Hutchins Center
on Fiscal & Monetary Policy
at BROOKINGS

Are state and local governments prepared for the next recession?

2020 Municipal Finance Conference Webinar

Hutchins Center on Fiscal & Monetary Policy

The Brookings Institution

0:00:04 David Wessel: Good afternoon everybody, this is David Wessel, I'm Director of the Hutchins Center at Brookings. And with the help of my colleagues at the Brandeis International Business School, the Olin Business School at Wash U in St. Louis, and the Harris School of Public Policy at the University of Chicago, we're pleased to welcome you to this, our annual webinar. And this year we picked a topic, when we picked it, it was a lot of speculation that the US was on the cusp of a recession. That doesn't appear to be the case today, although it's pretty certain that we will have another recession sometime, and it will have an effect on state and local governments. And I think what we were trying to do today is to get some sense of what are state and local governments doing, and what should state and local governments do so they are more resilient for the next recession?

0:01:01 David Wessel: And I'm very pleased that we have two very qualified speakers today. Laura Porter is a managing director at Fitch Ratings where she's been for about 15 years. Mike Nadol is a Managing Director of PFM Group, and in his distant past was Deputy Mayor and Finance Director of the City of Philadelphia. So, Laura's gonna start, and she has some slides. Mike is then gonna follow, and then we'll open it up. Given our past experience, having people ask questions orally seems to be kind of complicated, but on the right side of your screen you should see something that says, "Questions," and you can just type in a question and we'll keep track of them and ask as many as we can. You should know that the session is being recorded and we'll make the audio and the transcript available later. The slides are already on the website, on the Hutchins Center website. And so is a white paper that Mike Nadol wrote which kind of elaborates on some of his presentation. So with that I'm gonna turn the mic over to Laura.

0:02:08 Haowen: Hi Laura, is it okay for me to transfer the screen to you?

0:02:12 Laura Porter: Yes please, thank you. And thank you David, and thanks everyone for calling in today. Mike and I are... First, I'm gonna stop to show my screen. So Mike and I are gonna approach the question of whether state and local governments are prepared for the next recession from two different perspectives today. We're gonna bring you from the relatively narrow focus of a rating agency to the broader considerations of someone who is thinking about all the aspects of running a government. I come from the rating agency perspective, and the one job of a ratings analyst is to assess whether bondholders are going to be repaid in full and on time. And from that perspective, our answer to the question is a strong yes. We believe that the vast majority of state and local governments are well prepared to manage through the next recession in a way that preserves their credit quality.

0:03:08 Laura Porter: And that's not to say it's gonna be easy, but governments have been steadily bolstering their financial resilience throughout this extended recovery and we believe that they'll continue to adjust through anticipated challenges. That's what we've seen time and again in downturns. There are new challenges all the time, and some of the challenges get more challenging over time, but we feel that the states and local governments are very well positioned. And I'm not just saying that because I'm being optimistic today, this assessment of the conditions is very clearly indicated in the ratings that we assigned to state and local governments. Our average state rating is AA+, that's on the left hand side of the screen. If you're wondering, that BBB is the state of Illinois. And our average local government rating is AA. These are exceptionally high ratings, and it means that we think the ability of these governments to manage throughout the economic cycle is very strong.

0:04:05 Laura Porter: This slide shows you year over year changes in tax revenues for state and local government. And you can see here that without question economic cycles do have a direct effect on revenues. You can see the state revenues, mostly income and sales taxes, drop quickly in downturns. And you have some pretty steep drops, as well as recovery. Local revenues, which are primarily property taxes, are much less exposed. But even there you do see economic sensitivity. So, of course, it's very important to consider these issues, and another aspect for local governments is that you have to worry about the knock-on effects of state funding declines. That the exposure of that depends on the level of government, but it's particularly an issue for school districts, which are heavily influenced by state funding decisions. So again, you really do... The question is a good one, about preparedness, because how a government manages at times of economic recovery is hugely influential on how that government is gonna look at times of economic decline.

0:05:19 Laura Porter: As I mentioned, Fitch's ratings are designed to convey the relative prospects for full and timely payment of debt service. And when you look at our rating definitions, you see that they distinguish credits primarily based on relative vulnerability to adverse business or economic conditions. Our focus is on forward-looking expectations, and we expect the governments performance to vary, potentially considerably, throughout an economic cycle. A financial manager who built reserves in a recovery and then uses them at a time of economic decline, for example, didn't become a bad manager at the point where they started drawing on reserves. They may just be doing what's reasonable to do at that point in the economic cycle. That is... When I say that, it sounds obvious, but I think that that has been an evolution in municipal credit analysis. Because I think that over time there had just been the sense of "More reserves, more reserves, more reserves", and then concern in using reserves.

0:06:00 Laura Porter: And we've taken a pretty explicit through the cycle approach. And I would argue that even though credit analysis gets the most attention at times of economic and financial stress, in many ways the more important time is times like now, well into an economic recovery, paying attention to what management is doing there and looking about what's being done to support financial resilience once things take a turn.

0:06:44 Laura Porter: So to get a little more granular about how we make our assessments, I will spend a few minutes on our rating criteria. I'll try not to go too long on it. In evaluating the credit of a state or local government we start with the base of the economy and then we consider the four factors that are laid out here. Under "revenue framework" we're looking at the strength of revenue growth prospects and the government's independent legal ability to control their revenue system. When looking at "expenditure framework" we're comparing the pace of expected spending growth to the pace of expected revenue growth, and that's trying to get to long-term sustainability, and we're also looking at the government's ability to control spending. And that can vary a lot, depending on the nature of services it provides. Under "long-term liability burden" we're looking at both debt and pensions combined as a fixed-cost burden on the resource base, so we're looking at that as a percentage of personal income.

0:07:39 Laura Porter: And then finally "operating performance", that's really where it all comes together. There we're evaluating the government's financial resilience through downturns and budget management at times of economic recovery. So again, the two sides of that coin that work together. As I mentioned, we don't expect a government's finances to look the same throughout the economic cycle, but it is important that times of economic growth are used to bolster resilience in preparation for downturns. And in considering this we use scenario analysis to think about the

concept in a more consistent rigorous way, and it allows us to compare one government to another. A little bit more on scenario analysis. So, for us, scenario analysis looks at issuer-specific fundamentals and potential performance under a standard economic stress. And we rate to kind of a moderate economic downturn. And the power of doing this is that, from our perspective, it highlights how cycles affect individual issuers differently, and that depends on the nature of their revenue system, the nature of their economy, the nature of what they do and what they provide.

0:08:45 Laura Porter: So it really is very issuer specific. We have a stress-test model that considers the revenue impact of a moderate economic downturn, and then the model-generates scenarios. They're not forecasts, and we're very clear that they're not forecasts, but we've been using the system for about four years and have found it really additive to the analytical process. The scenario analysis differs for state and local governments, but in both cases we're looking to have a consistent way to evaluate financial flexibility, and that is essentially preparedness to address stress. When you're thinking about a government's financial flexibility, this is no surprise. But you can really boil down to three things. You can increase revenues, you can cut spending, or you can use reserves. States have a lot of control over revenue and spending, including the ability to download challenges to lower levels of government. In contrast, local governments have less control, but in generally a general higher level of reserves. So that compensates to some extent for the lack of the same amount of control over revenues and spendings.

0:09:52 Laura Porter: Recognizing the importance of reserves to the local government credits, our local scenario analysis is focused on the maintenance of reserves, specifically. And that's in contrast to our state scenario analysis, which is more oriented to comparisons of the level of budget shortfall that the State may need to address in a downturn. So, slight differences there but to the same ultimate goal. So let's spend a few minutes on local specifically, and how we answer the question of "What's the appropriate level of reserves for a local government?" We get that question all the time, and the short answer is, "There is no one level of reserves that make sense for all local governments at every point in the cycle?" We don't set static one-size-fits-all reserve expectations, instead we think it makes more sense to consider reserves in the context of the issuer's ability to control revenues and spending, and that's... The term we use for that is "inherent budget flexibility".

0:10:54 Laura Porter: And then we'll also look at historical revenue volatility. And we look at that as an indicator of the level of revenue shortfall that the government might need to cover in a downturn, and as I mentioned, that's a number that can vary considerably. As I mentioned earlier, we expect reserve levels to fluctuate throughout the economic cycle, and we know that there are many reasons that you might want to have reserves beyond what is needed to make the rating agencies and bond holders happy. Again, we just care about the ability to pay debt service. So our minimum reserve expectations are going to be set to that... To answer that question. And there are many other reasons why, obviously, governments keep reserve. So, for example, a government that doesn't want to be cutting spending or raising taxes at the point of a downturn would want to keep higher reserves than some governments who are very comfortable doing those kind of potentially pro-cyclical spending cuts when revenues go down. So this page and the next page are trying to show you visually how we explicitly incorporate a government's ability to control its budget, as well as its revenue volatility into our consideration of reserves.

0:12:09 Laura Porter: I don't wanna spend too much time going through into the details here, but if you look at the blue lines that are labeled on the right hand side, AAA through BBB, and that corresponds to our rating scale, with AAA the highest you can go, that is reserve expectations for

different rating levels. And that is calculated as a function of inherent budget flexibility and historical revenue volatility. So this government's revenue system has relatively limited exposure to a downturn scenario. You can see in the box on the top that, based on historical results, its revenues would drop only about 1% in a 1% US GDP decline scenario. That's pretty manageable, but you can also note in the box that the issuer has minimal inherent budget flexibility. That means there's little they can do to adjust revenues or spending at any point. So the reserves are the only tool to address the effects of an economic downturn. In this situation, reserves are very important to our assessment of financial resilience and for the highest assessment of AAA reserves would have to equal more than 15% of spending.

0:13:14 Laura Porter: Contrast that to this situation. The government depicted in this scenario is more than twice as exposed to a downturn on the revenue side. Their revenues, based on historical results, would be expected to decline 2.3% in the same downturn. However, as you can see by the bunching of the blue lines at below 5% here, reserves are much less important to the assessment of financial resilience for this issuer. And that's because the government has superior inherent budget flexibility, there's lots they can do on the revenue and spending side to deal with downturn conditions, so reserves become less important in our assessment of whether they're prepared for the next recession, specifically from a credit quality preservation perspective. So that's our framework for looking at these things. And when you look at it through this framework you really see the inherent credit strengths of US states and local governments.

0:14:05 Laura Porter: I won't go through everything on this slide. But the ability of governments to manage their budgets in a manner that preserves credit quality is really solid. And everything laid out here for locals is even more true for states. We think this makes the vast majority of governments very well prepared in the next downturn. Finally, before turning it over to Mike, I'll leave you with a few pieces of good news. The first, I mentioned earlier, that there are many reasons to keep reserves beyond pleasing the rating agencies, and you'll see here that local governments have been building reserves to very high levels. School districts tend to be lower due to state policies, but if you look at the sheet even those are relatively high. And I'll note that in general reserves remained high even during the Great Recession. So, the preservation of reserves and the maintenance of those reserves has been a real characteristic of local governments, by and large.

0:14:56 Laura Porter: This slide is a quote from Fitch's rating criteria for US states and local governments, which is leading into Mike's presentation, by highlighting that management can make a big difference in bolstering credit quality and in the assessment of preparedness. It's not just the hand you're dealt, but also how you play it. And on my final slide, in case who were wondering, Fitch is not forecasting a recession for this year or next. This is our most recent forecast from December and it anticipates a slowdown but not a downturn. With that I'll turn it over to Mike to take the broader view and look forward to questions after that.

0:15:33 David Wessel: Thanks. Mike, Haowen will pass you the screen.

0:15:37 Michael Nadol: Terrific, thank you.

0:15:40 David Wessel: While we're waiting, somebody asked about, "Are the slides online?" And the answer is, yes, the slides are online. And we will post the audio and a transcript of the presentation shortly after it's over.

0:16:00 Michael Nadol: Great. So I'm gonna shift gears a little bit, although I think you'll observe quite a few common themes with Laura's presentation. My perspective is a bit more that of a practitioner, or now an advisor to practitioners, and in that spirit I see the sort of economic forecast that Laura just shared, and our firm's forecasts are pretty consistent with that. I listened to David at the outset of the presentation talk about the sense that the risk of a recession is abating a little bit, or at least farther off on the horizon, and I hope that's all true but, as a practitioner, as someone who's worked with governments developing budgets or served in that role myself over the years, I have to say it all makes me nervous. And part of that is that we're now more than 10 years into what has become the longest expansion period in the US economy dating back to when it was... These business cycle dynamics were first tracked, looking backward to the 1850s. We're in an expansion phase that's more than twice as long as the average in the post-war era.

0:17:15 Michael Nadol: And yeah, I expect there are a number of economists and folks on the phone who are very sophisticated about those issues. Don't have to tell you that old age alone won't kill a good economy. And there's a lot more to what might go into the next downturn, but as somebody who's lived through those cycles and what they mean in terms of service delivery and the difficult choices involved for state and local governments, I'll tell you, if you'll forgive me, a pre-Super Bowl sports metaphor, I feel a little bit like a quarterback who's just been sitting in the pocket a long time. And you may not quite hear the footsteps yet, you may not see that pass rusher out of the corner of your eye, but you know it's time to let go of the ball, make a move, step into the pocket, do something to preserve your chances of achieving the kind of outcome you're looking for. And that's what it feels like to me. The other thing I'll share is that I took a look at the Survey of Professional Forecasters.

0:18:19 Michael Nadol: Again, some of you are probably familiar with that. It's produced by the Federal Reserve Bank out of Philadelphia. They look at academic and financial sector economists' kind of consensus forecasts of GDP growth going forward, and looking at a report I saw that the projected mean probability for growth in the GDP for the following year would be to the 2-2.9% was kind of the most common outcome, in terms of the mode among the survey respondents. But the survey I was looking at was published in February 2008, looking forward to 2009, one of the worst years of the Great Recession when we actually saw a GDP loss. And none of that is, again, to suggest that that's going to happen. I hope it doesn't and I'm happy that mainstream economists foresee a little bit more breathing room to prepare, but it will come and it is important that governments are prepared.

0:19:28 Michael Nadol: And, again, I think you'll see some of my views aligning well with Laura's around what has been done, but also I'll share some thoughts about some more that can be done to make sure this period of relative good times doesn't go to waste. And when I talk about relative good times, that 10 year plus expansion phase of the business cycle, the low unemployment rate, it's all great news for many people in our country and in our society, but governments still face some pressures even during positive economic times. The slide you're seeing here shares one of the outputs from a simulation model that the Federal Government Accountability Office has developed, they update it more or less on an annual basis now and it adds up in the aggregate across the state and local government sector as a whole, all of the different revenue streams that that sector relies on. All of the different spending categories associated with state and local governments and kind of looks at whether there's an operating balance or not.

0:20:39 Michael Nadol: And what they've consistently found is that, even in relatively good times

state and local governments face budget pressures largely because, and we'll get into this a little bit more deeply, revenues tend to track the economy sales taxes, income taxes, even property taxes to a lesser degree more or less, ebb and flow with how the overall spending and wage growth and the like, the health that are doing, the health of the overall economy. But on the spending side states have Medicaid responsibilities, local governments are labor-intensive have a lot of responsibilities for employee and even retiree healthcare, and that healthcare inflation in particular, pushes spending out of balance with revenues if nothing were to change. If governments were to operate on a pure carry-forward basis. And of course they don't, they look for efficiencies, they find new ways of delivering services they increase property tax rates in some parts of the country from time to time, or layer in a new tax for Ubers and Lyfts or something that may come along. They find ways of year after year, bringing their own budgets into balance. But I think it's just important to note that even prior to a downturn that's often a pressured undertaking. And when you do have a down turn that weakens the particularly the revenue side of the income statement.

0:22:13 Michael Nadol: And by deflating those economically sensitive revenue sources, in the aggregate it's, of course, an even more difficult prospect. But that's the aggregate. In the particular, much as Laura outlined, every state and local government has its own dynamics. And forecasting the degree of sensitivity a government may have to different types of economic conditions on the revenue side, some of the flexibility that may or may not exist to make spending changes, both legally and practically and even politically, is an important part of determining what you can do to be better prepared. And that starts with a baseline forecast under, again, mainstream economic expectations, the kind of forecasts that Laura shared that most folks are anticipating for the years ahead. And you see here just a couple of graphic examples from one city we worked with, showing how, absent a recession, they faced those kind of moderate pressures to keep up with healthcare inflation in particular, given fairly tepid revenue streams. But when you then begin to break that down further and think about, first in a good scenario, in a baseline scenario, "What can you do to bring that into balance? What can you do to manage medical insurance costs without gutting the quality of the plans for your workforce? Are there new revenue streams you can grow and enhance?"

0:23:58 Michael Nadol: As you start to break that down in a recession scenario, by effectively stress-testing a budget during, as the Fitch system does on, I'm assuming, a moderate recession, or you could also look at both a moderate and a more sever downturn, what are the outcomes that you can anticipate? And part of evaluating that can be done by looking empirically at sort of what has happened in the past. The first chart here from another one of the rating agencies shows the largest one year operating revenue decline in major cities across the country, and you can really observe pretty readily how variable that can be. A lot of the Texas cities are property tax reliant, and may have significant transfers from their utilities that help to sustain their general operating revenues and that can leave them in a better position, albeit there's some volatility there as well. Whereas governments, often in California, that have had long-standing constraints on their legal ability to raise the property tax, dating back to the old Prop 13, decades ago, are more sales tax reliant in most cases and see more volatility.

0:25:15 Michael Nadol: And the chart below, that sort of range of experience highlights how there are both differences in degree of susceptibility of major, here local government, and some state government revenue streams to the economy and it's cycles, and also differences in timing. You'll see that sales tax tends to react first as people begin to become hesitant to spend.

0:25:52 Michael Nadol: Over time, as income tax filings take place, as the employment slows, you see a decrease in income tax and wage-related revenues. And then... In the early 2000s recession, property taxes didn't really even dip at all, but only in the great recession did they come down with the particular housing intensive character of that downturn. But even there, there was a lag because of the assessment process, and some of the... Depending on the place you are and the timing and cycle for that, the built-in delays before a drop in property tax values actually shows up in the public sector too. So, as you think about how to stress test a government, you wanna look at these dynamics, think about how they'll apply to a particular state or locality, and also think about what may have changed since the last time there was a downturn. In a number of communities the tax base isn't quite the same as it was more than a decade ago when that last recession was experienced. At the state level, there have been a number of changes in terms of millionaires taxes that some states have adopted that increase the reliance on a small subset of the total population. And that subset of tax payers tends to have more volatile incomes.

0:27:28 Michael Nadol: So in a down turn, whether you like the policy or don't, just as a purely technical matter, in a downturn you're likely to see more volatility than in past recessions for that increasingly significant share of the tax base, just due to changes in tax policy or in a city or other local government, it may reflect changes in demographics or addition of a new tax, maybe a tax for cannabis that wasn't here the last time we had a recession. Kind of working through all that to model out what you can anticipate and how much your revenues are exposed is a key part of diagnosing first sort of where you would be, and then what you can do. And moving to...

0:28:13 David Wessel: Mike, can you just back-up. There's a question about the top panel on that slide. So someone asked... I think they just didn't understand what it is. They asked about what's the difference between green, blue and red. So, green are cities that had operating revenue increases right?

0:28:30 Michael Nadol: Yeah, the worst year of the recession they still didn't go negative in terms of their aggregate revenues. Which can be...

0:28:37 David Wessel: And the difference between blue and red is just degree?

0:28:41 Michael Nadol: It's degree. There's kind of a 9.9 percentage drop breaking point that was used to differentiate the more severe...

0:28:52 David Wessel: Thanks.

0:28:52 Michael Nadol: From the challenging, but not quite as severe instances.

0:28:57 David Wessel: Great. Thanks.

0:29:00 Michael Nadol: Sure. So that's kind of some thoughts about how you would stress test for revenues. Kind of... Some... Most states and major cities, not so much among smaller governments, will have even econometric models and access to professional forecasting support to even help model out those kinds of sensitivities, at least for their biggest revenue sources. On the spending side though there are also changes that can take place. You have to think about total expenditure simplistically as "What are your fixed costs?" Those elements of a budget that probably aren't gonna move as much if at all, debt service commitments. If you don't default that's largely fixed.

Perhaps pension payments and the like, and then everything else just kind of simplistically comes down to how much of a service level do you provide and what does it cost per unit of service. And you may actually see in a downturn that some services decline in terms of demand, you will see for typically, for example, a slowdown in development, which means fewer building permit inspections and less activity for plan reviews and those sorts of activities. You may, in contrast, see a greater demand for some social services and safety net programs.

0:30:27 Michael Nadol: In terms of the unit costs of service, you may see your vendor sharpen their pencils a little bit. Because it's tougher for them to find work from... In the broader marketplace. You may see wage pressures moderate a little bit for public employees. And then on the fixed cost side, which I'll just touch on briefly a little bit more, what simplistically might be categorized as a fixed cost, like debt service, may not be entirely so. You may, just taking the case of debt service, see some governments with variable rate debt, and in a downturn if interest rates fall, as they often do, those costs may actually abate a little bit, you may be able to issue future debt to maintain a capital program at a lower interest rate as well and actually see some moderation. And I guess the bigger theme here of stress testing is you want to develop a scenario that hangs together, that is not a worst case "line item by line item" in a budget, but is a consistent approach to what the budget as a whole would look like under particular economic conditions.

0:31:41 Michael Nadol: And then just turning a bit more to those fixed costs, there of course are the effects on pensions. One of those kind of changes in the landscape since the last downturn is that most pension systems, as you see in the graphic on this slide, have de-risked a little bit. They're still assuming at the median investment return assumptions of 7.25%. In a downturn that would very likely be much lower for a couple of years. And that in turn would increase an unfunded liability, require additional amortization payments to pay down that liability and add to a government's budget strain. But I'd note that a decade ago the median was 8%. So the...

0:32:31 Michael Nadol: And there were a lot more above that median and a lot fewer below. So there's some de-risking here that goes into the equation. It's also, from just a technical perspective of forecasting this, an area where different actuarial practices, smoothing practices, lags in the production of actuarial evaluations means that the negative effects on a budget of investment losses in a downturn would tend to hit a couple years down the road and be smoothed out a bit. Just to keep moving, I'll just note some of these other items listed on this slide reflect some of the ancillary funds that governments may maintain to help, for example, fund their fleet services and they'll keep an internal service special bucket of money to help maintain and replace and renew their fleet.

0:33:32 Michael Nadol: You may see that dip a little bit and be underfunded, and not something that would typically be focused on, and maybe not even be a big concern in good times. But it's a little bit like a sandbar under shallow waters, and if the tide goes out that sandbar can surface and create a compounding problem. So it's something that's important to plan for and shore up during better fiscal periods. In terms of what to do about this. We'll talk more about this in the Q and A period but this slide is sort of noting the Captain Obvious solutions to preparing for a downturn. You certainly want to increase your reserves, so it's something that I think Laura articulated well, and there is no one-size-fits-all approach to that. It should be calibrated to the different risks you face and the flexibility you anticipate to be able to address those risks. So I have a client who has pegged their reserve levels to being sufficient to cover half of the effect of revenue losses in a moderate downturn for two years. Given themselves partial support and reasonable breathing room and that's kind of what their basic budget stabilization reserve is pegged to achieve.

0:35:00 Michael Nadol: The other sort of obvious approach, once you've understood better through a stress testing exercise, sort of what the parameters look like is to not get out over your skis. And the bottom graph, on this slide indicates just simply over the preceding half decade or so, if a hypothetical government with a $500 million wage base had grown its wages through headcount increases and salary adjustments at the rate of inflation, instead of just 3%, not that 3% is terribly high, they would have reduced their running rate going forward by over $30 million a year. And it's sort of an illustration of how it's never easy to hold down spending, to hold down new service commitments or increases you might want to give to hard-working public employees. But it's a lot easier and less disruptive to keep things in moderation through the better years of a business cycle rather than letting them become on-going commitments that might require layoffs or severe freezes or cuts when you hit that next difficult period.

0:36:28 Michael Nadol: The final note on this slide is just to think about a fully comprehensive recession readiness plan, and you see a few thoughts about that in the bullets on the right hand side of this checklist. Not just spending parameters and reserve calibration, but thinking about ways to improve your tax base by thinking about tax policy. Again, not easy to make changes, but easier to be thoughtful, for example, about whether you may have tax incentives that have outlived their usefulness and in a growth period you could engage in an exercise to systematically reevaluate whether all of your tax incentive programs make sense. Maybe sunset those that don't, it's something the state of Oklahoma has been doing for the last four or five years. If you were to launch that kind of a program in the teeth of a recession, the sort of good policy flavor of it might get caught up in more immediate concerns from your business sector about short-term effects or perceived loss of effects just when they're facing the toughest times with their businesses, and it'd be a much harder thing to achieve.

0:37:54 Michael Nadol: So, kind of tactically are there things that can be done, going down this list, to further, for example, de-risk pension or retiree healthcare programs? Or better fund them, develop more conservative and prudent actuarial assumptions. It will have a short-term cost, but that's something that can be absorbed now and better position you for the future. Can you top off the tank on those internal services funds? Can you make new investments out of whatever better resources are available today to get a municipal fleet into a good life cycle where you don't have high repair costs, because of excessive breakdowns or or to invest in new energy efficiency? Are there strategies with the workforce for still providing a competitive compensation package but perhaps exchanging better wages if you can afford it, for somewhat stronger cost containment in those areas, like healthcare and pensions where you could potentially still provide a good benefit at a lower cost and going forward have less exposure to high growth rate cost centers, and probably more flexibility to make changes by containing future wage growth during a couple of years of a recession without having to really cut into folks benefits that they're counting on.

0:39:28 Michael Nadol: So, kind of take the analysis from the stress test, look at the different drivers of the budget, category by category, and the different risk exposures you have with the downturn, and then systematically think about ways to shore those up, be prepared and make good use of the period that hopefully will last at least several more years, and better yet even longer. So those are few of my thoughts and I guess David it'll turn it back to you.

0:40:01 David Wessel: Yeah, thanks very much. I have a couple of questions and I encourage people who have any more questions to use the question tab. And let me just start with, I noticed on

your slide Mike, that you showed reserves at something like 8% of spending, is that right? It's a lot higher...

0:40:22 Michael Nadol: I did, and I should have probably paused to be a little more clear about what this is. These are the reserves for state governments. I think some of what Laura may have shown were cutting across the sectors or perhaps local government specific.

0:40:37 Laura Porter: Yeah, yeah, mine are local governments in particular, yeah and the aid is very high for states, as you can see.

0:40:44 David Wessel: Right. So is... Mike, so what I judge from this is that, seared by the great recession, states, at least the median state, has been building savings to prepare for the next one? And it's kind of encouraging. I mean it's much higher than it was before the last recession.

0:41:00 Michael Nadol: Yeah I would say, just kind of speaking somewhat anecdotally, with the states and cities and counties that I work with, memories can be short for all of us in terms of forgetting the hard times, but the effect of the great recession was pretty game changing in terms of the way a lot of, particularly finance officers, and many responsible elected officials have approached preparedness. And you can see kinda how folks built back up after the tech bubble collapsed in 2001 at the state level and kind of got in what they thought was decent shape, heading into the great recession. And just weren't ready for something of that magnitude. So yeah, I think some lessons have been learned. There unfortunately are some counter examples. This is the median and there are certainly... There's some who've done even better and some who are a bit below, and states too have varying volatility if they maybe are energy revenue dependent more than perhaps another state and the like. But yeah, the overall story here is definitely positive per state.

0:42:27 David Wessel: And Laura, it doesn't look quite a sharp at the local level, but it's upward sloping. Is that fair?

0:42:33 Laura Porter: Yeah. So on the local side it hasn't... They didn't go down in the same way. And I think local... I very much agree with Mike, locals have always I think seen reserves as an important thing for them, whereas states I think historically have thought "Oh, you have a lot of control over your budget, you can make your way through". It wasn't so much of a priority and I agree that they were hit so hard, really twice, in a relatively short period of time. And not just more of a commitment now, but also more rigor around how they are sized. Mike mentioned that, but there are many states that are looking at really,"What's our potential exposure and what position do we wanna be in?" So it was more of a change in thinking on the state side than for locals.

0:43:18 David Wessel: One of the things...

0:43:19 Michael Nadol: If I can... I'm sorry if I can, I just want to also observe that, for me at least, thinking about state reserves has implications for the locals as well, and even brings into the equation thinking about what the federal government might do. So taking the first part of that first, school districts are heavily dependent on state assistance. Even municipalities in some states receive significant municipal aid, or at least state-level support for different core programs. And the fact that the states are better prepared to weather a recession is also kind of indirectly, but meaningfully, good news from any local level of governments. That's looking from states down. If you look from states up, there's a question mark of, "What is the federal government going to do if there's another

downturn? What are the risks associated with that?" As many will remember, there was a significant federal stimulus program that included support for state budgets quite directly. And is that something that's gonna happen again? Probably not in a mild recession, but that's one of the unknowables that is part of preparing and ideally would be part of planning for a greater resiliency.

0:44:52 David Wessel: Right. Yeah, I guess counting on nothing from the federal government is probably the conservative assumption, even if it doesn't turn out to be true. And one of the things that we've noticed over time is that even though the balanced budget requirements only really apply to operating budgets, that infrastructure spending seems to be very cyclical. And just... I'm not in the government or... And I'm not in the muni bond market, but just a simple-minded way of looking at it is, "Well, when times are tough and interest rates fall, and you have a lot of unemployed workers, it would seem a very good time to borrow and use that money for infrastructure", which everybody seems to think is possible. Why doesn't that seem to happen, or does it happen or how do we think about that?

0:45:41 Laura Porter: Yeah, I think that's partly just... And I'd be interested in Mike's thought having been on the practitioner side. It's interesting, we rate the Canadian provinces out of the States rating group at Fitch, 'cause there's similarities between the two, and that is the approach in Canada. So you're doing things that's stimulative to the economy at times of decline. And it's just not the way states have operated. There's an ethos of "You don't spend in downturns", and that's what we've seen pretty consistently. You've seen gas taxes and things raised over the course of this recovery in the absence of federal action, but I can't recall seeing that type of significant stimulative program in downturns.

0:46:31 Michael Nadol: I think that's right, in terms of the sort of just... I guess from my experience, to some degree it circles back to the notion that a lot of public sector budgets are pressured anyway, even in good times, due to the structural kind of imbalance between spending on a carry-forward basis growing faster than revenues. So when you hit a downturn you kinda have to pull out all the stops to preserve services. And, unfortunately, one of those stops can be to go on a debt diet and reduce your new issuance and your... Try to not add to your prospective debt service cost. I do agree with you though David, that that's missing an opportunity if you can afford to do otherwise, for all the reasons you identified, and also maybe this was implicit what you were saying, because very commonly the cost of construction, the competition for quality contractors to do public works projects for example, is a lot more favorable when the private sector economy has slowed.

0:47:42 Michael Nadol: Right now it's pretty expensive in a lot of parts of the country to do those projects. And if the cranes start to stop going up across the cities, that creates some good price competition to execute a public sector program in addition to the stimulative effects and the lower cost of borrowing. I think... I'm not a registered municipal advisor, but some of my colleagues who are would also say depending on a place's particular circumstances it may also make sense to take a look at whether with lower interest right costs you could appropriately think about a different structure for debt issuance that is not as burdensome in the near term. You don't wanna overdo that, and not pay down your debt on a reasonably rapid schedule pegged to the life cycle of projects, and all of that. But if the rates are low and the overall case is there to be made it's another kind of way to think about achieving what you outlined.

0:49:01 David Wessel: And a couple of generic questions which are both... You know, they're kinda

"through the cycle" questions. One is, "How do you think about the exposure of different issuers and state and local governments to things like the China trade shock or the Coronavirus? How do you differentiate? Can you do that? When you... Laura, when you rate the municipalities, whether in a recession or not?

0:49:28 Laura Porter: You got... Depending on the topic, so trade, we've done a lot of analysis about depending on what's being targeted, what areas that might affect, Coronavirus we haven't done anything on that, I think in general the ratings are looking at resilience to deal with stress. So you'll have, Mike had mentioned, resource economies, right? Sometimes you have places through different cycles. So we're using the economic foundation to inform everything. But in general, when you're talking about the rating levels that we have, unless it's a small place that doesn't have much diversification usually that kind of thing would not affect your rating.

0:50:13 David Wessel: And someone asked, "In general are... Is the concern about underfunded pensions significantly crowding out spending on other things?"

0:50:26 Laura Porter: Yeah, I feel like it depends on the place. When you hear about the pension story, you would generally, understandably, the stories are about Illinois and New Jersey and Connecticut and places with big problems. We feel like in the majority of cases the pension situation is pretty manageable. There are certainly very high-profile examples where that is not the case and there's clear crowding out going on. Also, it's just interesting to think about the impact of a downturn on pension funding in an environment of increased pension fund investment in the capital markets.

0:51:08 David Wessel: Yeah. Go ahead.

0:51:08 Michael Nadol: And obviously there are so many variables there in terms of the range of actuarial assumptions that you see out there and without getting into the weeds of that, just observing how much that can make a difference in terms of the trajectory of payment obligations. The variability is based on whether you're a mature community that has more retirees than actives, or whether you're a community in a part of the country that's a little bit more greenfield experience, still experiencing fairly rapid growth, may not have proportionately as many retirees yet. A lot of these different variables can go into kind of assessing that degree of risk and trends. But I certainly agree with Laura, outside of the trouble plans, right now we're seeing pension costs stabilizing somewhat, as a percent of payroll they're a lot higher than they were a decade and 15 years ago. But they've sort of ratcheted up to that newer level and are not continuing to rise at the moment.

0:52:29 Michael Nadol: The question does become, "What happens in a downturn?" and just one other observation on that is that here we are more than 10 years into an expansion phase and the typical, I think, the sort of aggregate of major pension plans in the US are still funded in the 70-some percent range. There's still a significant under-funding even after 10 plus years of relatively good times. And some of that's due to de-risking and adopting more conservative actuarial assumptions across that period, that makes it harder to get to headline full funding. But some of that reflects that there is still a big challenge to be met there.

0:53:18 David Wessel: And hold on just one second, let me just open this. We're in a period of extraordinarily low interest rates and from what I gather from people in municipal bond business, a substantial demand for municipal bonds, despite the lower tax rates federally, is... Are low rates

affecting communities willingness to take on more debt or not?

0:53:52 Laura Porter: Mike, you're probably in a better position to answer that, but I would say not from what I've seen. In some cases, depending on the political orientation there, it seems to be kind of a philosophical aversion to debt.

0:54:09 Michael Nadol: Yeah, there was... Some of the federal tax law changes kind of just put a big freeze on the market when they passed. And that seems... That particular factor seems to have kind of been absorbed in terms of market volume. But I'd agree there's more that goes into determining how much to invest than just the rates. And that kind of conservative vibe is probably pretty prevalent. At the same time, if you look at some of the surveys that folks like the National League of Cities or others do of what's on the mind of finance officers in the public sector, you see infrastructure funding and infrastructure shortfalls kind of pretty high on the list and front and center in terms of what people are worrying about it, it's just a question of how do you get support to get more done.

0:55:17 David Wessel: If... There's a participant named Angela on the line who you... There's a question you asked about one of Laura slides, but I can't quite figure out which slide you're talking about, so you can, if you're still on the line type it in again so I can pose that question. I'm wondering whether, when you talk to people, either in your practice, Mike, or in your talking to issuers as you do their ratings, in addition to the point that Mike just made about infrastructure, what are the big headaches that they're worrying about? What are the big things that put them at risk? Is it the Medicaid tab, or what are the things that you hear coming up most often?

0:56:02 Laura Porter: Yeah. On the ratings side, you see infrastructure, as Mike said, there's a lot of concern around that. Medicaid has actually... So, historically that's always what a state budget manager would be talking about. When you're this far into a recovery, that's become less of a focus, but as in a downturn I think it would very much become a focus again, not as a budget pressure but as a thing people are thinking about, I feel like we're hearing more about higher education. And then also on the education front, pressure on salaries in general and teacher salaries in particular.

0:56:49 David Wessel: Mike... Go ahead.

0:56:51 Michael Nadol: I'll just throw a couple more in there. And again, some of this depends on who you are and where you are. But we focused a lot, intentionally, on economic readiness and resiliency but there's growing concern among a lot of our clients around climate change and environmental related sustainability and resiliency, and risks, particularly in certain geographies. But... And then kinda beyond that, I guess I would say just broadly to the extent that the foundation of public sector finances is a little bit less shaky. You see increasing focus just on the policy needs that may be particular to individual community. So I'm here in Philadelphia, our mayor and city counsel are focusing a lot on anti-poverty issues these days, which is an important and, from my perspective, high-merit thing to worry about. It's hard to worry about it if you are just trying to figure out how to sustain basic services in the way that the Great Recession challenged Philadelphia and just about everybody else. So you get that kind of shift in focus to "What more can you do?" with the resources you have.

0:58:20 David Wessel: Mike somebody...

0:58:20 Laura Porter: And I would say a lot of affordable housing discussion.

0:58:20 Michael Nadol: Exactly.

0:58:20 Laura Porter: There's a lot of initiative.

0:58:20 Michael Nadol: Right.

0:58:20 David Wessel: That's understandable. Mike, somebody asked if you have good examples besides building up reserves of cities that implement measures such as the ones listed on your action plan for resiliency and sustainability.

0:58:45 Michael Nadol: A couple. One that I can highlight that I think is kind of cool is just some different approaches to tax policy, which you might think about as being sort of maybe "safety valves". So California, Massachusetts, Maryland, they all have variations of a kind of approach to taking really high revenue years from capital gains receipts, or unearned income in Maryland, and determining through different statutory or formula-driven approaches, sort of what would be a more normal year. And then if you have one of these positive spikes in returns, they have set up mechanisms to set that aside, to not recognize those peak-year revenues in those volatile revenue streams, as if they were something you could count on happening year in and year out. But instead require that they be used either to build reserves or to pay down non-recurring liabilities. And even at the local level, the City of Oakland, California has a similar mechanism for its real estate transfer tax revenues. If you kinda think about the local economy of the Bay Area in California and how high cost the real estate market is, Oakland actually generates a very material percentage of its overall revenues from the tax that you pay when you sell a property.

1:00:39 Michael Nadol: And if the economy were to cool down, and this has been seen in past recessions, you tend to see some price deflation for those high cost homes, you'll also see just a big slowdown in the number of transactions in the market activity. So that's a comparatively volatile revenue source, you know, much more volatile than general real estate taxes for example. And what Oakland has enacted by ordinance is a provision that if in any given year that particular line item of revenues exceeds what they've kind of set as a threshold level, the excess is used to pay down unfunded retiree healthcare or pension liabilities or otherwise, to address non-recurring expenses, rather than becoming dependent on something that may be, again, not there for you over the longer span of time.

1:01:42 David Wessel: So somebody asked this related question about, "Are there some parts of the country that are more or less vulnerable and more or less prepared?" So I think you answered the first part. Obviously, if you're dependent on the capital gains revenues as California is, you're gonna be more volatile and... Or if you're dependent on real estate transactions you're gonna be more volatile. Is is a sort of a state by state, city by city thing? Or are there some parts of the country that stand out as being particularly well-prepared or particularly poorly prepared for the next recession?

1:02:19 Michael Nadol: Yeah, it's an interesting question. I do think you see some kind of balance, I don't know Laura if you see the same thing. I mean, I, over the years, have observed that California local governments tend to carry much higher average reserve balances than I see in almost any other part of the country. And often kind of averaging, and I haven't looked at the recent

medians, but over 30% and some of the more economically vibrant communities or, you know, more affluent communities significantly higher. And I don't think that's just general conservatism. I think that is a rational response to being in a state where you have very limited revenue flexibility because of the history of different ballot propositions. So it's very hard to raise tax rates or create new taxes, and over the years that very same dynamic has led to much greater reliance on the sales tax, which tends to be more volatile. So you have less control over a more volatile set of revenues. And then on the spending side, many California communities participate in a statewide CalPERS pension system and that system has seen significant growth for its member agencies in the employer contribution rates based on perhaps perfectly appropriate adjustments they've made to actuarial assumptions and the like, to de-risk their program and ensure sustainability.

1:04:07 Michael Nadol: But it's something that the locals have no control over. They're part of a much bigger system where they really can't do much to influence that significant part of their spending. So, overall... And then you layer into that, while it's been better in the last decade or so, California as a state has had a history of modifying local revenue streams during downturns to help shore up the state's own financial condition. You take all of that into account, and those cities, counties, California, local governments probably need bigger reserves than their counterparts, here in Pennsylvania where I'm based, where there are other challenges, but you can raise your property tax millage if you need to. And it's hard, politically, nobody wants to do it, it has adverse effects, but you can do it. And that greater flexibility may not require quite as high of a reserve as you would see in California, for example.

1:05:18 Laura Porter: Yeah, and I agree with that, I think I wouldn't say "regional", I do think you see different types of practices, behavior, in different states. I think in some cases that's for good reasons as... Good historical reasons, as Mike laid out. I think some other places it's... There's kind of a... In North Carolina, comes to mind, like very high reserves. And I think that's partly cultural, just the conservatism there in terms of how finances will manage. And the only thing I would add is that a way for management behavior... It's easier to, in many ways, easier to look better when you have a growing economy and less legacy liabilities. So, we have the North-East and the Midwest, the opposite of that. They can have more challenging situations that make it harder to be prepared in the same way.

1:06:07 David Wessel: Laura. So, I think someone was confused about the relationship between some of your slides. You showed a chart, a nice chart, showing the distribution of your ratings for states and local governments, and your point was that they're pretty good, relative to... They're pretty strong. And then you're next slide was one that showed that revenues, particularly for states, go up and down a lot in recessions. And I...

1:06:36 Laura Porter: Okay, so...

1:06:37 David Wessel: The questioner or asked, "Is there some relationship between your revenue chart, where you show that volatility, and the ratings?"

1:06:46 Laura Porter: Yeah, it's a great question 'cause it's counter-intuitive, right? You would think, "Well, if that's so much more volatile how are they better credits?" And the reason for that is due to the benefits of being the state which is in control of the local... So states primarily are funding services, rather than providing services, so they can make their problem, the school district's problem or the hospital's problem or the university's problems. So they will deal with that

volatility, they have the power to deal with that volatility that in most cases a local government wouldn't. So it's those powers that cause the state ratings to be so high. And when you see state ratings lower than that it's really only because, over time, the state has not used the powers that it's had. So like an Illinois situation, which has had very challenging governance situations, that's really the only reason if your state you should get down to that level. Usually the economic bases are broad enough that that would not cause a rating to be significantly lower than the norm.

1:07:54 David Wessel: I'm gonna ask why are sales taxes vulnerable... More volatile rather. I don't have the color chart, so I don't know if you show them being more volatile than the other things, but what's the cyclical story on sales tax revenues in general?

1:08:11 Laura Porter: Yeah, so income taxes are gonna be the most volatile. I think the reason why the sales tax is more volatile than the property tax, and Mike definitely chime in, is it's just a more controllable revenue source. It's not that usually you send out your bills and that's what people pay, and then you have some time to catch up. Whereas sales taxes, your sales tax rate is 4%, and as soon as people are buying less your sales tax is gonna go down.

1:08:40 David Wessel: I see. You guys wanna shout out anybody who's particularly poorly prepared for the next recession?

[chuckle]

1:08:49 David Wessel: Okay, I'm gonna warn you, the question after that one is, "Do you have specific recommendations for Illinois an the city of Chicago?" [chuckle]

1:08:58 Laura Porter: Yeah. So on the state side, particularly poorly, the ratings speak to preparedness. And so Illinois would be particularly poorly positioned. We have the city of Chicago Triple B Minus. The city of Chicago actually is interesting, because the reserve situation there is pretty solid, so they are, in terms of just cyclical variations, Chicago is pretty good. They're... But the structural issue, in terms of the burdens of the long-term liabilities and the fixed-expenditure burden, that's really the challenge there, whereas for the state there's not really a reserve position per se, and it's difficult to cut. So they have those cyclical and structural exposure.

1:09:48 David Wessel: Mike, you wanna call anybody out?

1:09:53 Michael Nadol: No, 'cause they're probably a client. But I will say, in terms of approaches, I can't say I'm up the Chicago curve well enough to weigh in on the various policy initiatives, but I think having that long range financial plan that I started my presentation with as a framework for planning is just a critical best practice to help ensure that you're thinking beyond the next year or two on your planning horizon, and getting to the kind of structural and sustainability issues that may not help you too much in fiscal 2021, because it takes too long to get movement on benefit costs or, again, we talked about pensions. Most governments are basing this budget year's pension payment on an actuarial valuation that was taking a snapshot as of two fiscal years prior, just because of the time it takes to first develop those valuations and secondly, kind of incorporate them into a budget cycle before enactment. And that's even before you take all the different smoothing practices and the like that actuaries use, into account, as part of those funding requirements. So moving the needle on some of these fundamental drivers of public sector budgets takes a while. And having a five, or even 10 year, perspective on that, even knowing that parts of that plan are not gonna play out

exactly as you think, I think puts you in a much better mode for getting to enduring kind of solutions as opposed to.

1:11:55 Michael Nadol: And I'm not speaking here of any particular place, but just over history I've seen other governments use quick fixes to kind of limp through to the following year, paper over an underlying gap that's only widening farther and farther underneath the surface, and then kind of run out of tricks or hit a bad economic patch at the wrong time, and just not be able to do it anymore. And that's why, more process-wise, having that multi-year view I think is foundational.

1:12:28 David Wessel: Sounds like a pretty big political challenge 'cause a lot of what you're talking about is probably gonna be in the term of the mayor or Governor's successor rather than his or her term.

1:12:41 Michael Nadol: Well, but you... Most of them... Most of my clients... Well, you will often see... You kind of have a couple of different scenarios. You have those communities where just a long-range financial plan is a well-established practice, and whoever it may be that comes into office kind of jumps into that path and keeps it going. Where you don't have a long-range plan, we do typically see it launched by a new administration that wants to think about how to put its agenda into place and ensure the success of their time at the wheel, kinda early in their period, and most of those folks are hoping for at least two terms, depending on what they're limited to. So you got a little bit of a runway at least. But again, I just think it's the most important tool, simple as it may sound, in my experience working with public sector budgets, to really grounding yourself in a stable and sustainable way.

1:14:00 David Wessel: So I think that we're starting to lose people, so I think that's a sign that we've met many of the... Filled the appetite. I wanna mention a couple of things, one is as I said earlier, the transcript of this, the audio and the slides will be on our website, the slides are already there. I also wanna plug our municipal finance conference which is July 13th and 14th in Washington, it brings together academics, public sector people and muni bond participants to hear and criticize rigorous research on state and local fiscal issues, and also we have some panels on topical issues. We have a call for papers on the website now, so we're always looking for people who wanna present. And finally, I wanna thank Mike and Laura for their time. Judging that how long we held most of the people, I think you did a great job at helping them, and if people have additional questions that we didn't get to, if you can send me an email at dwessel@brookings.edu, I'm happy to pass them along to Laura and Mike and we can get you answers. So with that, thank everybody and have a good afternoon.

1:15:07 Michael Nadol: Thanks.

1:15:08 David Wessel: Thanks.