been something more like what was done with TARP in 2008, where instead of giving them aid grants outright, the U.S. government took warrants so that they could potentially reap some of the upside as air travel has responded and these airlines are now profitable again.

**WESSEL:** Yeah, it's interesting, I don't remember much discussion about that at the time, the idea of taking a stake in the airlines like we did the last time. Gabe, what about the Federal Reserve? One of the things that distinguishes this episode from the Great Recession of 2008-09 is that Congress told the Fed, We want you to buy corporate bonds and the Fed offered to buy corporate bonds. They didn't actually end up buying that many, but they did do some intervention in the market. What do you make of that? And what lessons should we learn about both the potency of the Fed doing this and the wisdom of using this tool again?

**CHODOROW-REICH:** The Federal Reserve programs are really interesting here because they were backstopped with a lot of money from the Treasury. They were given large authorizations, hundreds of billions of dollars of corporate bonds authorization, hundreds of billions of dollars of authorization to help banks make loans through the Mainstream Lending Program. And in the end, they used very little of that capacity.

In the corporate bond intervention, the fact that they bought relatively little doesn't mean that they didn't have an impact. And if you look at that period—so the dates when that program was announced, some of the major dates after that when details of the program were given out—what you see is that corporate bond spreads fell, so cost of borrowing for corporations in the bond market went down. And those spreads fell particularly for the bonds that were eligible to be purchased by the Federal Reserve. So, that suggests that just the announcement of this program seemed to have an important impact in calming the bond market when it when it happened.

And that might have happened on its own, but in March of 2020, the bond market was in quite a bit of disruption. There is something called the bond CDS basis. So this is the

difference between a corporate bond and then taking on the same exposure as in that bond, but using credit default swap markets that had opened up a lot, which is a sign of disruption in the market. And when the Fed made this announcement and said we'll go buy corporate bonds, that close pretty quickly. So, again, it's very consistent with its having an impact on market functioning.

**WESSEL:** Let me just let me just play that back to you. So basically, what you're saying is there was a lot of concern that big companies would not be able to borrow on the bond market. And so Congress told the Fed, We want you to stand ready to buy bonds. And the Fed, because it does what Congress tells it, set up a program to do that. And the mere fact that the investors knew that the Fed was ready to buy if the world ended led them to be confident enough to buy the bonds, and the Fed didn't actually have to buy very many.

**CHODOROW-REICH:** That is one interpretation of what happened, and it's a very plausible interpretation. There's another which is that once investors knew that the Fed was going to buy if things went south in the bond market, they were willing to buy not because they had confidence in the fundamentals and not because liquidity was immediately restored in the bond market, but because they knew that if things went south, they would be able to sell it to the Fed that was backstopping. And since in the event what happened was things turned out pretty well for businesses and these bonds paid off. We can't actually distinguish those two theories from this particular episode.

**WESSEL:** So then you mentioned the Main Street Lending Program. Only big companies can sell bonds. Lots of companies, if they need to borrow, have to go to a bank. And the Main Street Lending Program was intended to encourage banks to lend, and it doesn't seem to have worked very well, in my reading. But do you agree, and what was the design problem there?

**CHODOROW-REICH:** It was not utilized very heavily. That's different from saying that it didn't work well or it wasn't designed well. The Main Street Lending Program was set up to try and target firms that are a little bit too small to be in the bond market, but a little bit too big for the PPP program, either to be eligible for that or for that to make much of a difference.

And what it did was it told a commercial banks that if they made loans to these companies through the MSLP architecture, they would then have to retain 5 percent of the loan themselves—so they would have some skin in the game to make sure that they were properly evaluating the credit concerns of the borrowers—but they could then sell 95 percent of the loan to the Federal Reserve, and the Federal Reserve would then be responsible both for providing 95 percent of the capital for the loan and also for taking 95 percent of the losses if the loan went south.

The reason to think why this was underutilized was this is a program that is really well designed for a period when banks don't have enough capital to lend themselves, so they don't have enough liquidity to lend themselves. So, if you think about the 2008 recession, when the banking sector was really suffering because of the losses they had taken on mortgages and mortgage backed securities and associated products, and they were restricting lending to the corporate sector at that time, that was a big problem. And facility at that point that could have helped to make loans to the private sector through the banks, but without the banks having to put up too much of their own capital, could have been very useful.

In the COVID period, the banks turned out to survive pretty well, and that, I think, is a function of a couple of things. First is the regulation that's been put in place and the capital requirements put in place since the 2008 recession meant that the banks entered 2020 in much better position. And the second is that all of the other support that we've talked about to businesses, that Ben talked about at the outset to consumers, meant that banks didn't lose a lot of money on loans because people then didn't have liquidity to repay. And so because the banks had adequate capital, it just wasn't that necessary for them to use this program to fund money to businesses.

**WESSEL:** I see. So, basically, it was a good solution but to a problem we didn't have.

**CHODOROW-REICH:** Yeah, and that's exactly where we think in terms of lessons for the future this is something that we might want to keep around, because a future recession might have constrained banks. And you want to design such a program in such a way that it only really gets used when the banks are constrained. So, in that sense, the fact that it wasn't used at this round it is probably more of a feature than a bug.

**WESSEL:** Okay, so let's conclude just where you were going, Gabe. What do we learn from this episode, which was so unusual, that we should keep in mind the next time we have a recession, which I'm afraid will arrive sooner than I thought it would when we started this project. You draw a couple of lessons at the end, but, Ben, do you want to tell us a couple of things that you think we should remember, and then I'll ask Gabe to finish the list?

**IVERSON:** Yeah, of course. That's the ultimate question, right? What did we do well during the recession and what can we learn? And I think a couple of things. A really sort of big picture important lesson that we hope people draw is that it's very tempting to look at the outcomes from this particular recession, which turned out to be short lived and a quick recovery, and that's very tempting to look at that and sort of say therefore all the toolkit that we just employed for this past recession is the tool kit that we should use.

And there's danger in that thinking. I think, just like we were just talking about the Main Street Lending Program, for example, there are different tools for different problems, and diagnosing those problems can be very, very hard at the start of a recession. I think with this particular case, a lot of people thought that the COVID recession would be worse than it turned out to be.

And if you get down to the base layers diagnosing what the problem is, you can sort of separate these problems into two large buckets. One is the liquidity problem where the financial markets kind of shut down and firms that are long-term viable just can't get the financing to stay afloat for a while and there's a lot of cost of rebuilding them. There's also a solvency problem, and solvency problem is like these firms are suddenly sort of not viable anymore, and we need to think about how we restructure the economy to funnel resources towards the right ones.

This recession turned out to be much more of a liquidity event, and it turned out to be shorter lived, I think, than most people expected it to be. And because of that, some of these tools didn't get used as much, like the Main Street Lending Program, and some of these tools maybe weren't targeted as well as they could have been because we were sort of funneling these resources to the those larger businesses. So, in terms of like broad lessons, I think the



first big lesson, the point that I'm trying to make is don't just look at the outcomes and say therefore this the tool kit that that we need to use.

More specific things that I think we would point to, and Gab will probably follow up on this as well, is let's first think about what are the frictions we're trying to solve. And in a lot of cases, those split across firm size type of lines. So, larger firms we can support in a different way than smaller firms. And I think hopefully that's come out as we've talked here today of thinking about what those frictions are.

The other thing is, I think that the stuff that Gabe was talking about with the Fed programs, just because a program doesn't get used also doesn't mean that it's not a bad idea in the future. Just having that program in place as a backstop is a good lesson to learn. Because it's hard to predict before a recession what the problems are actually going to be, thinking about ways to have programs that are used when they're needed and not used when they're not needed—and I know that's kind of a nebulous idea—but that type of structure is a really good idea for government programs rather than doling out money as quickly as possible to anyone who asks for it. And that's going to depend, I think, on different structures, but I think that's a nice lesson to pick up from this.

**WESSEL:** Great. Gabe, what would you add to that, if he left you any room?

**CHODOROW-REICH:** I'll just add one comment, which goes back to something that Ben said at the outset. It's hard to completely silo the different types of aid the government did during this recession. The business aid, the household aid, as well as the nature of the recession itself. And that applies the lessons we would take away as well. So, for example, the value of keeping workers who are idle at home because of a shutdown due a pandemic or generally because of slack demand, the value of keeping them on their firm's payroll through a program like PPE depends also on the generosity of the Unemployment Insurance system, which is the alternative if these workers separate but receive UI.

So, in the pandemic, the high generosity of UI and the fact that this was a period when we weren't so worried about the traditional moral hazard concerns or the fact that people are receiving UI would be less likely to search for new jobs, probably dampened how much we really needed the PPE. But in a future recession that might be very different.

Similarly, the importance of sustaining business aid a year after the recession starts—as we did in this recession with the second round of PPE, the Restaurant Revitalization Fund, some other business aid programs that kicked in not until 2021—really depends on the speed of demand recovery. And in COVID, that was very rapid, both because of the household aid and because of the nature of the downturn itself and people coming back to want to spend when vaccines became available. And the 2008 recession, it was much longer. And that might have called for more sustained support. So, the lessons that we take away, one of the lessons has to be that things should be tailored to the nature of the recession itself and to the other policies that are in place.

**WESSEL:** Let me ask you about one thing you said. In Europe, they had a different approach to keeping workers attached to their companies. They didn't do this complicated PPP thing. They just told the employers, Keep the workers on your payroll will pick up some of the tab. Do you think the PPP actually succeeded in keeping workers attached to their employers?

**CHODOROW-REICH:** There is a big debate in this area. What PPP did was not so different from some of those European programs in terms of instead of having workers become unemployed and collect UI, keeping them attached to firms and receive money that way. As we discussed, the evidence on PPE suggests some of it did marginally increase firm payrolls. And to be clear to the audience, when I say some of it marginally increased firm payrolls, that means there's a lot of firms and a lot of people who were kept on payrolls because of PPP, it's just relative to the huge scale of the program we're quantifying how much that was.

What we did not see in this recession is a slow recovery of the U.S. labor market that plausibly could be tied to the fact that workers have lost attachment to their firms. What we've seen instead is a historically rapid decline in the unemployment rate, historically high firm vacancies, and historically tight labor market. All of that suggests that the attachment consideration in this recession might not have been so important. Now there's one caveat to that, which is the decline in labor force participation. So, even though the unemployment rate has come down very rapidly, it is still the case that there are fewer workers and it took longer for some workers to come back than before the recession. And there are several hypotheses for that that I don't think we know the answer to. One is people left the workforce because they were concerned about getting sick. These might have been people who were particularly vulnerable to COVID. But another possibility is a little bit of the attachment hypothesis, and maybe some of these workers, if they had remained at their original firm, wouldn't have dropped out. And that's, this is that the place where we get a say that's a great topic for future research.

**WESSEL:** Those are really complete answers. I want to just put a finer point on some things that you do say at the end of your chapter. A couple of specifics, which you mentioned along the way, as we discussed. One is you think if we do something like the PPP, it ought to be targeted at smaller firms, not bigger ones. And secondly, things like aid to the airlines, we should be really skeptical about that, because as Ben said there's other ways that they can handle a crisis and run them through bankruptcy a number of times and I can still get a flight to L.A. this afternoon, so they seem to do that. And third, of course, the answer is always the remedies should fit the problem, the medicine should fit the disease. But we learned a lot about the Federal Reserve's power to support banks and corporate bond markets. So that's good, but we have to think about how to use it at the right time. The next time something comes, we shouldn't automatically do that again. Fair?

**CHODOROW-REICH:** That was a fantastic summary.

**IVERSON:** Yep, it's great.

**WESSEL:** Okay, well with that, I want to thank Gabe Chodorow-Reich of Harvard, and Ben Iverson of Brigham Young University, for their work on this chapter and joining us today. If you want to read their chapter and all the other work in this book, *Recession Remedies*, you can find it at [www.DotBrookingsDotEduSlashRecessionRemedies](http://www.DotBrookingsDotEduSlashRecessionRemedies). Thank you, Gabe, thank you, Ben.

**CHODOROW-REICH:** Thanks very much, David, for having us on and also for producing this excellent book, not just our chapter, but many of the chapters are great resources for understanding the pandemic and the response.

**WESSEL:** I'm David Wessel, director of the Hutchins Center at Brookings. Recession Remedies is a joint project of the Hutchins Center and the Hamilton Project at Brookings, and is a production of the Brookings Podcast Network. Learn more about our other podcasts at Brookings Dot Edu Slash Podcasts and follow us on Twitter at PolicyPodcasts. You can send feedback to us at Podcasts at Brookings Dot Edu.

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