

Shoring up shortfalls: Women, retirement and the growing GigSupp economy

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Introduction

Gig work—the selling of labor, effort, skills, and time—is a long-standing feature of the U.S. economy. Today, millions of people sell goods and services, or rent rooms, houses, and other assets using platforms (“online gig workers”) like Uber, Lyft, Rover, DoorDash, Ebay, Etsy, Postmates, VRBO, and Airbnb to connect with customers (Bruckner, 2016). Indeed, several high-profile Silicon Valley firms have engineered billion-dollar IPOs of companies that develop online and app-based platforms to: (1) connect online gig workers to customers; and (2) process payments (“online platforms”). Still millions more gig workers continue to run errands, walk dogs, rent rooms, care for children and the elderly, sell goods at outdoor markets, and do housework, yardwork and other occasional jobs without using an online platform to connect with customers (“offline gig workers”). Most gig workers do online and/or offline gig work as a supplemental or secondary source of income (referred to hereinafter as “GigSupp Workers”). Accordingly, this report focuses on GigSupp Workers to provide new insights from existing data and research in terms of what GigSupp Work means for women and their retirement savings strategies, and finds that:

1. GigSupp Work has grown significantly and is continuing to grow, but existing tax data have failed to fully capture the population of GigSupp Workers in large part because tax reporting rules enable extensive underreporting of self-employment income.
2. Comparative review of multiple administrative and survey data sources suggests that more women than men engage in GigSupp Work and that women are driving GigSupp Work growth.

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3. The policy response to the COVID-19 pandemic reflects the systemic failure of government research to measure the GigSupp Workforce reliably. Moreover, the COVID-19 pandemic has led to even more GigSupp Work growth as employers shed traditional jobs and employees.
4. GigSupp Work triggers a retirement financing gap that disproportionately impacts women, and notably, women of color, who have greater challenges saving for retirement than men.
5. Absent change, the existing tax and retirement financing rules will continue to underserve and frustrate the ability of GigSupp Workers to save for retirement in the short-term and, consequently, result in inadequate retirement incomes when they do ultimately retire.

This report starts with an overview of the existing measures of the gig workforce generally. Next, this report identifies challenges GigSupp Workers have in saving for retirement, including the extraordinary economic circumstances presented by the COVID-19 pandemic. Finally, this report identifies some of the federal tax and retirement proposals that might help GigSupp Workers, the majority of whom are women, better support themselves in retirement.

Measures of Gig workforce

Estimates of how many gig workers are working vary widely depending on how gig work is defined or what research tools are used (e.g., surveys or administrative data) (Abraham & Houseman, 2019). For example, in 2017, the U.S. Department of Labor Bureau of Labor Statistics conducted a survey to measure the alternative and contingent workforce, and included questions designed to capture online gig workers (U.S. Department of Labor, Bureau of Labor Statistics, 2018a). That survey found an overall decline in independent contractors from 7.4% in 2005 to 6.9% in 2017 (ibid.), but that approximately 1% of the total working population (1.6 million workers) engaged in online gig work (U.S. Department of Labor, Bureau of Labor Statistics, 2018b).

In contrast, recent studies of tax returns found that the number of independent contractors has grown 22% from 2001–2016, and that the growth was driven by women doing independent contract work (Lim et al., 2019, p. 14; see also, Collins et al., 2019). In fact, the share of women doing independent contract work rose from 5.4% to 7.5% while the share of the male independent contract workforce remained constant (Lim, et al., 2019, pp. 19–20).

A key explanation for the decline in the number of independent contractors reflected in the Bureau of Labor Statistics survey is that the questions were designed to capture only employment that is a worker's main or sole source of income (U.S. Government Accountability Office, 2019; Bruckner & Hungerford 2019). However, other recent federal government surveys have consistently found that a significant number of workers (3 in 10) do offline or online gig work as a supplemental source of income and that more of these workers are women (Robles & McGee, 2016; Board of Governors of the Federal Reserve System, 2020; Bruckner & Hungerford, 2019). Importantly, survey research finds that only a small fraction (13%) of all gig workers are online gig workers (Board of Governors of the Federal Reserve System, 2020, Appendix B, Q&A GE5). Private sector research echoes these findings in that online gig workers are a small (2 million workers) but growing, labor sector (Farrell et al., 2018).

In terms of earnings, research consistently shows that many gig workers work sporadically, often as a way to smooth income (Collins, et al., 2019; Abraham & Houseman, 2019; Farrell et al., 2018). Specifically, tax data finds that gig workers “have been earning modest amounts, generally less than \$7,500 in gross receipts” (Collins, et al., 2019, p. 13). For online gig workers, banking data shows that average monthly earnings in 2018 was \$828 (Farrell, et al., 2018, p. 14). More generally, analysis of 15 years of tax data indicates that gig worker earnings, like the majority of independent contractor earnings, are supplemental to wage earnings (see e.g., Lim et al., 2019, p. 19).

Challenges and anticipated needs of GigSupp Workers saving for retirement

GigSupp Workers face a range of challenges in saving for retirement and struggle to shore up each of three main pillars of the U.S. retirement system (i.e., Social Security, employer-sponsored pensions or retirement savings plans, and individual savings). Gig workers have lower self-employment tax compliance rates, limited cash flow and fewer opportunities to participate in employer-sponsored retirement plans. These challenges are acutely problematic for women engaged in GigSupp Work as they exacerbate an existing gender retirement wealth gap.

A. Self-employment tax compliance

Regardless of whether gig workers' earnings are a main or supplemental source of income, how (and whether) gig workers properly report their earnings for self-employment tax purposes can have major implications for workers' retirement income (Bruckner & Hungerford, 2019). Workers performing services outside of traditional employment relationships (i.e., most gig workers) are self-employed for federal tax purposes (U.S. Government Accountability Office, 2020a; Bruckner & Hungerford, 2019; Collins, et al., 2019; U.S. Department of Treasury, Inspector General for Tax Administration, 2019). Unlike traditional employment where employers are required to withhold income and Social Security taxes from the wages they pay their employees, there is no required withholding of payroll or income tax on amounts paid to self-employed workers. Instead, payor businesses only report to the Internal Revenue Service (IRS) on IRS Form 1099s—and only when required to do so (Internal Revenue Service, 2020).

Gig workers themselves are required to remit the equivalent 15.3% of self-employment tax for Social Security and Medicare contributions on their net self-employment earnings of \$400 or more on an IRS Form 1040 Schedule SE (Self-employment Tax, <https://www.irs.gov/pub/irs-pdf/f1040sse.pdf>). Importantly, if a taxpayer has self-employment earnings and will owe at

least \$1,000 in income tax and/or self-employment tax on amounts not subject to employer withholding, IRS rules require advance quarterly payments of estimated tax (see, e.g., Bruckner & Hungerford 2019, p. 3). The failure to remit those estimated tax payments can create audit and penalty exposure for self-employed taxpayers (ibid.).

In addition, businesses that make payments to gig workers of \$600 or more for services (per year) that constitute non-employee compensation are generally required to report those payments to the IRS and to gig workers on the recently-created IRS Form 1099-NEC (Nonemployee Compensation, <https://www.irs.gov/pub/irs-prior/f1099nec--2020.pdf>).¹ For these workers, that \$600 amount is often referred to as “the IRS Form 1099-NEC [previously MISC] threshold.” However, if a customer is not a business and makes a personal payment to a gig worker directly for services (e.g., when a homeowner pays a house cleaner), the customer is generally not required to report the payment or send an IRS Form 1099 to the payee or the IRS (U.S. Government Accountability Office, 2020a, p. 8).

A different reporting requirement is used for online gig workers using online platforms (Uber, Lyft, Airbnb, Ebay) to connect with customers and process payment (Bruckner, 2016). In those instances, the IRS treats the online platform as a third-party settlement organization (TPSO) and requires the online platform to report the payments on an IRS Form 1099-K (Payment Card and Third Party Network Transactions, <https://www.irs.gov/pub/irs-pdf/f1099k.pdf>) (U.S. Government Accountability Office, 2020a).

Notably, TPSOs are not required to issue an annual IRS Form 1099-K to the IRS or online gig workers until the aggregate number of annual transactions exceeds 200 and the TPSO processes more than \$20,000 of payments (a/k/a “the 200/\$20K Form 1099-K threshold”). In an effort to limit duplicative reporting, the U.S. Department of Treasury and the IRS developed

¹ Prior to 2020 (and by mistake thereafter), payments for \$600 or more in nonemployee compensation, as well as payments for at least \$600 in rents and at least \$5,000 in sales (other than to retail establishments) were reported on IRS Form 1099-MISC (Miscellaneous Income, <https://www.irs.gov/pub/irs-pdf/f1099misc.pdf>; see also Internal Revenue Code § 6041).

a “Tie-Breaker Rule” for transactions involving TPSOs (U.S. Government Accountability Office, 2020a, p. 10). Effectively, the Tie-Breaker Rule results in TPSOs only using IRS Form 1099-Ks to report electronic payments to online gig workers, and only when the 200/\$20K Form 1099-K threshold is triggered, which results in “no Form 1099 being filed in some cases” (ibid., p. 23; see also, Bruckner, 2018). As a result, online gig workers who earn less than \$20,000 or have fewer than 200 transactions in a calendar year—which is a majority of these workers—typically do not receive either an IRS Form 1099-NEC [or MISC] or an IRS Form 1099-K from the online platforms that they use to connect with customers (Bruckner & Hungerford, 2019; Bruckner, 2018).

Gig Worker tax compliance

For example, a 2020 U.S. Government Accountability Office study on tax compliance of online gig workers concluded that most online gig workers did not receive information returns (e.g., IRS Forms 1099) from the platforms that they worked with (U.S. Government Accountability Office, 2020a, p. 10). When there is no information reporting tax compliance falls to 37% (U.S. Department of Treasury, Inspector General for Tax Administration, 2019, p. 3). In short, noncompliance is greatest among self-employed workers “for which third-party information reporting is not separately reported to the IRS and is very difficult to obtain” (Holzblatt & McGuire, 2016, p. 2). In contrast, tax compliance is high (93%) when amounts are subject to information reporting and even higher (99%) when subject to withholding (e.g., wages) (U.S. Department of Treasury, Inspector General for Tax Administration, 2019, p. 3).

In fact, there is an extensive literature that shows that self-employed taxpayers “consistently and substantially” underreport their income for tax purposes (Hurst et al., 2010, p. 2; Internal Revenue Service, 2019). For example, one study of almost two decades of tax returns found that of those gig workers who received an IRS Form 1099-K, 43% did not file any IRS Form 1040 Schedule C or Schedule SE with respect to their online gig earnings (Collins et al., 2019, p. 9). Overall, IRS analysis shows

that there is at least \$45 billion in underreporting of self-employment tax each year and another \$6 billion goes underpaid each year (Internal Revenue Service, 2019, p. 11). More specifically, 8.6% of people (almost 2 million) who received IRS Form 1099s for non-employee compensation for the 2016 tax year did not file an IRS Form 1040 or pay any payroll taxes, and that is up from just 6.1% in 2000 (Collins et al, p. 10). This translates to underpayment of Social Security payroll taxes by gig workers and, ultimately, adversely impacts their Social Security benefits.

Social security implications of GigSupp Work

The lack of information reporting for GigSupp Work triggers low self-employment tax compliance and frustrates the ability of these workers to save for retirement through Social Security contributions. Social Security benefits are primarily financed (89%) by worker and employer Social Security contributions made via the payroll tax and the self-employment tax (National Academy of Social Insurance, 2020, p. 7). Social Security is the most common source of retirement income for households aged 65 or older, with almost nine out of ten individuals age 65 and older receiving benefits (ibid.).

Women tend to rely more heavily on Social Security than men; the majority (55%) of adult Social Security beneficiaries are women (Social Security Administration, 2020, p. 19). “The reality is that for many women, Social Security is their main or only source of retirement income” (Women’s Institute for a Secure Retirement (WISER), 2020, p. 2). On average, however, the monthly Social Security benefits that women receive are just 80% of what men receive (Enda & Gale, 2020). Motherhood, specifically, seems to play a significant role in reducing women’s Social Security benefits (Rutledge et al., 2017, pp. i, 7–12). For example, “women with one child receive 16% less in benefits than non-mothers, and each additional child reduces benefits by another 2 percent” (ibid., p. i).

GigSupp Workers struggle with cash flow and access to retirement plans

GigSupp Workers struggle with self-employment tax compliance in financing retirement, but research shows they also do not contribute to retirement plans because they struggle with cash flow and unpredictability with their gig earnings (Small Business Majority, 2017). Compounding these issues, under current tax rules, gig workers are often ineligible for employer-provided retirement or health care benefits (U.S. Government Accountability Office, 2015; Rutledge, 2020; Rutledge & Wettstein, 2020; Applebaum et al., 2019, p. 21). In many instances, independent contractors are not permitted to participate in employer-sponsored plans, and businesses rarely want to provide those fringe benefits to their part-time and temporary workers (see, e.g., Rutledge, 2020; Rutledge & Wettstein, 2020). Administrative tax data is similar: in 2014, 41.9% of wage-only earners made contributions to a pension or IRA, but only 21.3% of workers with some wages and some self-employment income made a contribution to retirement savings – either an employer-sponsored plan or an individual retirement account (Jackson et al., 2017, p. 37 table 9).

Implications for gender and racial retirement wealth gap

The retirement financing challenges that GigSupp Work presents are even more challenging for women as “women face unique challenges saving [for retirement] largely stemming from a gender pay gap that persists into a retirement wealth gap” (Bond, et al., 2020, p. 1). Breaks in paid work, together with the gender pay gap, can compound and make it “relatively impossible” for women to reach retirement income parity with men (Merrill Lynch Wealth Management & Age Wave, 2019, p. 19). Women are also less likely to work full-time and be covered by an employer-sponsored pension plan than men, and they tend to have less retirement savings (see, e.g., Bond et al., 2020).

The retirement wealth gap is even greater for women of color, who, on average, have less savings for retirement

than their White counterparts (see, e.g., Hassani, 2018). A recent analysis of data from the Survey of Consumer Finances, found that as recently as 2016, “the average White woman had \$43,000 more in retirement savings than the average Black woman” (ibid.). This racial retirement wealth gap has persisted (and grown) since 1989, despite the fact that women overall were “better off” (ibid.).

Overall, research consistently finds women’s retirement wealth gap is exacerbated by additional factors including longer lifespans, higher health care costs, greater caregiving responsibilities, and lower financial literacy (see, e.g., U.S. Government Accountability Office, 2020b, pp. 8–9; Enda & Gale, 2020).

Gig Workers and COVID-19

With the onset of COVID-19, gig workers appeared to be particularly vulnerable to the economic shock, and policymakers took notice (see, e.g., Long et al., 2020). In response, Congress passed legislation that specifically allowed self-employed workers to qualify for emergency loans; and also provided Pandemic Unemployment Assistance (PUA) benefits to self-employed workers and gig workers not otherwise eligible for regular unemployment benefits (see, e.g., Chiang et al., 2020, p. 1574).

However, existing data and research proved to be wildly insufficient for calibrating an effective policy response. For example, in April of 2020, the Congressional Budget Office estimated that 5 million individuals would claim around \$35 billion in PUA benefits in 2020 and 2021 (Congressional Budget Office, 2020, pp. 9–10). As it turned out, by the end of August of 2020, some 14.5 million PUA benefit claims were filed (U.S. Department of Labor, 2020, p. 4).

The impact of the COVID-19 pandemic on women is readily apparent in that as of December 2019, women briefly outnumbered men in the paid workforce for just the second time, but those gains were virtually eliminated as COVID-19 layoffs swept the nation: women were overrepresented in some of the “hardest-

hit industries such as leisure and hospitality, health care and education” (Schmidt, 2020). In addition to the job losses, the related school and daycare shutdowns have also had a huge impact on the working women who “provide the majority of childcare” and now have children at home in the absence of full-time school and daycare (Karageorge, 2020, p. 1). Moreover, Congress has already heard testimony that the “pandemic’s economic consequences have fallen heavily on women of color... [and that] the pandemic will likely have negative long-term effects on women’s lifetime incomes, wealth, and overall economic security” (see, e.g., Matsui, 2020, pp. 3–4).

Policy options

Given the current COVID-19 crisis and the retirement financing gap that GigSupp Work presents for millions of workers as well as the retirement wealth gap facing women, policymakers could consider policy changes to improve the retirement income security of the growing number of GigSupp Workers, most of whom are women.

1. Improve information reporting and allow voluntary withholding

Reforming existing information reporting rules is the most immediate means to address gig worker tax compliance, and there are steps IRS and Treasury could implement to facilitate information reporting, and, in turn, tax compliance of online gig workers, most of whom “are likely not receiving an information return” (U.S. Government Accountability Office, 2020a, p. 12). The IRS could reform the “Tie-Breaker rule” and require online platforms to issue an IRS Form 1099-NEC when an online gig worker has \$600 in transactions, similar to the rules that apply for offline gig workers. In addition, the IRS could issue rules for voluntary withholding by online platforms, which would specifically address online gig worker tax compliance challenges (ibid.). Alternatively, Congress could reform the information reporting rules to target the misreporting of self-employment tax by gig workers.

2. Social Security and Supplement Security Income (SSI) reforms

To directly impact the finances of older women, Congress could consider making long-overdue updates to the (SSI) program, which primarily impacts older women. Eligibility for the means-tested program is limited to individuals 65 or older and those who are blind or disabled. Congress has not updated the asset limits for SSI program (\$2,000 for an individual, \$3,000 for a couple) for more than 30 years, and those limits make it “virtually impossible for an SSI recipient to save for retirement” (Entmacher and Matsui, 2013, pp. 762–763; Justice in Aging, 2019). In addition, Congress could consider: (1) increasing the minimum benefits available under Social Security; (2) increasing Social Security benefits for widowed spouses in low earning couples; and (3) reducing the marriage duration required for Social Security divorced spousal benefits from 10 years to fewer years. Given that women take time out of the paid workforce for caregiving responsibilities and the fact that current Social Security benefits do not account for any lost or reduced earnings attributable to unpaid caregiving responsibilities, Congress might make changes such that caregivers could qualify for larger Social Security benefits (see, e.g., National Academy of Social Insurance, 2020, p. 34; Enda & Gale, 2020).

3. Prioritize GigSupp Worker tax research

The COVID-19 pandemic has demonstrated the critical need for reliable data on GigSupp Work for tax and benefits policy purposes. The U.S. Department of Treasury and IRS could prioritize research on GigSupp Workers and their earnings. Additional targeted areas for tax research include: (1) the tax compliance of GigSupp Workers; and (2) the composition of the self-employment tax gap. More broadly, tax research could regularly focus on tax and retirement policy implications for women and people of color.

Conclusion

GigSupp Workers typically lack employer-provided retirement benefits or even tax withholding or information reporting on their gig earnings, and existing tax rules have not worked to facilitate self-employment tax compliance. Instead, current rules operate to trigger a retirement financing gap for these workers, most of whom are likely to be women that rely on Social Security in retirement. These challenges are even more consequential for women of color. Motherhood, too, plays a role in lowering women's retirement income. However,


it could be that lower earnings during working years and the need for flexibility to accommodate caregiving is what motivates so many women to engage in gig work in the first place. Significantly, many analysts now believe that our system of workplace-based benefits is obsolete and that more portable benefits are better suited to the modern workplace (Reder et al., 2019; Mitchell, 2020). These problems are not insurmountable—but the solutions do require more inclusive data and research on the gender difference in GigSupp engagement and retirement income security.

References

- Abraham, Katharine G., and Susan N. Houseman. 2019. "Making Ends Meet: The Role of Informal Work in Supplementing Americans' Income." *RSF: The Russell Sage Foundation Journal of the Social Sciences*, 5 (5, Dec. 1): 110–131. <https://www.rsfjournal.org/content/5/5/110>.
- Applebaum, Eileen, Arne Kallenberg, and Hye Jin Rho. 2019. *Nonstandard work arrangements and older Americans, 2005–2017*. Report, Center for Economic and Policy Research & Economic Policy Institute. <https://cepr.net/images/stories/reports/cws-2019-02.pdf>.
- Board of Governors of the Federal Reserve System. 2020. *Report on the Economic Well-Being of U.S. Households in 2019*. Available at <https://www.federalreserve.gov/consumerscommunities/shed.htm> (data and appendices are also available there).
- Bond, Tyler, Joelle Saand-Lessler, and Christian E. Weller. 2020. *Still Shortchanged: An Update on Women's Retirement Preparedness*. National Institute on Retirement Security. <https://www.nirsonline.org/wp-content/uploads/2020/04/Still-Shortchanged-Final.pdf>.
- Bruckner, Caroline. 2018. "Testimony for the hearing on 'Improving Tax Administration Today' before the U.S. Senate Committee on Finance Subcommittee on Taxation and IRS Oversight, 115th Congress (July 26)." <https://www.finance.senate.gov/imo/media/doc/26JUL2018BrucknerSTMNT.pdf>.
- Bruckner, Caroline. 2016. *Shortchanged: The Tax Compliance Challenges of Small Business Operators Driving the On-Demand Platform Economy*. Working Paper, Kogod School of Business, American University. Available at <https://ssrn.com/abstract=2784243>.
- Bruckner, Caroline, and Thomas Hungerford. 2019. *Failure to Contribute: An Estimate of the Consequences of Non- and Underpayment of Self-Employment Taxes by Independent Contractors and On-Demand Workers*. Working Paper 2019-1, Boston College Center for Retirement Research. https://crr.bc.edu/wp-content/uploads/2019/01/wp_2019-1.pdf.
- Chiang, Wei-Chih, Yingxu Kuang, and Charlie (Shengsheng) Huang. 2020. "COVID-19 Aid and Relief for the Self-Employed." *Tax Notes Federal* (Aug. 31): 1573–1583. <https://www.taxnotes.com/tax-notes-federal/legislation-and-lawmaking/covid-19-aid-and-relief-self-employed/2020/08/31/2cwjg>.
- Collins, Brett, Andrew Garin, Emilie Jackson, Dmitri Koustas, and Mark Payne. 2019. *Is Gig Work Replacing Traditional Employment? Evidence from Two Decades of Tax Returns*. Washington, DC: Internal Revenue Service. <https://www.irs.gov/pub/irs-soi/19rpgigworkreplacingtraditionalemployment.pdf>.
- Congressional Budget Office. 2020. *Preliminary Estimate of the Effects of H.R. 748, the CARES Act, Public Law 116-136, Revised, With Corrections to the Revenue Effect of the Employee Retention Credit and to the Modification of a Limitation on Losses for Taxpayers Other Than Corporations*. Washington, DC: Congressional Budget Office. <https://www.cbo.gov/system/files/2020-04/hr748.pdf>.
- Enda, Grace, and William G. Gale. 2020. *How Does Gender Equality Affect Women in Retirement?* 19A The Brookings Gender Equality Series, Brookings Institution. <https://www.brookings.edu/essay/how-does-gender-equality-affect-women-in-retirement/>.
- Entmacher, Joan, and Amy Matsui. 2013. "Addressing the Challenges Women Face in Retirement: Improving Social Security, Pensions, and SSI." *John Marshall Law Review*, 46 (3):749–793. <https://repository.jmls.edu/cgi/viewcontent.cgi?article=1216&context=lawreview>.

- Farrell, Diana, Fiona Greig, and Amar Hamoudi. 2018. *The Online Platform Economy in 2018: Drivers, Workers, Sellers and Lessors*. JPMorgan Chase Institute. <https://www.jpmorganchase.com/corporate/institute/document/institute-ope-2018.pdf>.
- Hassani, Hannah. 2018. *Women are building more wealth. But Racial Gaps Persist*. Urban Wire: Income and Wealth, The Blog of the Urban Institute (Mar. 22). <https://www.urban.org/urban-wire/women-are-building-more-wealth-racial-gaps-persist>.
- Holzblatt, Janet, and Jamie McGuire. 2016. *Factors Affecting Revenue Estimates of Tax Compliance Proposals*. Joint Working Paper of the Congressional Budget Office and the Staff of the Joint Committee on Taxation. <https://www.cbo.gov/sites/default/files/114th-congress-2015-2016/workingpaper/52199-wp-taxcompliance.pdf>.
- Hurst, Erik, Geng Li, and Benjamin Pugsley. 2010. *Are Household Surveys Like Tax Forms? Evidence from Income Underreporting of the Self-Employed*. NBER Working Paper No. 16527. <https://www.nber.org/papers/w16527>.
- Internal Revenue Service. 2020. *Gig Economy Tax Center*. Washington, DC: Internal Revenue Service. <https://www.irs.gov/businesses/gig-economy-tax-center> (last reviewed or updated 06-24-2020).
- Internal Revenue Service. 2019. *Federal Tax Compliance Research: Tax Gap Estimates for Tax Years 2011–2013*. Internal Revenue Service Publication 1415, Washington, DC: Internal Revenue Service. <https://www.irs.gov/pub/irs-pdf/p1415.pdf> (revised Sept. 2019).
- Jackson, Emilie, Adam Looney, and Shanthi Ramnath. 2017. *The Rise of Alternative Work Arrangements: Evidence and Implications for Tax Filing and Benefit Coverage*. Office of Tax Analysis Working Paper 114, Washington, DC: U.S. Department of Treasury. <https://www.treasury.gov/resource-center/tax-policy/tax-analysis/Documents/WP-114.pdf>.
- Justice in Aging. 2019. *Supplemental Security Income Restoration Act of 2019*. Policy Issue Brief, Justice in Aging. https://www.justiceinaging.org/wp-content/uploads/2017/07/SSI_Policy-Issue-Brief.pdf.
- Karageorge, Eleni X. 2020. "Covid-19 Recession is Tougher on Women." *Monthly Labor Review* (Sept.). Washington, DC: U.S. Department of Labor, Bureau of Labor Statistics. <https://www.bls.gov/opub/mlr/2020/beyond-bls/pdf/covid-19-recession-is-tougher-on-women.pdf>.
- Lim, Katherine, Alicia Miller, Max Risch, and Eleanor Wilking. 2019. *Independent Contractors in the U.S.: New Trends from 15 Years of Administrative Tax Data*. Washington, DC: Internal Revenue Service. <https://www.irs.gov/pub/irs-soi/19rpindcontractorinus.pdf>.
- Long, Heather, Andrew Van Dam, Alyssa Fowers, and Leslie Shapiro. 2020. "The covid-19 recession is the most unequal in modern U.S. history." *Washington Post* (Sept. 30). <https://www.washingtonpost.com/graphics/2020/business/coronavirus-recession-equality/><https://www.washingtonpost.com/graphics/2020/business/coronavirus-recession-equality/>.
- Matsui, Amy. 2020. "Testimony for the hearing on 'Save our Social Security Now' before the U.S. House of Representative Committee on Ways and Means Subcommittee on Social Security, 116th Congress (Sept. 23)." <https://waysandmeans.house.gov/sites/democrats.waysandmeans.house.gov/files/documents/AmyMatsuiTestimony.pdf>.
- Merrill Lynch Wealth Management and Age Wave. 2019. *Women & Financial Wellness: Beyond the Bottom Line*. Bank of America Corporation. Available at <https://www.ml.com/women-financial-wellness-age-wave.html>.
- Mitchell, Olivia S. 2020. *Building Better Retirement Systems in the Wake of the Global Pandemic*. Working Paper 27261, National Bureau of Economic Research. <https://www.nber.org/papers/w27261.pdf>.

- National Academy of Social Insurance. 2020. *Social Security Benefits, Finances, and Policy Options: A Primer*. National Academy of Social Insurance. <https://www.nasi.org/sites/default/files/research/2020%20Social%20Security%20Primer%20Final.pdf>.
- Reder, Libby, Shelly Steward, and Natalie Foster. 2019. *Designing Portable Benefits: A Resource Guide for Policymakers*. The Aspen Institute, Future of Work Initiative. https://assets.aspeninstitute.org/content/uploads/2019/06/Designing-Portable-Benefits_June-2019_Aspen-Institute-Future-of-Work-Initiative.pdf.
- Robles, Barbara, and Marysol McGee. 2016. *Exploring Online and Offline Informal Work: Findings from the Enterprising and Informal Work Activities (EIWA) Survey*. Finance and Economics Discussion Series 2016-089, Washington, DC: Board of Governors of the Federal Reserve System. <https://www.federalreserve.gov/econresdata/feds/2016/files/2016089pap.pdf>.
- Rutledge, Matthew S. 2020. *Are Older Nontraditional Workers Able to Find Health and Retirement Coverage?* Working Paper 2020-9, Boston College Center for Retirement Research. https://crr.bc.edu/wp-content/uploads/2020/03/wp_2020-9-.pdf.
- Rutledge, Matthew S., and Gal Wettstein. 2020. *Is Nontraditional Work At Older Ages Associated With Better Retirement Security?* Working Paper 2020-13, Boston College Center for Retirement Research. https://crr.bc.edu/wp-content/uploads/2020/07/wp_2020-13_.pdf.
- Rutledge, Matthew S., Alice Zulkarnain, and Sara Ellen King. 2017. *How Much Does Motherhood Cost Women in Social Security Benefits?* Working Paper 2017-14, Boston College Center for Retirement Research. https://crr.bc.edu/wp-content/uploads/2017/10/wp_2017-14.pdf.
- Schmidt, Samantha. 2020. “Women have been hardest hit by job losses in the pandemic. And it may get worse.” *Washingtonpost.com* (May 9). <https://www.washingtonpost.com/dc-md-va/2020/05/09/women-unemployment-jobless-coronavirus/>.
- Small Business Majority. 2017. *Opinion Poll: Freelancers Need Flexible Retirement Options*. Small Business Majority. <https://smallbusinessmajority.org/sites/default/files/research-reports/032217-Freelancers-Retirement-poll.pdf>.
- Social Security Administration. 2020. *Fast Facts & Figures About Social Security, 2020*. Washington, DC: Social Security Administration. https://www.ssa.gov/policy/docs/chartbooks/fast_facts/2020/fast_facts20.pdf.
- U.S. Department of Labor. 2020. *Unemployment Insurance Weekly Claims*. Sept. 17. <https://oui.doleta.gov/press/2020/091720.pdf>.
- U.S. Department of Labor, Bureau of Labor Statistics. 2018a. *Contingent and Alternative Employment Arrangements—May 2017*. USDL-18-0942, Washington, DC: U.S. Department of Labor. <https://www.bls.gov/news.release/pdf/conemp.pdf>.
- U.S. Department of Labor, Bureau of Labor Statistics. 2018b. *Labor Force Statistics from the Current Population Survey: Electronically mediated employment*. Washington, DC: U.S. Department of Labor. <https://www.bls.gov/cps/electronically-mediated-employment.htm> (last modified 09-28-18).
- U.S. Department of Treasury, Inspector General for Tax Administration. 2019. *Expansion of the Gig Economy Warrants Focus on Improving Self-Employment Tax Compliance*. Reference 2019-30-016, Washington, DC: U.S. Department of Treasury. <https://www.treasury.gov/tigta/auditreports/2019reports/201930016fr.pdf>.
- U.S. Government Accountability Office. 2020a. *TAXPAYER COMPLIANCE: More Income Reporting Needed for Taxpayers Working Through Online Platforms*. GAO-20-366, Washington, DC: U.S. Government Accountability Office. <https://www.gao.gov/assets/710/707209.pdf>.



U.S. Government Accountability Office. 2020b. *RETIREMENT SECURITY: Older Women Report Facing a Financially Uncertain Future*. GAO-20-435, Washington, DC: U.S. Government Accountability Office. <https://www.gao.gov/assets/710/708121.pdf>.

U.S. Government Accountability Office. 2019. *CONTINGENT WORKFORCE: BLS is Reassessing Measurement of Nontraditional Workers*. GAO-19-273R, Washington, DC: U.S. Government Accountability Office. <https://www.gao.gov/assets/700/696643.pdf>.

U.S. Government Accountability Office. 2015. *CONTINGENT WORKFORCE: Size, Characteristics, Earnings, and Benefits*. GAO-15-168R, Washington, DC: U.S. Government Accountability Office. <https://www.gao.gov/assets/670/669899.pdf>.

Women's Institute for a Secure Retirement (WISER). 2020. *Minority Women and Retirement Income: Your Future Paycheck*. https://www.wiserwomen.org/wp-content/uploads/2020/10/wiser_rpt_yfp_minority_2020.pdf. Accessed 10-27-2020.

About the authors

Professor Caroline Bruckner is on the faculty of American University's Kogod School of Business (Kogod) and is the managing director of the Kogod Tax Policy Center, which researches tax issues specific to small businesses and entrepreneurs. In this capacity, she has testified before both U.S. House and Senate Congressional committees as well as the IRS. Since joining Kogod, she has done ground-breaking research on the tax compliance challenges of gig workers as well as women business owners. In Oct. 2019, the Ranking Member of the U.S. Senate Committee on Finance, Ron Wyden (D-OR), introduced tax legislation to address challenges women business owners have accessing capital prompted by Bruckner's research. More recently, she developed a Congressional witness dataset that is the first-of-its-kind digital diversity and inclusion legislative research tool to measure the diversity of Congressional witnesses in the federal legislative process. She teaches courses on business law, fundamental principles of federal income tax and business implications of the future of work.

She previously worked for the U.S. Senate Committee on Small Business and Entrepreneurship (SBC) from 2009 through 2014, ultimately as Chief Counsel, where she worked on small business tax legislation and advised the committee and its chair on tax, labor and budget matters. Prior to public service, Professor Bruckner was a senior associate with the international tax services group of PricewaterhouseCoopers, LLP - Washington National Tax Services (PwC-WNTS), where she advised clients on international tax issues. Before joining PwC-WNTS, she served as an associate in the employee benefits group of Paul Hastings.

Professor Bruckner has a Masters in Taxation (LLM) from Georgetown University Law Center and a Juris Doctor from George Mason University School of Law where she won the "Best Memorandum of Law Award" for the First-Year Class, and was a Writing Fellow and articles editor for The Civil Rights Law Journal. She has a B.A. in Political Science from Emory University, where she was a member of *Pi Sigma Alpha*, Political Science Honors Society. She is an American College of Tax Counsel Fellow, a member of the National Academy of Social Insurance and member in good standing of the Virginia Bar.

Professor Jonathan Barry Forman is the Kenneth E. McAfee Centennial Chair in Law at the University of Oklahoma, where he teaches courses on tax and pension law. Professor Forman served in Washington, DC, as the Professor in Residence for the Internal Revenue Service Office of Chief Counsel for the 2009–2010 academic year, and he was a member of the Board of Trustees of the Oklahoma Public Employees Retirement System (OPERS) from 2003 through 2011.

Professor Forman is also a co-chair of the Washington-DC-based Retirement Income Institute, the research arm of the Alliance for Lifetime Income. He is also active in the American Bar Association, the American College of Employee Benefits Counsel, the American College of Tax Counsel (a regent since 2017), the Association of American Law Professors, the TIAA Institute, and the National Academy of Social Insurance. Professor Forman has lectured around the world, testified before Congress, and served on numerous federal and state advisory committees.

Professor Forman has more than 300 publications including *Making America Work* (Urban Institute Press 2006); *Fully Funded Pensions*, 103(4) *Marquette Law Review* 1205–1312 (Summer 2020); *Removing the Legal Impediments to Offering Lifetime Annuities in Pension Plans*, 23(1) *Connecticut Insurance Law Journal* 31–141 (Fall 2016); and *Tontine Pensions*, 163(3) *University of Pennsylvania Law Review* 755-831 and (Feb. 2015) (with Michael J. Sabin). Professor Forman earned his law degree from the University of Michigan in 1978, and he has master's degrees in economics and psychology. Also, prior to entering academia, it was his privilege to serve in all three branches of the federal government, including as Tax Counsel to the late Senator Daniel Patrick Moynihan (D-NY).