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COVID-19 IS NOT A RETIREMENT STORY

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Introduction

A hot topic these days is how COVID-19 and the ensuing recession have affected retirement. The surprising answer may be "not very much." On the benefit side, Social Security payments continue to go out each month, and 401(k) balances appear relatively unaffected. On the income side, the impact on Social Security's finances has been minimal, and employee and employer 401(k) contributions remain relatively steady. In terms of the labor market, recessions inevitably increase unemployment, but this recession has not hurt older workers more than other groups.

The conclusion that COVID is not primarily a retirement story does not mean that all is right with the world. The problems confronting the retirement system before the pandemic remain. Social Security continues to face a 75-year deficit and the depletion of the trust fund in the mid-2030s. Employer plans continue to face inadequate balances, a major coverage gap, no decumulation mechanism, and low interest rates. And older workers continue to face difficulties in finding new jobs, causing many to retire too early. Most important, the reason for COVID's lack of impact on retirement is that people who have the least have borne the brunt of the downturn.

The discussion proceeds as follows. The first section summarizes Social Security finances before the pandemic and the actuaries' reassessment of the program's financial status in the wake of COVID. The second section turns to employer-sponsored plans, summarizing the challenges before COVID and examining adverse developments that could have happened but did not. The third section shifts to the labor market to show that while older workers have suffered, they have not been hurt disproportionately and appear as able to work from home as their younger counterparts. On the other hand, those with the least education – workers least likely to have a 401(k) – have borne the brunt of the recession. The final section concludes that COVID is not a retirement story, but the pre-COVID weaknesses in the retirement system remain. In addition, the continued decline in real interest rates has made it even more difficult to save for retirement, and the increased stress on state and local government finances makes it more difficult to fund public sector defined benefit plans.

COVID and Social Security

For retirees and people with disabilities, Social Security has continued to send out benefit payments each month. In addition, with an early retirement age of 62, the program has served as a safety net for older workers who are forced to leave the labor market. Thus, Social Security has provided a steady source of support during the pandemic.

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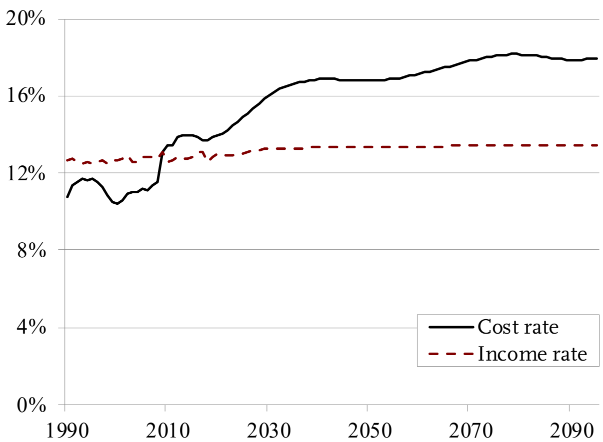
On the financing side, the question is the extent to which COVID and the ensuing recession have worsened the program's outlook. Figure 1 shows Social Security's cost and income rates over the next 75 years as reported in the 2020 Trustees Report, which was prepared pre-COVID. The cost of the program rises rapidly to about 17 percent of taxable payrolls in 2040, at which point it declines slightly for a decade before drifting up to 18 percent of taxable payrolls (see Figure 1). The increase in costs is driven by demographics, specifically the drop in the total fertility rate after the baby-boom period.

Figure 1. Projected Social Security Cost and Income Rates, as a Percentage of Taxable Payroll, 1990-2094



Source: U.S. Social Security Administration (2020a).

In the short term, the gap between costs and revenues is covered by money from the program's trust fund, which emerged from cash flow surpluses that began in response to reforms enacted in 1983. According to the 2020 Trustees Report, the trust fund was projected to be depleted in 2035. Once the fund's assets are depleted, Social Security can pay only 75-80 percent of promised benefits.

Over the next 75 years, Social Security faced a 75-year deficit of 3.21 percent of covered earnings. This number equals the difference between the present discounted value of scheduled benefits and the present discounted value of future taxes plus the assets in the trust fund, all as a percentage of taxable payrolls. The easiest way to interpret the deficit figure is that an immediate increase in payroll taxes of 3.2 percentage points – 1.6 percentage points each for the employee and the employer – would enable the government to pay the current package of benefits for everyone who reaches retirement age through 2094, with a one-year reserve at the end.

A lot of speculation has swirled around what COVID would do to Social Security's finances. In response, the Social Security actuaries in November 2020 released an updated assessment of the program's finances to reflect the impact of the pandemic and ensuing recession.[1] These new numbers will replace the intermediate projections in the 2020 Trustees Report as the baseline for evaluation of legislative proposals until the next Trustees Report is issued in the spring.

The actuaries characterize the impact of the pandemic and recession as "significant" and, indeed, a number of important assumptions look quite different in the next few years. Mortality is up, fertility and immigration are down, disability incidence is down in 2020 and then up for the next three years, unemployment is up, real wages are down then up, and real interest rates are down. But the impact on Social Security finances appears to be modest. Most of the pandemic/recession effects are projected to end by 2025, and the effects on the long-term deficit and on the depletion of the trust fund are negligible.

In terms of the long-term outlook, the average income rate did not change at all and the cost rate rose only a tiny bit, leading to a slight increase in the 75-year deficit from 3.21 to 3.28 percent of taxable payrolls (see Table 1).

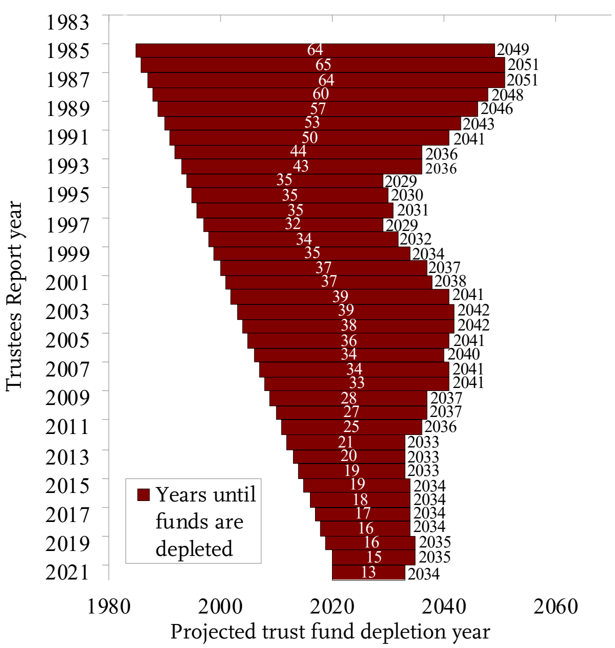
Table 1. Social Security Cost and Income Rates and Deficit as a Percentage of Taxable Payrolls, 2020-2094

75-year	2020 Trustees Report	After COVID-19
Cost rate	17.06%	17.13%
Income rate	13.85	13.85
Deficit	-3.21	-3.28

Source: U.S. Social Security Administration (2020a, 2020b).

Most of the attention, however, has not been focused on the long-run cost and income curves, which shift with glacial speed, but rather on the depletion date for the trust fund that has been bridging the gap between costs and revenues. The trust fund has always been projected for depletion, but the window has narrowed dramatically over time. Whereas we used to have 65 years to figure out how to avoid trust fund depletion, with the 2020 Trustees Report's projected depletion date of 2035, that number dropped to 15 years (see Figure 2). The new Social Security projections move the depletion date from 2035 to 2034, and – since we are now in 2021 – the time for finding a solution has dropped to 13 years.

Figure 2. Projected OASDI Trust Fund Depletion Date, by Year of Trustees Report, 1983-2021 and Updated Actuarial Projections



Notes: The trust fund was not projected to be depleted under the intermediate assumptions of the 1983 and 1984 Trustees Reports. The 2021 projection is from the recent supplemental analysis by Social Security actuaries.
Sources: U.S. Social Security Administration (2020a, 2020b, and 1983-2019).

The message from the new actuarial projections is that Social Security finances have been virtually unaffected by COVID. The program is still facing a long-run deficit – something we have known since the mid-1980s – and the trust fund, which bridges the gap between costs and revenues, is going to run out by the mid-2030s – something we have also known for many years.

COVID and Employer-Sponsored Retirement Plans

Shifting the discussion from the Social Security program to employer-sponsored plans, the story remains the same. Problems existed before COVID; COVID had little impact on retirement resources; and the pre-COVID problems persist.

Pre-COVID Challenges

The employer-sponsored retirement system consists primarily of 401(k) plans in the private sector and defined benefit plans in the state and local government arena. The nation's 401(k) system faced a number of shortcomings before COVID – inadequate balances, a stunning coverage gap, the lack of an orderly decumulation mechanism, and the challenge of low interest rates. On the state and local front, roughly 20 percent of plans were seriously underfunded.

Inadequate 401(k) Balances. The Federal Reserve's 2019 *Survey of Consumer Finances* provides an update on how retirement balances fared between 2016 and 2019. Despite three years of solid economic growth, strong stock market returns, and continued maturation of the 401(k) system, the news was lackluster. For the typical working household approaching retirement with a 401(k) plan, combined 401(k)/IRA balances increased from $135,000 in 2016 to $144,000 in 2019. These balances will provide a couple with only $570 per month in retirement.[2] Overall, the system provides meaningful balances for only the top two income quintiles of households with 401(k)s.

The Coverage Gap. Moreover, only about half of all households approaching retirement have any retirement savings. The lack of consistent coverage has two important implications. First, those without supplementary saving will not be able to maintain their standard of living in retirement, because Social Security was never meant to be the sole source of support. For low earners retiring at age 62, Social Security currently replaces only 42 percent of a worker's pre-retirement earnings – far below the typical target of 75 percent. The second implication is that many workers move in and out of coverage. This lack of continuous contributions reduces the expected 401(k) balance for the typical 60-year-old from $425,000 to $159,000. Fees and leakages bring the balance to $120,000.[3]

No Decumulation Mechanism. 401(k) plans and IRAs provide little guidance on how to turn accumulated assets into income. As a result, retirees must decide how much to withdraw each year and face the risk of either spending too quickly and outliving their resources or spending too conservatively and consuming too little. They also must consider how to invest their savings after retirement. These are difficult decisions. Yet participants shun the option of buying immediate or deferred annuities. And they do not take advantage of the cheapest option of using their 401(k) balances to defer claiming Social Security, which is effectively "purchasing" more annuity income. Moreover, plan sponsors remain reluctant to incorporate lifetime income mechanisms as the default in 401(k) plans, even in the wake of the SECURE Act.

Low-Interest-Rate Environment. In December 2019, the real interest rate had dropped to zero, and low interest rates make it extremely difficult to save for retirement.[4] For an individual – who starts saving at 35, retires at 67, faces a real return of 3 percent, and purchases a single-life annuity with the proceeds – a 401(k) contribution rate of 9.6 percent, when combined with Social Security, will produce the target replacement rate of 75 percent.[5] This contribution rate is in line with the average combined (employee plus employer) contribution rates we see among Vanguard participants. However, if the real return falls to 2 percent, 1 percent, or 0 percent, the required contribution rate rises to 12.2 percent, 16.8 percent, and 24.2 percent, respectively. Of course, households can increase their expected return by shifting more into equities, but that shift also exposes them to more risk.

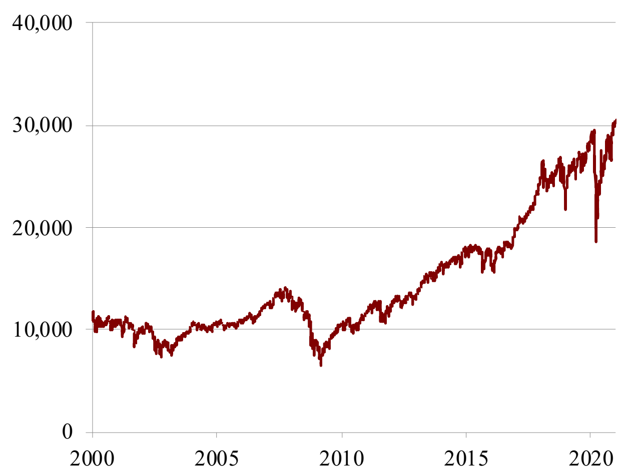
About 20 Percent of State and Local Plans Seriously Underfunded. Using the plans' assumed returns, state and local plans held assets equal to 71 percent of scheduled benefits as of 2019. Roughly 20 percent of these plans had a funded ratio below 60 percent, and a subset of this group had a funded ratio below 40 percent. The risk with poorly funded plans is that they might exhaust their assets in the next decade. At that point, assuming benefits continue, the cost to the sponsor of paying benefits on a pay-as-you-go basis would be substantially higher than their current annual required contributions.

Potential Damage from COVID

COVID could have worsened the picture for employer-sponsored 401(k) plans if financial markets had collapsed, the recession had led to widespread 401(k) withdrawals, or employers had suspended the match, but these things did not happen. On the other hand, real interest rates continue to decline. In terms of state and local plans, again a collapse of financial markets would have worsened this situation, but this did not happen. However, the stress on state and local government budgets – albeit less than initially anticipated – will make it more difficult to improve funding going forward.

Stock Market Did Not Collapse. After stock prices fell over 34 percent from mid-February to March 23, the market roared back with the Dow Jones Industrial Average breaking 30,000 (see Figure 3). When the steep drop occurred, most 401(k) participants did not move their assets out of equities, so they enjoyed the run-up in stock prices.[6]

Figure 3. Dow Jones Industrial Average, January 2000-December 2020



Source: S&P Global (2020).

Mass Withdrawals Did Not Occur. Another way that balances could have been reduced is by participants emptying their accounts. Certainly, the CARES Act included a number of provisions that made it easier for participants to access their 401(k) balances, and most sponsors implemented at least one of these provisions.[7] About half of plans allowed COVID-related distributions, which enabled individuals to access *without penalty* up to $100,000 from their account and spread the required tax payments over three years.[8] In addition, nearly a third of plans allowed increased loan amounts, and half allowed participants to pause the paydown of existing loans (more common at larger companies). Among plans offering COVID-related distributions, however, only 7 percent reported that more than 5 percent of participants used this option. In terms of loans and withdrawals generally, 25-35 percent of plans saw some increase in this activity (see Table 2).[9]

Table 2. Percentage of Plans with Changes in Loans and Withdrawals, Onset of COVID-19 to November 2020

Change	Loans	Withdrawals
None	58.1%	48.8%
Increase	25.6	37.2
Decrease	12.0	9.3
Unsure	4.3	4.7

Source: Plan Sponsor Council of America (2020).

No Widespread Suspension of the Employer Match. Although plan balances were not undermined by a collapse of the stock market or mass withdrawals, retirement security could have been affected if employers pulled back on their matching contributions. (On average, employees contribute 7.0 percent of their earnings, and the employer makes a matching contribution of 3.7 percent.)[10] During the Great Recession, nearly 20 percent of plan sponsors suspended or reduced their contributions (see Table 3). In 2020, only 5 percent took similar action. Interestingly, smaller employers were much more likely than larger employers to suspend or reduce their match in 2020, just the opposite of the pattern in 2008/2009.

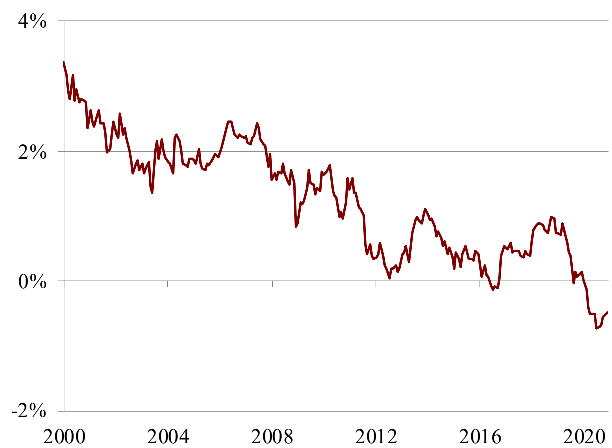
Table 3. Percentage of Plans Suspending or Reducing Employer Match, 2008/2009 and 2020

Change	Plan size by number of participants					All plans
	1-49	50-199	200-299	1,000-4,999	5,000+	
2008/2009	6.1%	17.8%	25.0%	18.9%	19.2%	18.5%
2020	11.5	7.4	3.1	4.5	3.4	5.2

Source: Plan Sponsor Council of America (2020).

Real Interest Rate Decline Continued. The pandemic-induced recession did exacerbate the challenge of saving for retirement in a low-interest-rate environment. Real rates, as measured by the difference between nominal returns on 10-year Treasuries and the Cleveland Federal Reserve's inflation expectations, fell by half a percentage point in early 2020, although rates appear to have ticked up slightly since then (see Figure 4). This persistently low-rate environment means households might have to increase their savings rate or expose their nest egg to riskier assets.

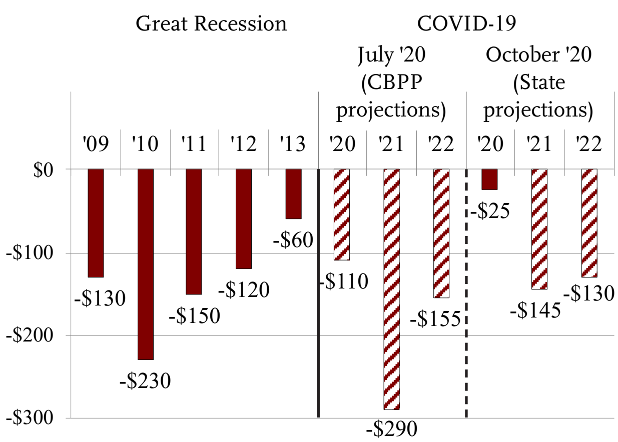
Figure 4. Real Interest Rates, January 2000-December 2020



Sources: U.S. Board of Governors of the Federal Reserve System (2020) and Federal Reserve Bank of Cleveland calculations (2021) based on Hubrich, Pennacchi, and Ritchken (2012).

State Budget Shortfalls Less than Expected. State and local revenues have declined as the pandemic forced businesses to close or scale back, costing millions of jobs. At the same time, states and localities have faced increased expenses due to the pandemic, such as increased enrollment in Medicaid and other programs. Interestingly, however, state budget shortfalls have turned out to be significantly less than originally expected and less than occurred during the Great Recession (see Figure 5). Reasons for this less-than-expected decline include the concentration of employment losses among lower earners, who do not pay a lot in income or sales taxes; a robust stock market, which drives up capital gains receipts; and the unprecedented support provided by the CARES Act.[11] Local governments also face shortfalls, though less than the states because property tax revenues have remained relatively steady. Although the shortfalls have been lower than expected, the increased fiscal pressures on both states and localities will make it more difficult for them to fund their pensions.

Figure 5. State Budget Shortfalls: Great Recession, July 2020 Projections, and October 2020 Projections, Billions of 2020 Dollars, Fiscal Years



Note: Projections include federal aid from the CARES Act.
Sources: Leachman and McNichol (2020); McNichol and Leachman (2020); and email communication with McNichol.

In summary, the 401(k) system has been only minimally affected by the recession. However, all the problems that existed before remain. In addition, the further decline in real interest rates makes it even more difficult to save for retirement and the fiscal pressures on state and local governments make it even harder to fund public sector defined benefit plans.

COVID and the Labor Market

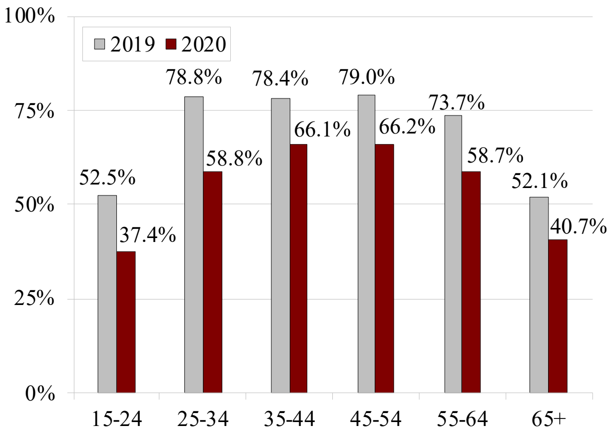
The final component of the retirement story is the labor market. Recessions hurt workers, and employment is down for people of all ages and education levels. The question is the extent to which certain groups have been especially disadvantaged. Older workers are of particular interest here because, if they lose their job, they are at risk of retiring prematurely. The following discussion looks first at the pattern of employment by age in order to put the experience of older workers into perspective. It then turns to the pattern by education to shed light on why the 401(k) system has been so little affected by such a dramatic increase in unemployment.

Older Workers Not Harmed Disproportionately

Some very early data offer a peek at the impact of COVID on employment by age. The data come from the monthly *Current Population Survey* (CPS), which is the basis for the Labor Department's unemployment report. The survey's rotating interview pattern makes it possible to link individuals across time. Specifically, individuals are interviewed for four consecutive months, then not interviewed for eight months, then interviewed again for another four consecutive months before exiting the survey. This pattern allows us to see the labor force transition for a subset of individuals between April-July 2019 and April-July 2020. As a basis of comparison, we also looked at the transitions of a different subset of households between the same months in 2018 and 2019.

The results are shown in Figure 6 (on the next page). In April-July 2020, 40.7 percent of those ages 65+ who had been employed in April-July 2019 were still working. In contrast, in April-July 2019, 52.1 percent of those 65+ who had been working in April-July 2018 were still working. Thus, the percentage of previous workers still working had declined by 11.4 percentage points in 2020 compared to 2019. For those ages 55-64, the comparable numbers are 58.7 percent and 73.7 percent for a difference of 15.0 percentage points. In terms of the *deterioration* in employment outcomes, workers ages 55-64 and 65+ fared about the same as prime-age workers and better than younger workers.

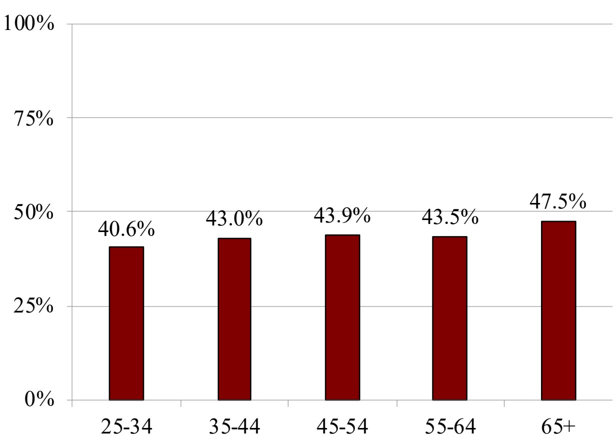
Figure 6. Percentage of Workers Still Working During April-July Relative to Same Period in Previous Year, 2019-2020, by Age



Note: Sample is civilian population linked to previous year.
Source: Authors' calculations from the *Current Population Survey* (2018-2020) via Univ. of Minnesota's IPUMS-CPS database.

This pattern of job loss might seem surprising at first, since older people are more at risk of health complications from the pandemic. However, an earlier study shows that older workers are as well situated as younger workers to have jobs that can be done remotely (see Figure 7).

Figure 7. Percentage of Workers with Jobs that Can Be Done Remotely, by Age Group, 2018



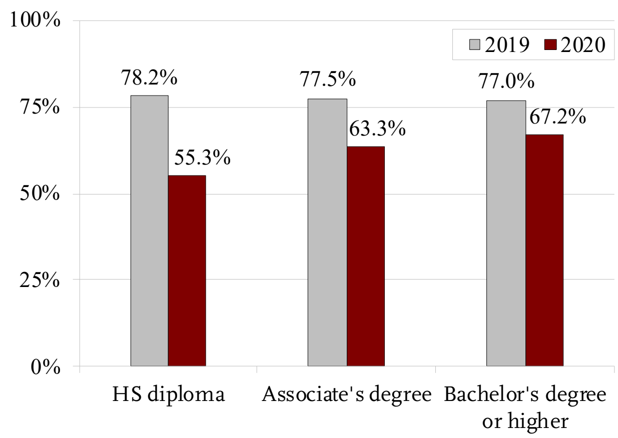
Source: Chen and Munnell (2020).

Unemployment Targeted the Less Educated

The same CPS data described above can be used to examine the change in employment patterns by education. Education here consists of three groups: high school diploma or less (31 percent of all workers), some college (26 percent), and bachelor's degree or more (44 percent).[12] Once again, recessions hurt all workers. The question is whether workers with less education might have been disproportionally affected.

The results are shown in Figure 8. In the period April-July 2020, only 55.3 percent of those with a high school diploma or less who had been employed in April-July 2019 were still working. In April-July 2019, 78.2 percent of those who had been working in April-July 2018 were still working. Thus, the percentage of previous workers still working had declined by 22.9 percentage points between the two periods. For those with a college education, the comparable numbers are 67.2 percent and 77.0 percent, for a difference of 9.8 percentage points. In short, while unemployment increased sharply across the board, the brunt of this recession has been borne by those with less education. Since this group is much less likely to have access to a 401(k) plan, it is not surprising that 401(k) balances have been relatively unaffected.

Figure 8. Percentage of Workers Still Working in April-July Relative to Same Period in Previous Year, 2019-2020, by Education



Note: Sample is civilian population ages 25-64 linked to the previous year.
Source: Authors' calculations from the 2018-2020 CPS.

Conclusion

COVID is not really a retirement story. On the benefit side, Social Security payments continue to go out each month, and 401(k) balances appear relatively unaffected. On the income side, the impact on Social Security's finances has been minimal, and 401(k) contributions remain relatively steady. In terms of the labor market, older workers have not been hurt more than other groups.

But the lack of impact from COVID does not mean that our retirement system is in good shape. The problems confronting the retirement system before the pandemic remain. Social Security continues to face a 75-year deficit and the depletion of the trust fund in the mid-2030s. Employer plans continue to face problems of inadequate balances, a major coverage gap, no decumulation mechanism, and low interest rates. And older workers continue to face difficulties in finding new jobs. In addition, the continued decline in real interest rates makes it even more difficult to save for retirement and the increased stress on state and local government finances makes it more difficult to fund public sector defined benefit plans. Most important, the reason for the lack of impact on retirement is that people who have the least have borne the brunt of the pandemic.

Endnotes

1 U.S. Social Security Administration (2020b).

2 Munnell and Chen (2020).

3 See Chen and Munnell (2020) for the numbers and Biggs, Chen, and Munnell (2019) for the methodology.

4 Of course, bond prices rise when interest rates fall, which benefits those who sell and consume the proceeds, but this phenomenon does not benefit the investor. If investors hold bonds to maturity, they will not benefit from the price change and will be forced to reinvest the proceeds at a lower interest rate. If they sell bonds prior to maturity, the capital gain is precisely offset by the reduction in the interest they will earn on any replacement bonds.

5 In any interest rate environment, the required 401(k) contribution rate depends on the age when workers start saving and when they retire. The earlier the start date and the later the retirement date, the lower the required contribution. The required contribution rate also depends on how the money is withdrawn in retirement. The required employee-employer contribution rate reported in the text assumes the participant purchases a single-life annuity.

6 Blanchett (2020).

7 Plan Sponsor Council of America (2020).

8 In addition, the 20-percent tax withholding provision does not apply, and individuals are allowed to recontribute the amount of the distribution to their retirement plan within three years.

9 The story looks similar at the individual level. Despite the loosening of restrictions on accessing money from retirement accounts, the percentage of plan participants that took a loan or withdrawal remained virtually the same between 2019 and 2020, according to data from the Federal Reserve's *Survey of Household Economic Decisionmaking*.

10 Vanguard (2020).

11 Sheiner (2020) and Green and Loualiche (2020).

12 The share of the population in each educational group is different than observed in the general population because those with a high school degree or less were less likely to be working, even in a good economy.

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