Default Electronic Delivery Works:

Evidence of Improved Participant Outcomes from Electronic Delivery of Retirement Plan Documents

Prepared for
The SPARK Institute

November, 2019

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EXECUTIVE SUMMARY

Currently, employers that voluntarily choose to offer retirement plans, such as 401(k) plans, are required to distribute numerous statements and disclosures both quarterly and annually. Many plans would like, as a default, to distribute retirement plan information electronically. All participants would be given the right to "opt out" and receive paper communications at no direct charge. But current rules stand in the way.[1] The recent Department of Labor (DOL) proposed safe harbor reflects the changing nature of electronic communication and improved internet access for retirement plan participants, and offers plan administrators the ability to use technology to enhance participant outcomes.

Building on research conducted in 2015, this white paper updates the previous estimate of participant cost savings and further explores the other benefits of electronic communication for plan participants based on current empirical evidence of internet access and technology adoption. In addition, the current research is enhanced by providers' experience with electronic delivery to demonstrate the many benefits realized by plan participants from electronic communication.[2]

The trend toward digital access and electronic delivery continues to move into all areas of everyday life. This is consistent with a 2015 Greenwald & Associates survey that found plan participants are aware of the many potential benefits of electronic delivery and they overwhelmingly find it acceptable to make electronic delivery the default method of delivering of plan information.

Electronic delivery provides an efficient, secure, and reliable means of communicating important plan information, which reduces costs and facilitates superior participant outcomes. Further, economic theory supports the benefits to plan participants in two ways. First, economic theory indicates that in a competitive marketplace, a significant portion of the costs savings will pass through to plan participants (Refer to Appendix A). Second and more importantly, current economic research shows that electronic delivery and communication (nudges) alters participant behavior and dramatically improves participant outcomes.

FINDINGS

- **Default Rules that Rely on Opt-Out Improve Outcomes –** Behavioral economists have demonstrated the importance of nudges and enhanced communication to engage plan participants and overcome their inertia. Accordingly, in the landmark Pension Protection Act of 2006, Congress promoted the use of "automatic" rules that facilitate "automatic" behavior for retirement savings. The evidence is clear that this shift has had a critical impact on driving superior outcomes:

[1] Previously, the Department of Labor (DOL) and Internal Revenue Service (IRS) have issued extensive guidance governing the manner in which plans can distribute retirement plan information electronically.
[2] The SPARK Institute represents the interests of a broad-based cross section of retirement plan service providers. The SPARK Institute funded this research and coordinated the service providers' responses. These providers made available proprietary data to support and strengthen this research. The author acknowledges data and empirical evidence contributed from Ascensus, Empower Retirement, Fidelity ICMA-RC, Lincoln Financial Group, Principal Financial, Prudential, Charles Schwab, TIAA, Transamerica, and Vanguard.

- ***Automatic Enrollment Increases Plan Participation* –** Auto enrollment has been a remarkable success in getting participants to save for retirement with one large provider's data showing that ***92 percent of eligible employees participate in the plan when automatic enrollment is available, but only 57 percent participate when no such feature is available.***
- ***Automatic Escalation of Deferral Rates* –** Getting participants in a plan is only the first step toward reaching retirement savings goals; it is also important for the participant to increase their rate of savings over time. One recent survey found that ***automatic escalation of contribution amounts resulted in average account balance growth of 78 percent*** for plans with automatic contribution escalation.

➢ **Enhancing Retirement Readiness with Default Electronic Delivery –** Directing participants to electronic mediums promotes the use of electronic tools (such as investment rebalancing and financial wellness applications) that ultimately play an important role in promoting superior retirement outcomes. In fact, as provider data demonstrate, mere exposure to online tools has been shown to encourage participants to increase deferrals or modify their investment strategy to achieve a secure retirement. Consequently, provider evidence demonstrates that participants receiving plan communications electronically have better retirement outcomes and default electronic delivery could improve retirement readiness for countless others.

- ***Increases in Deferral Rates* –** Estimates indicate that plan participants ***could increase their final account balance by 63 percent with modest increases in their deferral rate*** which provider data indicates can be accomplished with electronic communication nudges and engagement with online tools**.**
- ***Improving Investment Choices and Defaults*** – Providers overwhelmingly offer tools and education to plan participants, as well as financial wellness and benchmarking or data analysis portals for participants.
- ***Cumulative Benefits*** – Projections of the benefits of increased electronic communication – e.g., direct cost savings, increased deferral rates, improved investment choices and utilization of online tools, ***could increase a participants account balances by as much as 149 percent over their saving horizon*** in combination with other enhancements like automatic escalation.

➢ **Benefits Accruing Directly to Participants –** Allowing retirement plan administrators to use default electronic delivery would reduce the costs associated with their plans. As our research based on economic incidence theory shows, these cost savings would ultimately be passed back to participants, translating to lower expenses – and higher net investment returns – for participants. We calculate that switching to an electronic delivery default would produce ***$250 to $450 million in aggregate savings annually that would accrue directly to individual retirement plan participants***.

- Empirical estimates indicate that these cost savings attributable to default electronic delivery could <u>***improve participant retirement security by 9 percent***</u> during the accumulation phase.

- **Benefits of Electronic Delivery –** Relying on paper communication is both inefficient and costly. Even the federal government has recognized in its defined contribution plan for federal employees that electronic delivery of plan information is the appropriate default. Electronic delivery:

    - ***Allows participants to respond quickly to plan information received electronically;***
    - ***Ensures information remains up-to-date and is accessed by participants in "real time;"***
    - ***Provides information that is more accessible – and digestible;***
    - ***Provides information that can be more readily customized;***
    - ***Provides a better guarantee of actual receipt of information and helps address missing participants; and***
    - ***Helps strengthen cybersecurity and prevents online account fraud.***

- **Retirement Savers Have Online Access and Prefer Electronic Delivery –** Recent surveys indicate that technology and personal devices have changed the nature of online access. Current government surveys of internet performance no longer measure access, but rather focus on the available speed of the connection. Virtually all Americans have access to online services through a smartphone or through broadband service in the home. Discrepancies across age group, race, and household income have narrowed and, in some cases, have been eliminated. This is particularly true for the sub-population of plan participants. A recent Greenwald & Associates survey of online habits indicated that ***99 percent of retirement plan participants reported having computer access at home or work and 88 percent of respondents reported accessing the internet on a daily basis***.[3]

- **Conducting Financial Business Online –** Americans' reliance on electronic technology for financial communication and transactions has grown significantly along with the dramatic growth in smartphone and internet access. This growth has taken place in areas of critical importance to everyday life:

    - ***Banking and Financial Transactions*** – According to the most recent American Bankers Association survey, customers overwhelmingly preferred electronic banking methods, with ***72 percent of all respondents in 2017 preferring online*** (computer or other device) or mobile banking, a dramatic increase from 45 percent in 2012.
    - ***Social Security Benefits*** – Nearly ***all Social Security recipients (98.6 percent in 2018)*** receive their benefits through electronic payment.
    - ***Federal Income Tax Filing*** – The trend to file individual tax returns electronically continues to experience steady growth. Specifically, ***85 percent of the 137 million returns filed as of May 2018 were filed electronically***.

  Conducting day-to-day financial transactions online serves as a proxy for a retirement plan participant's willingness to electronically receive retirement plan-related notices, disclosures, and statements. This move toward conducting day-to-day financial transactions is a strong indicator that participants would prefer and benefit from default electronic delivery of plan information.

[3] Refer to Appendix A in the original 2015 study for the complete Greenwald & Associates survey.

I. Restrictive Framework Guiding Electronic Delivery

A. Overview

Federal law requires that qualified retirement plan participants receive plan information on a regular basis.[4] This breadth of required information, as outlined in Table 1, includes plan description and summary materials, benefit statements, and disclosures regarding expenses and fees.

Traditionally, retirement plans (through their administrators) have prepared printed (hard) copies of these materials for distribution to employees and other plan participants (including former employees who have already retired).[5] This has entailed either distributing materials to employees at the workplace or, in many cases, mailing the materials to participants. But as electronic communication has gained traction as the primary means by which individuals receive important information, retirement plans have increasingly turned to delivering information through e-mail or secure websites.[6] Besides reducing costs (which are passed through to plan participants), electronic delivery of plan information provides an efficient and reliable means of communicating important plan information – which can facilitate superior participant outcomes.

Rules issued by the DOL and the Internal Revenue Service (IRS) govern the distribution of plan information by electronic means. While providing some guidance for retirement plans, these rules generally do not permit plan administrators to make electronic delivery the default delivery option. Rather, current DOL and IRS guidance often requires that a plan participant affirmatively consent to receive electronic delivery of plan information. But as behavioral economics, particularly in the retirement plan context, has made clear, inertia is an exceedingly powerful force. The need for affirmative consent creates a considerable barrier for plans trying to increase efficiencies and pass those efficiencies to plan participants – even while (refer to Section II.C. and Appendix A) the overwhelming majority of today's plan participants are comfortable with an electronic default that enables them to "opt out" and receive paper documents. Further, the existing DOL and IRS rules apply different electronic delivery standards to different communications; the conflicting standards create considerable confusion for plan sponsors and their plan administrators.

Indeed, today's highly restrictive framework guiding electronic delivery of plan information is trapped in the Twentieth Century; this framework reflects neither recent years' emerging information trends and technologies nor their many benefits for retirement plan participants. Given the many benefits of electronic delivery, it is not surprising that plan participants themselves are overwhelmingly willing to accept electronic communication and online access for

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[4] Federal Law refers to both the Employee Retirement Income Security Act of 1974 (ERISA) and the Internal Revenue Code (Code), and the regulations thereunder.

[5] Plan administrators include employers who sponsor a qualified retirement plan, plan trustees, or third-party managers who act as a plan fiduciary and are responsible for the plan's administration and management.

[6] Use of traditional first-class mail (single piece and bulk mailing) service via the U.S. Postal Service has declined 44.6 percent since 2009. This decline is linked to the widespread use of electronic communication. Refer to U.S. Postal Service, *Postal Facts, 2018, A Decade of Facts and Figures*, available online: https://facts.usps.com/table-facts/

retirement plan information. Since the 2015 survey conducted by Greenwald & Associates, which found almost 85 percent of retirement savers are comfortable with electronic delivery, the preference toward electronic delivery as the default continues to grow and has become the accepted form of communication.[7]

The Greenwald & Associates survey of plan participants documented the preferences and practices of online access and electronic communication for their day-to-day financial transactions and activities. More recent statistics and empirical evidence demonstrate that this trend continues and extends into all areas of financial life.

Further, participants realize tangible benefits when plan providers couple online access and electronic delivery with tools and evaluation methods, as plan data provides evidence that participants enjoy a number of efficiencies that accrue from improved information flow. In addition, behavioral economic research finds that careful design of electronic communication offers a 'nudge' that encourages participant engagement. This is borne out in the plan provider experience demonstrating that participants clearly recognize the many ancillary benefits available from moving to electronic delivery and are reaping these benefits (refer to section III. C. for estimates of these benefits).

Consistent with plan participant views, recent legislative efforts recognize the importance of allowing plan administrators to keep pace with these trends to facilitate more widespread delivery of plan information through electronic methods. The RETIRE Act (H.R. 4610, 115th Congress) introduced by Representatives Jared Polis (D-CO), Phil Roe (R-TN), Ron Kind (D-WI) and Mike Kelly (R-PA) and 38 other bipartisan cosponsors would improve the way that employers provide employees with information about their retirement benefits by allowing employers to use default electronic delivery for pension plan documents. RETIRE Act supporters argue that Americans would benefit from greater use of technology for retirement plan communications, as they have for almost every other area of their daily lives.[8] Senators Sherrod Brown (D-OH) and Mike Enzi (R-WY) also introduced companion legislation (S. 3795, 115th Congress) in the Senate along with original bipartisan cosponsors including Senators Gary Peters (D-MI), Rob Portman (R-OH), Doug Jones (D-AL), and Johnny Isakson (R-GA).

While permitting plan administrators to make electronic delivery the default delivery method, both legislative proposals would preserve the opportunity for a participant to opt-out of electronic delivery and request, at no direct charge, paper copies of all documents. These legislative proposals are consistent with: (1) President Trump's recent Executive Order directing

7 The 2015 Greenwald & Associates survey found that 84 percent of plan participants find it acceptable to make electronic delivery the default option (with the option to opt-out at no cost to the participant). The study examines plan participant views toward receiving plan documents and account updates by paper and online. A total of 1,000 randomly selected plan participants nationwide were administered a 10-minute telephone survey. The results reflect the weighted (by age and gender) responses to reflect the current demographics of plan participants.

8 The bill would require plan administrators to meet conditions that have already been established by the DOL for certain communications, *i.e.*, continuous secure website access with instructions and notifications to participants of their ability to opt-out of electronic delivery (and receive paper copies) at no direct cost to the participant. The bill would require plan participants to receive an annual notice informing them of the documents they have received electronically that year and the participant's right to receive them in paper. In addition, the bill provides numerous consumer protections to ensure that participant needs are met.

the Department of Labor to investigate "…the potential for broader use of electronic delivery as a way to improve the effectiveness of disclosures and reduce their associated costs and burdens:" and (2) the resulting regulatory proposal discussed in the following section.[9] **By enabling plans to set electronic delivery as the default delivery method, considerable benefits would accrue to plan participants, not only from reduced costs, but also from increased efficiencies (through access to online tools and applications to assist in their saving decisions), which in turn will improve their retirement preparedness.**

B. DOL and IRS Electronic Delivery Regulations

Depending on the specific required disclosure, either the DOL or the IRS provides the applicable delivery rules and interpretations.[10] Most disclosures overseen by the DOL are subject to the DOL's Electronic Disclosure Safe Harbor and Interpretive and Technical Guidance.[11] Meanwhile, for disclosures required under the Tax Code, the IRS has issued Media Disclosure Guidance.[12] The DOL and IRS rules and interpretations bear considerable similarities in terms of *how* documents can be delivered electronically: Whereas the DOL requires electronic delivery in a manner that is *reasonably calculated to ensure actual receipt of the material*, the IRS requires *effective ability to access* the material. But the regulations differ considerably on *when* documents can be delivered electronically.

Table 1 provides a list of the commonly required disclosures on the vertical axis, and options available for electronic delivery on the horizontal axis. As the table makes clear, DOL and IRS guidance lack a consistent approach for all plan disclosures. The lack of conformity means that plan administrators must make a case-by-case determination regarding the method for delivering plan information that maintains compliance with the rules and guidance.

Reviewing this existing display of electronic delivery rules, a 2013 Government Accountability Office (GAO) report concluded that the current framework is "somewhat inconsistent and

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[9] U.S. Department of Labor, Employee Benefits Security Administration, Office of Regulations and Interpretations, RIN1210—AB90, Electronic Disclosure by Employee Benefit Plans, 2019 and Office of Management and Budget, Executive Office of the President, *Executive Order on Strengthening Retirement Security in America***,** Memo dated August 31, 2018. In addition, the previous administration promoted electronic delivery in an Executive Orders, as well, directing Federal Agencies to conduct electronic transactions whenever feasible. Refer to Office of Management and Budget, Executive Office of the President, Reducing Reporting and Paperwork Burdens, Memo dated June 22, 2012.

[10] For a detailed review of the DOL and IRS rules and interpretations, *see* Principal, *A Guide for Plan Sponsors of 401(k) and Other Participant-Directed Retirement Plans*, May, 2013, and OneAmerica, American Life Insurance Company, *Distributing Materials Electronically FAQ,* June 2013.

[11] *See* Employee Benefits Security Administration, *Final Rules Relating to Use of Electronic Communication and Recordkeeping Technologies by Employee Pension and Welfare Benefit Plans*; Final Rule [04/09/2002], Volume 67, Number 68, Pages 17,263 – 17,276 (29 CFR Part 2520), available online: http://www.dol.gov/ebsa/regs/fedreg/final/2002008499.htm. *See also* Technical Release, No. 2011-03, *Interim Policy on Electronic Disclosure Under 29 CFR 2550.404a-5,* September 13, 2011, available online: http://www.dol.gov/ebsa/newsroom/tr11-03.html, and Section A of the Technical Release, No. 2011-03R, December 8, 2011, available online: http://www.dol.gov/ebsa/newsroom/tr11-03r.html, respectively.

[12] The IRS has issued *Use of Electronic Media for Providing Employee Benefit Notices and Making Employee Benefit Elections and Consents,* (26 CFR Parts 1, 35, and 54) available online: http://benefitscollective.com/images/a/a7/Td9294.pdf.

unclear."[13] The GAO found a need to clarify the rules and disclosure guidance between the DOL and IRS to avoid inconsistencies. As the following descriptions of the DOL and IRS guidance shows, this inconsistent framework complicates the process for making the many required disclosures.

Table 1 – Disclosure Requirements and Electronic Delivery Options

Original Source: Principal, A Guide for Plan Sponsors of 401(k) and Other Participant-Directed Retirement Plans, May, 2013; Verified with IRS documents and DOL EBSA website for current laws and regulations.

Disclosure Requirement	Electronic Delivery Options						Jurisdiction	
	Wired at Work	**Affirmative Consent**	**Assumed Consent**	**Continuous Access Website**	**IRS General Method**	**IRS Alternative Method**	**DOL**	**IRS**
Summary Plan Description and Summary of Material Modifications	√	√					√	
Summary Annual Report	√	√					√	
401(k) Traditional Safe Harbor Notice					√	√		√
Quarterly Benefit Statement	√	√		√			√	√
Plan and Expense Information for Participant-Directed Plans	√	√	√	√			√	
Investment Information for Participant-Directed Plans (in tabular or another accessible format)	√	√	√				√	
Automatic Enrollment and Qualified Default Investment Alternative Notices	√	√				√	√	√
Blackout Notices	√	√					√	
IRS Notices (for example, Rollover Notices or Qualified Domestic Relations Orders)					√	√		√

Available online at: https://www.irs.gov/pub/irs-tege/irs_reporting_disclosure_guide.pdf and https://www.dol.gov/sites/dolgov/files/ebsa/about-ebsa/our-activities/resource-center/publications/reporting-and-disclosure-guide-for-employee-benefit-plans.pdf

1. DOL's 2002 Electronic Disclosure Safe Harbor – A fiduciary (in this case generally the plan administrator) that complies with the 2002 safe harbor is treated as having delivered the materials by traditional postal service. To satisfy the safe harbor, the plan must ensure that the electronic systems:

[13] *See* Government Accountability Office, *Private Pensions Revised Electronic Disclosure Rules Could Clarify Use and Better Protect Participant Choice*, GAO-13-594, September, 2013.

- Guarantee receipt of the materials;
- Protect confidentiality of personal information;
- Deliver notices explaining the importance of the materials and the option to "opt-out" of electronic delivery;
- Contain materials that are easily understood and accessible to the participant;
- Contain the same content as documents delivered by other means; and
- Respond accordingly to requests for paper documents.

The safe harbor identifies participants who are "wired at work" or who give their "affirmative consent" as having the potential to receive information electronically. An employee who is wired at work requires access to electronic materials at any location where the employee works and use of the computer is an integral part of the employee's work duties.

Affirmative consent requires that the plan communicate the:

- Types of document covered by consent;
- Ability to withdraw consent at any time, without cost;
- Procedures for withdrawing consent; and
- Hardware and software requirements necessary to access and store the electronic documents.

In October of 2019, the DOL proposed a new and separate safe harbor that would allow plan sponsors the option to use default electronic delivery for ERISA required retirement plan notices and disclosures. The proposal would generally establish a new "notice and access" delivery safe harbor for posting documents online, with a right for participant to request any documents in paper free of charge. In addition, the proposal recognizes the changing nature of electronic communication and increased internet access since the DOL last published regulations for use of electronic delivery in 2002.

2. DOL's Interpretive and Technical Guidance (for benefit statements) **–** Separate from its generally applicable safe harbor, DOL provides a separate set of rules for delivery of quarterly benefit statements[14]. Plans may make quarterly benefit statements available through "one or more secure continuous access websites." But to deliver quarterly statements this way, plans must provide an annual notice explaining the: (1) availability of the information on the website; (2) instructions for accessing the information; and (3) right to request paper copies at no additional cost. Participants who meet the "wired at work" or "affirmative consent" requirements can be electronically provided this annual notice; otherwise, the notice must be sent via traditional postal service.[15]

Additionally, in the context of plan and expense information and, for participant-directed plans, investment information, DOL issued additional information regarding the "assumed consent" method for electronic delivery. Specifically, the plan may treat a participant as having provided his or her consent if the participant (1) receives an annual notice consistent with the requirements

[14] DOL Field Assistance Bulletin 2006-03

[15] Even if a plan administrator must send notices by mail, the participant may still also receive quarterly benefit statements through online access.

under “affirmative consent” and then (2) provides an e-mail address to the administrator for electronic delivery. Moreover, the plan must continue to provide annual notices conveying the same information (as contained in the initial notice).

***3. IRS’s Media Disclosure Guidance* –** The IRS has two methods governing the default use of electronic delivery, its “general” and **“**alternative**”** methods. The general method parallels the DOL’s Electronic Disclosure Safe Harbor, which requires affirmative consent.

The alternative method provides greater flexibility for the plan, allowing delivery of information through any electronic medium (*e.g*., e-mail or continual access website) as long as the individual has the “effective ability to access” the materials. In addition, the administrator must advise recipients – at the time of electronic delivery – that they have the right to request paper copies without any associated costs. Some call this the “post and push” method of delivery.[16]

II. The Digital Experience and Financial Business

A. Online Experience is the Norm

Allowing plan administrators to send electronically, by default, all ERISA and Tax Code notices, disclosures, and statements is consistent with widespread internet access for the vast majority of active, separated, and retired plan participants.[17] The 2015 Greenwald Survey of retirement plan participants’ online habits indicated that 99 percent reported having access at home or work and 88 percent of respondents reported accessing the internet on a daily basis.[18] Since that study, both public and private surveys indicate that widespread access to the internet has continued to grow.[19]

At one time, the primary location for internet access was the workplace. However, numerous surveys that measure online access shifted the focus of their questions away from the workplace to home access or use of smart phones. Further, they focused on the speed or performance of the internet access, not simply the presence of the access. Indeed, recent surveys indicate that virtually all Americans have access to online services, either at home or through a mobile device.

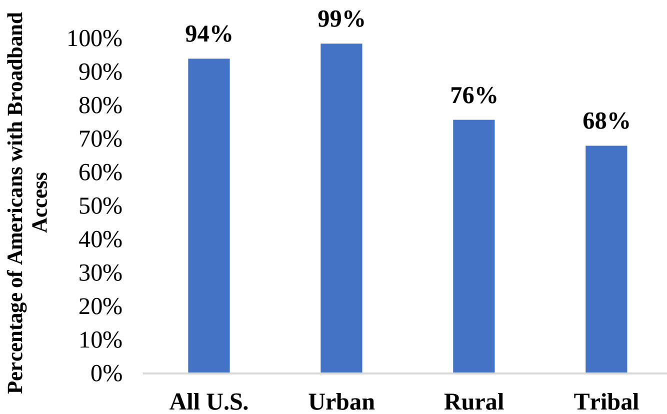
More importantly, access to the internet through smart phones represents an important trend which, in a few short years, has replaced home internet access for certain segments of the

[16] The DOL proposal does not make any modifications to the IRS standards. However, the RETIRE Act would make conforming changes to the current DOL and IRS standards.
[17] Under this option, the plan administrator must meet the conditions established by the DOL, *i.e*., continuous secure website access, with instructions and notifications of the ability to opt-out at no cost to the participant. The plan participant must receive annually these instructions and notifications.
[18] Refer to Appendix A in the original 2015 study for the complete Greenwald & Associates survey.
[19] Refer to the Pew Research Center, June 2019, *Mobile Technology and Home Broadband 2019*, Federal Communications Commission, *Communications Marketplace Report*, FCC 18-181A, December 12, 2018, and U.S. Census, American Community Survey Reports, *Computer and Internet Use in the United States: 2016*, ACS-39, August 2018.

population.[20] Recent surveys indicate that 37 percent of Americans have their primary access to the internet through their mobile device or smart phone.[21]

***1. Broadband Access in Homes* –** The overwhelming majority of Americans have computers and internet access in their homes. Over the past twenty years, household access to computers and internet connections has increased dramatically.[22] This reflects the trend toward streaming entertainment in the home, or the 'internet of things,' where home appliances and home systems (e.g. lights, heating, or security) rely on an internet connection to function. According to the U.S. Census Bureau, in 1997 fewer than half of all households had computers at home.[23] By 2017, 94 percent of all households had broadband internet access in their home according to the Federal Communications Commission (FCC) Marketplace Report.[24] Since the completion of the previous study, the direction of the research into internet access has shifted from availability of access to speed of access.[25]

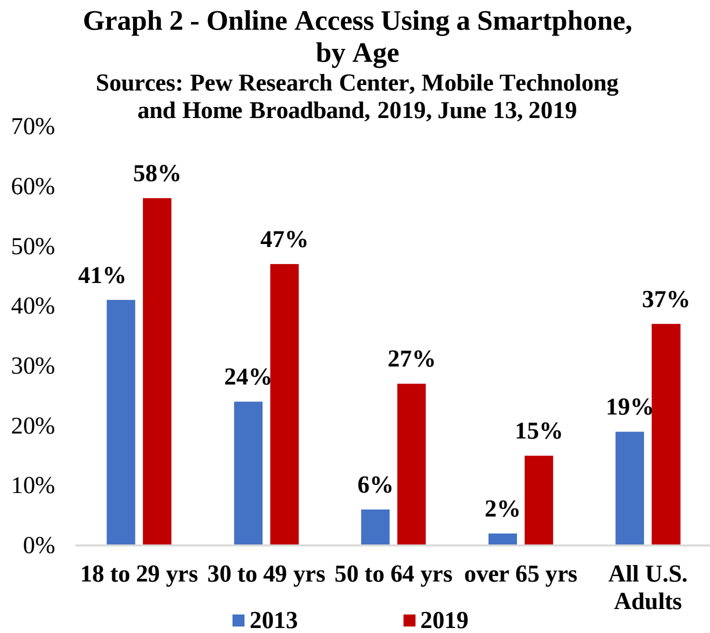
Graph 1 - Percentage of Americans with Broadband, by Geographic Location, 2017
Source: FCC, *Communications Marketplace Report,* GN Docket No. 18-231, FCC 18-181, p. 132



As Graph 1 shows, availability of broadband access lags behind in rural and tribal areas. However, this most likely reflects the lack of infrastructure in these sparsely populated areas. Consistent with the FCC study, the Congressional Research Service study confirms that in tribal lands, "high poverty rates and low income levels in tribal lands—along with the fact that many tribal communities are located in remote rural areas (often with rugged terrain)—are major factors that explain why tribal areas have comparatively poorer levels of broadband access."[26] With advancements in cell phone

[20] The trend toward smartphone access means that segments of the population that previously had been excluded from internet access, now have affordable internet access.
[21] Pew Research Center, June 2019, *Mobile Technology and Home Broadband 2019* (data based on telephone interviews conducted Jan. 8-Feb. 7, 2019, among a national sample of 1,502 adults, 18 years of age or older, living in all 50 U.S. states and the District of Columbia (302 respondents were interviewed on a landline telephone, and 1,200 were interviewed on a cellphone, including 779 who had no landline telephone).
[22] The digital divide is no longer viewed in terms of availability, but rather in terms of speed of the available access, with faster speeds deemed as more desirable.
[23] U.S. Census Bureau, *Computer and Internet Use in the United States, 2013.* ACS-28, November 2014 and *Computer and Internet Trends in America,* 2013.
[24] Federal Communications Commission, *Communications Marketplace Report,* GN Docket No. 18-231, FCC 18-181, p. 132. The most current Census data was released in 2016, making the FCC data the most current statistics on broadband coverage.
[25] For instance, refer to the recent study by the Federal Communications Commission, Office of Engineering, *Measuring Broadband America Fixed Broadband Report,* Eighth Version, 2018.
[26] Congressional Research Service, *Tribal Broadband: Status of Deployment and Federal Funding Programs,* January 9, 2019. In addition, according to the 2018 National Compensation Survey conducted by the Bureau of Labor Statistics, access to pension coverage is correlated positively with income and employment in larger establishments. Characteristics that are typically associated with more densely populated or urban areas.

technologies, many rural and remote areas no longer are waiting for internet service in their homes, but rather moved to smartphone or other digital devices to directly access the internet.



2. Smartphones and Access beyond Computers – The available technology has changed with internet access. Smaller, hand-held devices (including smartphones and tablets) now contain internet browsers that enable users to have internet access comparable to those with home computers. According to the Census Bureau, in 2011, 48.2 percent of individuals used a smartphone to access the internet, for a variety of reported uses.[27] A 2013 survey indicated that this number is increasing, with 63 percent of cellphone owners using their device to access the internet.[28] The most recent 2019 PEW Research Center Survey indicates that the percentage of respondents increased to 81 percent of cellphone owners having a smartphone with internet access.[29] This is consistent with the plan participants surveyed in the 2015 Greenwald & Associates study that found that 80 percent reported using an internet browser on their smartphone or tablet.[30] Smartphones serve multiple purposes, and indeed, most adults have replaced conventional technologies with their smartphone (e.g. music, photos, or navigational devices). Further, most businesses have developed their own application for smartphone use, offering many tools and benefits to the user. According to Statista, gross annual revenue for smartphone applications is projected to exceed $189 billion by 2020.[31] This level of growth is a leading indicator of the importance and permanence of handheld smartphone technologies.

3. Closing the Access Gap among Demographic Groups – Since 2000, when robust data collection on internet access became available, access and device ownership has been correlated positively with certain characteristics (e.g., race, age, and income). Predictably, statistics for lower income, older individuals, and minority populations showed a lack of access with these groups lagging behind the national averages. However, the current statistics demonstrate that with the changes in technology, the discrepancies in access have been nearly eliminated.

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[27] Respondents reported that in addition to making phone calls, activities included web browsing, e-mail access, maps, games, social networking, as well as entertainment (music, photos, and video). Refer to the U.S. Census Bureau, *Computer and Internet Use in the United States, 2013.* ACS-28, November 2014 and *Computer and Internet Trends in America*, 2013.

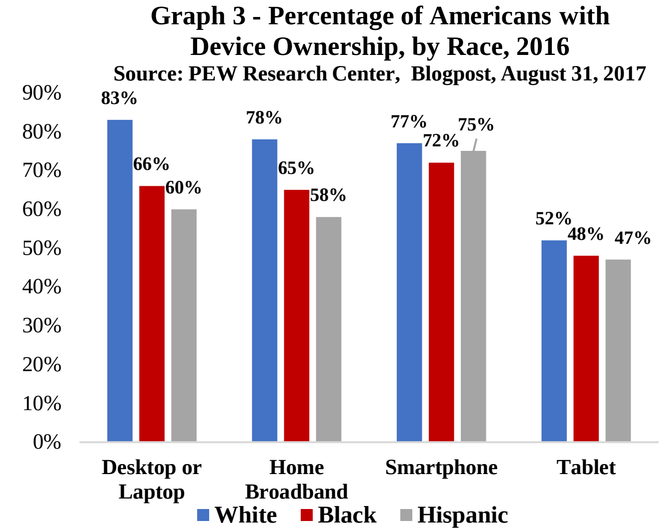
[28] Duggan, Maeve and Aaron Smith, Pew Research Center's Internet and American Life Project, *Cell Internet Use, September 16, 2013.*

[29] Refer to Pew Research Center, *Mobile Technology and Home Broadband 2019*, June 13, 2019.

[30] Refer to Appendix A in the original 2015 study for the complete Greenwald & Associates survey.

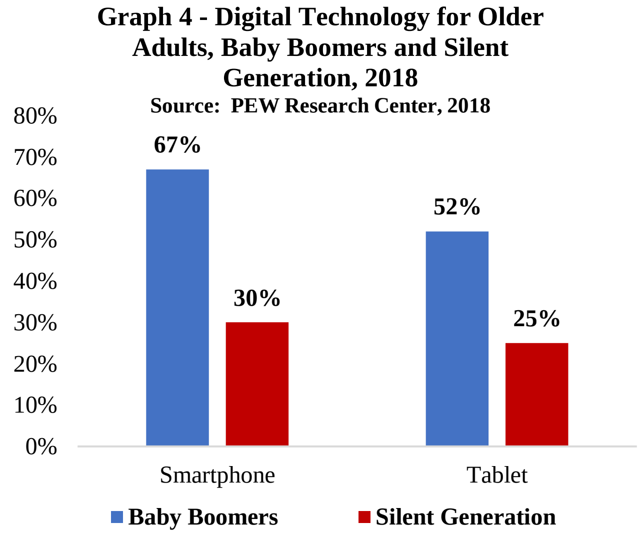
[31] Refer to *Mobile App Usage – Statistics and Facts*, J. Clement, August 1, 2019.

Race **–** Previous studies by the U.S. Census Bureau indicated that there is some disparity in internet access by racial characteristics, when considering the traditional online experience (e.g., home computer and internet subscriptions).[32] However, recent surveys reveal significant differences in device and service choices. As shown in Graph 3, many Black and Hispanic households choose smartphone service over home broadband service and desktop or laptop computers. Therefore, lack of home broadband does not indicate an absence of internet access.



Graph 3 demonstrates that populations of color have comparable rates of smartphone ownership. Despite the differences in desktop or laptop computer ownership, internet access through smartphones has closed the racial divide that existed at one time.

Age **–** Some assume that older Americans (those at or beyond retirement age) lack internet access. But this assumption belies reality. Current surveys indicate that the previous measure of computer ownership and internet access have obscured the trend toward other devices. Recent surveys by the PEW Research Center found that older adults embrace digital life.[33] This is demonstrated by the growth in smartphone and tablet ownership among older adults. The PEW survey defines the Silent Generation as adults born before 1945 and Baby Boomers as adults born between 1946 and 1964. As Graph 4 indicates, these older generations are adopting technologies that allow internet access.[34]



Income **–** Just as with age and race, there is evidence that the divide is narrowing across income classes. Graph 5 presents device ownership by income classes. In this case, the results are analogous to those by race. Minorities and lowering income adults are more likely to have

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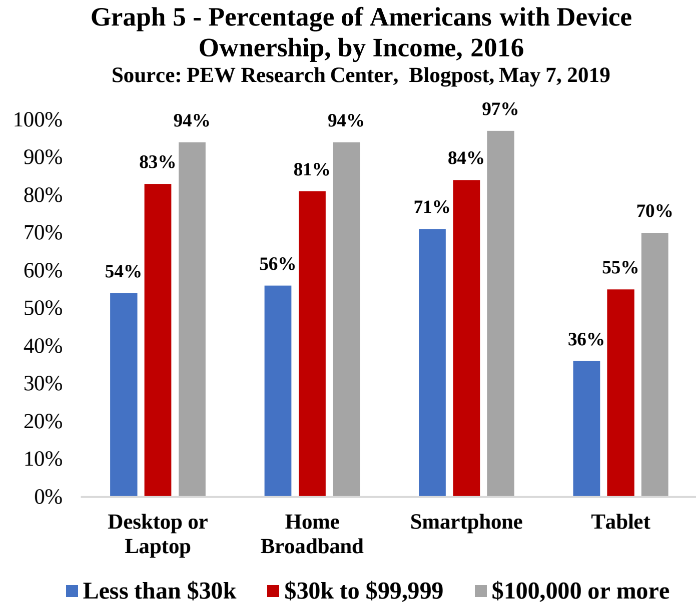
[32] Refer to the U.S. Census Bureau, *Computer and Internet Use in the United States, 2013.* P20-569, May 2013.
[33] Refer to Pew Research Center, Fact-tank, News in the Numbers, *Millennials Stand Out for Their Technology Use, but Older Generations Also Embrace Digital Life*, JingJing Jiang, May 2, 2018.
[34] *Ibid.* While younger Americans tend to have higher adoption rates for electronic devices (including computers, tablets, and smartphones), the gap between younger and older individuals' rates of access and adoption has narrowed considerably.



smartphones compared to home broadband or desktop computers. This is particularly true for the lowest income classes. Where just over half have home computers and broadband, while 71 percent report smartphone ownership. These results suggest that internet access is moving toward mobile smartphone devices and away from access in a fixed location via a home computer.

While general population surveys and research are helpful to understand the overall trends in internet access, for the purposes of understanding the effects of electronic delivery for retirement plan documents, it is important to assess the data for the subset population of retirement plan participants. Indeed, this subset of the general population reports nearly universal internet access.

Pension Plan Participants – The 2015 Greenwald & Associates survey found significant overlap between pension plan participation and online access. The survey focused on the online habits of the specific population of retirement plan participants and indicated that 99 percent reported having access at home or work and 88 percent of respondents reported accessing the internet on a daily basis.[35]

More recent research by the Investment Company Institute (analysis of Federal Reserve survey data) indicates that individuals with mutual fund ownership had online access. In other words, most retirement plan participants had direct access to the internet, despite characteristics associated with limited online access (e.g., lower incomes) in the general population. Specifically, the ICI found that "93 percent of households owning mutual funds had internet access in 2018. The gaps in internet access between younger and older households and between higher- and lower-income households have narrowed, and in 2018, the vast majority of mutual fund-owning households had internet access across each age or income grouping."[36]

Internet access is only one indicator of plan participants' ability to access electronically plan documents and communication. Another proxy to support the trend toward electronic communication is the widespread use of electronic methods for (nonretirement plan) financial transactions. The willingness to adopt electronic technologies is demonstrated across many areas of financial life, including income and benefits payments, banking, and income taxes.

[35] Refer to Appendix A in the original 2015 study for the complete Greenwald & Associates survey.
[36] Investment Company Institute Research Perspective, *Ownership of Mutual Funds, Shareholder Sentiment, and Use of the Internet, 2018,* Pers. 24-08, November 2018 and Investment Company Institute Research Perspective, *Ownership of Mutual Funds, Shareholder Sentiment, and Use of the Internet, 2013,* Pers. 19-09, October 2013.

B. Using Electronic Methods in Financial Transactions

Americans' reliance on electronic technology for financial communication and transactions has also grown significantly, which is consistent with the growth in computer devices and internet use over the past twenty years. This growth has taken place across areas of critical importance to everyday life, including payment processing (payroll and benefit payments from the Federal government), income tax reporting and refund payments, banking and investment financial transactions, and financial information distribution.[37] In fact, electronic communication and transactions are now the overwhelming standard for most American households.

Within the public and private sector, businesses routinely use electronic payments for payroll processing. The Federal government delivers electronically 99.5 percent of all salary and payroll allotments.[38] In 2017, this covered more than 50 million transactions. One large payroll processing firm (for private businesses) reported having processed electronically $1.85 trillion in direct deposit, client tax payments, and related funds in fiscal year 2018.[39] This payroll processing firm indicated that they served nearly 40 million workers worldwide, with 45 percent using the mobile solutions app.[40] Having access through the mobile application means that employees may get real time information on their payroll and compensation benefits.

Further, a 2017 survey of plan sponsors indicates that 79 percent of plan providers support transactions on smartphones or other mobile devices. In 2014, this figure was 67 percent, representing an 18 percent increase in mobile applications in just three years.[41]

In addition, the movement away from paper correspondence toward electronic communication is evident in the downward trend among U.S. Postal Service statistics. Over the past ten years, first-class single-piece mail (e.g. letters) declined 44.6 percent, from over 31.6 to 17.1 billion pieces of mail.[42] Clearly, this trend away from paper documents is well-established across multiple sectors and is also evident in trends in daily financial transactions.

Conducting day-to-day financial transactions online serves as a proxy for a retirement plan participant's willingness to receive electronically plan-related notices, disclosures, and statements. In other words, widespread online financial activity is similar to accessing retirement plan information online, where the participant would access their plan information through a secure website (as they do with their banking transactions); view or download statements (either electronic or printed formats); and access account information and disclosures

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[37] The Federal government itself has contributed significantly to this trend, using electronic delivery to pay benefits to 98.7 percent of Social Security recipients in 2018. Refer to U.S. Treasury Department, *Government-wide Treasury-Disbursed Payment Volumes: EFT Payment Volume Chart for March 2018.*

[38] Government-wide Treasury-Disbursed Payment Volumes: EFT Payment Volume Chart for September 2017.

[39] In addition, the ADP Corporate Overview states that they service payroll for 40 million (approximately 1 in 6) U.S. workers. Available online: https://www.adp.com/-/media/corporate%20overview/adp-corporate-overview.ashx?la=en&hash=87E6902ABB44AEE1A0EC11054374BFE94F4657EF.

[40] According to the Corporate Overview, more than 18 million people use the ADP mobile application.

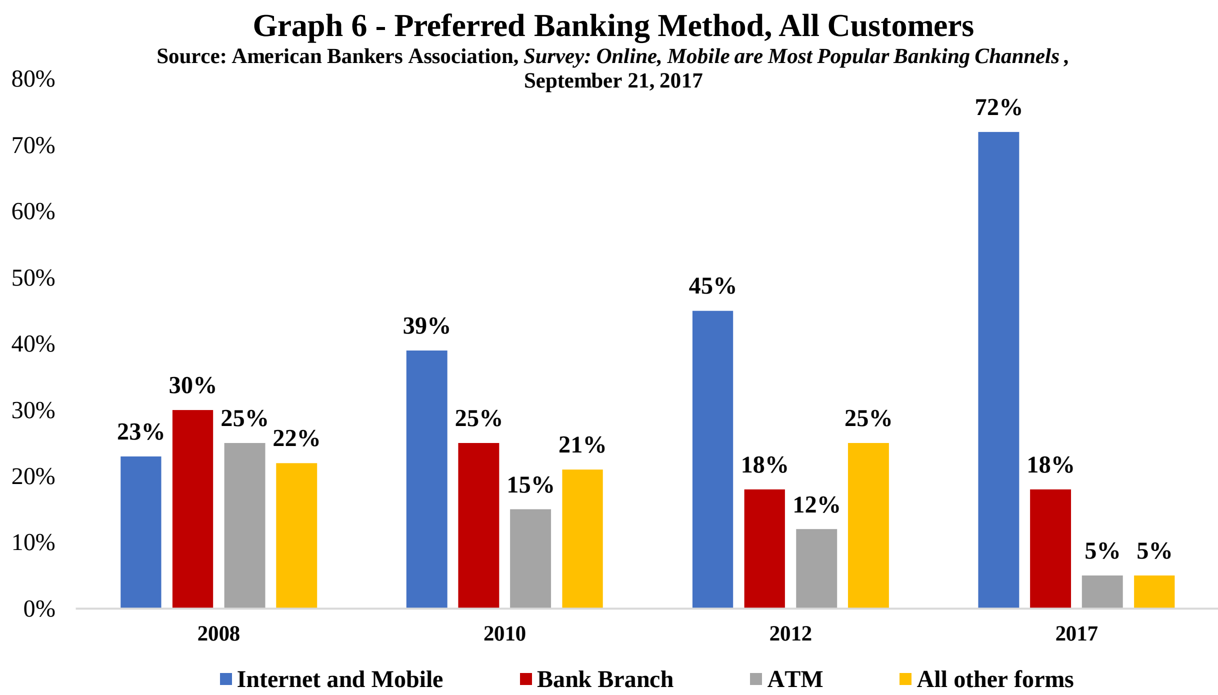
[41] Refer to the Deloitte Defined Contribution Benchmarking Survey, *From Oversight to Participant Experience: Plan Sponsors are Taking Their Fiduciary Role up a Notch*, 2017.

[42] Refer to the United States Postal Service, A Decade of Facts & Figures, available on line at: *https://facts.usps.com/table-facts/*.

through the website. Therefore, the significant move toward conducting day-to-day financial transactions serves as a strong indicator that participants would prefer and benefit from electronic delivery of retirement plan information, though the inertia of being defaulted into paper delivery is holding many retirement savers back.[43]

Reliance on electronic delivery for financial records and transactions has ballooned in recent years, due largely to widespread growing private computer ownership, using computers in the workplace, and moving from cellular to smartphones.[44] Further, electronic activity permeates everyday financial activities for the vast majority of Americans, including banking, receipt of program benefits, and Federal tax filing and refunds.

1. Banking and Financial Transactions – The American Bankers Association (ABA) survey indicates that customers' most preferred banking methods are online or mobile banking.[45] Graph 6 provides the top results for selected survey results for years between 2008 and 2017. According to the most recent survey, customers overwhelmingly preferred electronic banking methods, with 72 percent of all respondents in 2017 preferring online (computer or other device) or mobile banking, a dramatic increase from 45 percent in 2012. The last few years show that online and mobile banking is the established method of banking.



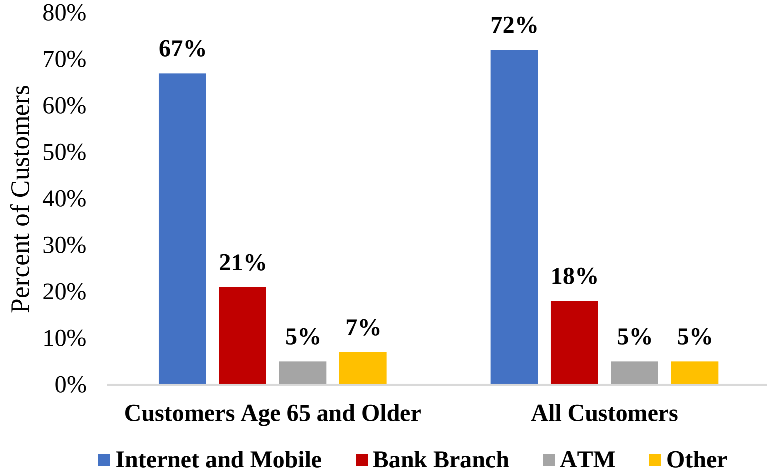
[43] The current system of opting-in tends to create a barrier to widespread adoption. Under current DOL rules most plan participants have to affirmatively elect to receive electronic communication.

[44] Refer to the previous section for trends in access.

[45] The ABA's most current data (2017) lags one year behind that presented in the Pew Research Center's survey results (2018). However, comparing comparable years for Pew and the ABA finds consistent results.

When assessing consumer preferences of online and mobile banking practices, one might assume there is a generational divide. However, as Graph 7 displays the behavior of older customers, those aged 65 or older, is comparable to customers of all ages. Both graphs make clear that online and mobile phone banking is the preferred banking method across all age groups.[46]

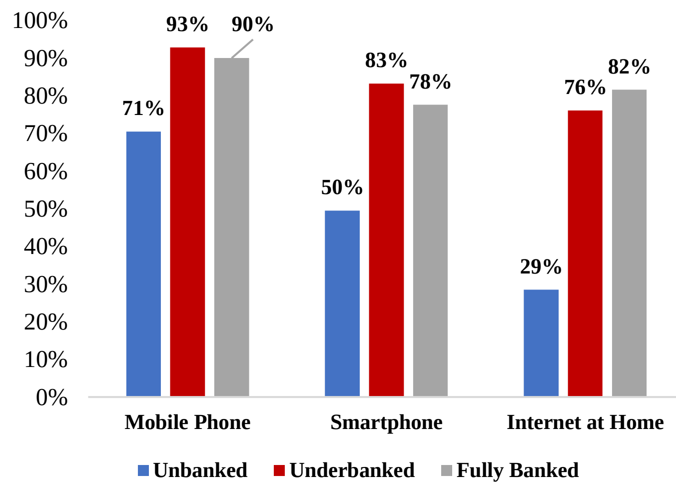
Graph 7 - Preferred Banking Method, All Customers Compared to Customers Age 65 or older, 2017
Source: American Bankers Association, *Survey: Online, Mobile are Most Popular Banking Channels*, September 21, 2017



The American Bankers Association gauges consumer preferences by tracking activities that are proxies for consumer trust in online transactions. In other words, banking is so critical and important to everyday life that if individuals did not feel confident with electronic transactions, they would not continue to conduct such financial transactions online or using smartphones.

Just as with internet access, it is important to explore the small percentages of people that do not access financial institutions through online transactions or mobile devices. The previous section identified a small percentage of people that did not have (and in some cases, want) access to the internet. Those findings indicate that (1) infrastructure (limits in high-speed capabilities); (2) financial resources; or (3) other socio-economic characteristics will limit online or smart phone access. The characteristics that limit access to financial institutions are highly correlated with those that limit internet access.[47]

Graph 8 - Mobile Phone, Smartphone, and Internet for the Unbanked, Underbanked, and Fully Banked, 2017
Source: FDIC National Survey of Unbanked and Underbanked Households



Studies that merged data from the Federal Deposit Insurance Corporation and the NTIA indicate a strong relationship between

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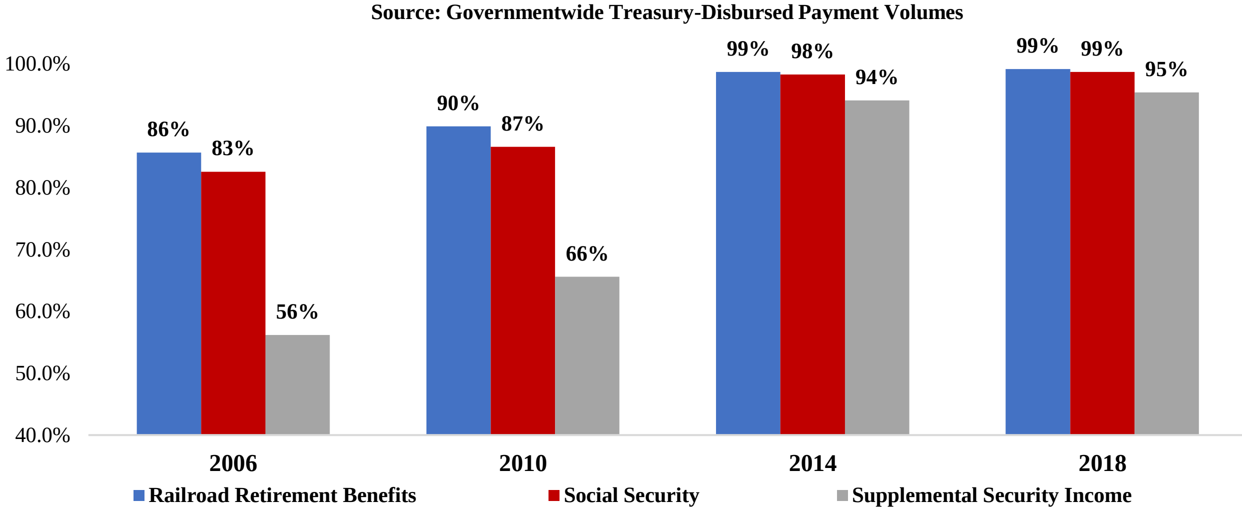
[46] This result is consistent with all age groups (18-34, 35-54, and 55 and older) respondents in the ABA customer survey.
[47] It is also important to note that people that lack resources to access the internet or purchase a smart phone are also unlikely to have employer-sponsored retirement benefits.

the patterns that characterize internet activity and being unbanked or under banked.[48] In other words, those without bank accounts are unlikely to access or feel the need for the internet. The current 2017 FDIC study suggests that approximately 8.4 million households (representing 6.5 percent of all households), made up of 14.1 million adults are unbanked or underbanked.[49]

***2. Federal Payments* –** Like payroll or personal banking, receiving Federal benefits is an essential financial transaction.[50] Given its importance – and against the perception that older Americans prefer paper documents – it is striking nearly *all* Social Security recipients (98.7 percent in 2018) received their benefits through electronic payment. The transformation from paper checks to electronic transactions has been striking. Further, other comparable populations, Railroad Retirement Benefits has nearly 100 percent of beneficiaries receiving payment electronically and more than 95 percent of Supplemental Security Income recipients receive payments electronically.

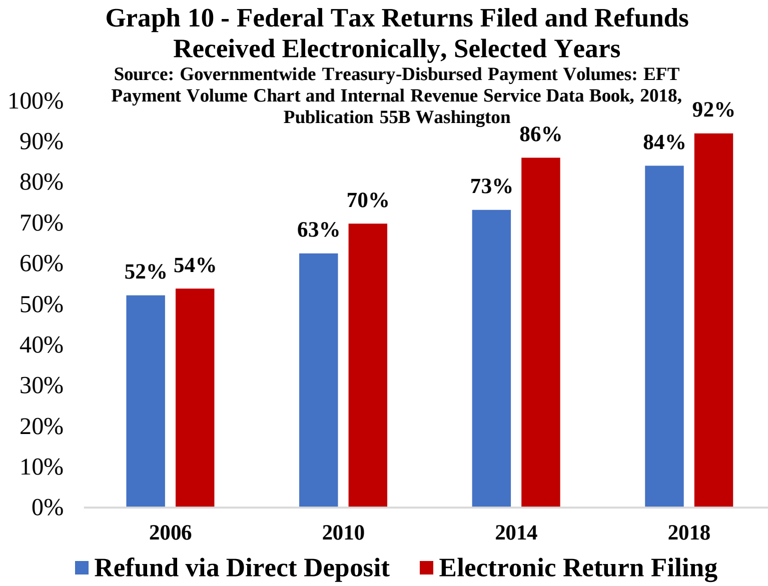
To emphasize this point, consider that the Social Security Administration (SSA) reports that among elderly recipients, 52 percent of married and 74 percent of unmarried recipients rely on Social Security for at least half of their income. Further, among the elderly, 21 percent of married and about 44 percent of unmarried recipients rely on Social Security for 90 percent or more of their income. The importance of Social Security income among the elderly cannot be overstated, but we see that moving to electronic delivery of benefits has demonstrated a steady transition. Social Security experience supports that older and lower-income populations transitioned smoothly to electronic delivery of benefits and statements.

Graph 9 - Electronic Payments From the Federal Government, Selected Years
Source: Governmentwide Treasury-Disbursed Payment Volumes



[48] In a previous analysis, the NTIA staff merged datasets from two supplements to the Current Population Survey (the Federal Deposit Insurance Corporation's (FDIC) June 2015 Unbanked and Underbanked survey and NTIA's July 2015 Computer and Internet Use survey).
[49] Federal Deposit Insurance Corporation, *National Survey of Unbanked and Underbanked Households, 2017*, October 2018.
[50] Recent estimates by the Social Security Administration indicate that retired workers account for 72 percent of all benefits paid. Refer to Social Security Administration, *Fast Facts and Figures on Social Security*, SSA Publication No. 13-11785, September 2018. Available online: https://www.ssa.gov/policy/docs/chartbooks/fast_facts/2018/fast_facts18.pdf.

3. Federal Income Tax – Consistent with other important financial matters, Graph 10 depicts that the trend to file individual tax returns electronically continues to experience steady growth, with nearly all taxpayers filing electronically in 2018. Specifically, of the more than 153 million individual returns for 2017 filed as of May 16, 2018, more than 134 million were filed electronically. Approximately half of all returns received a refund (76 million) and of those, 84 percent received that refund through direct deposit or electronic payment methods.



C. Efficiencies and Cost Savings

1. Efficiencies **–** Electronic delivery provides many opportunities for more timely and complete communication to important retirement information and tools.

Electronic delivery ensures information remains up-to-date **–** Once plan administrators produce and mail paper copies of plan information, these paper documents can have a short shelf life. That is because changes to plan information can quickly render printed materials outdated and inaccurate. Moving toward electronic disclosure (on an opt-out basis) would improve greatly the efficiency of the plan communications because electronic information can be updated in real time.

Electronic delivery enables immediate action **–** Electronic delivery allows a participant to respond quickly to plan information. In the absence of electronic delivery, making changes to one's account could require the participant to fill out paper forms and send the forms through traditional mail service or to communicate via another means with the plan administrator to make desired changes. With electronic delivery, after receiving plan documents or disclosure electronically, the participant who is already logged into their account online can make changes (such as increasing deferral rates or diversifying investment options) with just a few 'clicks of the mouse.'

Electronic delivery provides information that is more accessible and digestible **–** Electronic delivery also provides information of superior quality. For instance, when available on a secure website, online material tends to be clearer and better organized, giving participants an ability easily to access the particular document or information they desire. Generally, websites present information on separate tabs that bring up only the relevant materials. This provides a concise format for the user to page through materials in a methodical, digestible fashion.

Moreover, because electronic materials are searchable through online tools, participants can use hyperlinks or the find function to readily locate specific information without needing to wade through pages and pages of printed materials.

Online access ensures that plan information is always available and in a form that is user-friendly. Meanwhile, paper documents may tend to “collect dust” on a participant’s desk. This is consistent with findings from the Greenwald & Associates survey that found plan participants agreed overwhelmingly (81 percent) that electronic delivery reduces clutter.[51]

Online storage provides real-time access to current and past plan information, improving the participant’s ability to analyze relevant information. Further, electronic access to pension disclosures and communications means that this material and content is easily available in a central repository, eliminating the need to look around one’s house or office for the ever-elusive paper copy. Additionally, the documents are provided in chronological order so participants have access to the most recent versions of their documents as well as older versions without having to sort through a stack of unorganized paper documents.

***Electronic delivery provides information that can be more readily customized* –** Plan administrators can alter the online experience to cater to participants needs. They are able to adapt quickly to improve the presentation based on participant feedback. Alternatively, plans can address specific concerns of the users as characteristics and needs of the participants may change over time. In both cases, once the administrator identifies the participants’ needs, the changes can be made quickly.

***Electronic delivery provides a better guarantee of actual receipt and provides a more permanent address* –** Electronic delivery also has the advantage of immediately alerting the sender to delivery issues. In contrast, delivery of paper documents and disclosures remains a significant problem for many plans. For instance, in 2018, the United States Postal Service returned as ‘undeliverable as addressed’ 2.2 million pieces of first-class mail.[52] This is consistent with the past experience of the TSP which cited a number of costs associated with returned mail as one of the reasons for their use of default electronic delivery. First, they cite the waste in printing and mailing costs. Second, TSP notes that high return-mail volume could jeopardize favorable mailing rates (discounted rate) that the U.S. Postal Service provides for mass mailings. Finally, TSP acknowledges that returned mailing of plan documents could increase the chance of fraud and decrease account security.[53]

With electronic delivery, a participant who moves physical addresses without informing the plan administrator will still continue to receive uninterrupted notice of and access to their retirement plan documents. Additionally, electronic delivery can be an important tool to maintain

[51] Refer to Appendix A in the original 2015 study for the complete Greenwald & Associates survey.
[52] Refer to the United States Postal Service, Undeliverable As Addressed Rollup, 1998-2018, available online at https://postalpro.usps.com/address-quality-solutions/undeliverable-addressed-uaa-mail.
[53] Refer to the Federal Retirement Thrift Investment Board, Strategic Plan, 2014, page 19.

connection with separated or retired participants whose physical address with the plan administrator may quickly become out of date. Because electronically delivered documents could also be delivered to a participant provided personal e-mail address, which is likely to be more permanent address for participants than physical mailing address, these participants will avoid becoming missing participants and continue to receive their plan information uninterrupted.

***Electronic delivery enhances cybersecurity and combats fraud* –** Plan administrators have noted that enhanced cybersecurity protections exist when a retirement saver actually registers for online access to their accounts.[54] Voya has commented that just the act of a participant registering and establishing access to their retirement savings account online helps prevent potential fraudsters from gaining improper access to their account. Participants can also monitor the account in real-time to ensure unauthorized transactions do not occur. Additionally, when participants access their accounts online plan administrators are able to implement two-factor authentication to thwart fraudulent account transactions. Two-factor authentication requires a participant to input a one-time code sent by the provider as an email or text message to ensure the authenticity of the participant and validate the traction as legitimate. Electronic delivery also helps prevent the mailing of statements and other documents with personal and detailed account information to physical addresses where the participant may no longer live and ensures that hard copies of these important documents do not fall into the hands of fraudsters.

***2. Overall Cost Savings* –** Both the Federal Thrift Savings Program's[55] and SSA's[56] move toward electronically delivered communication produced tangible and measurable saving to these programs. Further, electronic delivery is consistent with the Executive Orders issued by the past two administrations and the memorandum issued by the Office of Management and Budget (OMB) to encourage specifically the use of electronic communication across government agencies and "smart disclosures."

OMB encourages electronic communication stating that it can reduce burdens and increase efficiency. Specifically, the OMB states:

> Smart disclosure makes information not merely available, but also accessible and usable by structuring disclosed data in standardized, machine readable formats … In many cases, smart disclosure enables third parties to analyze, repackage, and

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[54] For example, refer to a recent article that details the many efforts toward online security. Available online at: https://www.plansponsor.com/in-depth/driving-cybersecurity-participants-providers/

[55] The TSP attributes the use of electronic delivery of plan documents and electronic communication as an important factor that contributes to its lower administrative costs. In 2003, the TSP changed its policy from default delivery of participants' quarterly benefit statements by mail to electronic, paperless delivery. TSP estimates that this change reduced the costs by $7 to $8 million dollars in 2006 (the first year it was phased-in fully).

[56] SSA realized an estimated $120 million annual cost savings when the agency shifted to electronic benefit delivery. A recent report indicated that by phasing out paper Social Security checks entirely is expected to save taxpayers more than $1 billion over 10 years. Refer to Murse, Tom, *The End of Social Security Paper Checks,* updated March 2, 2019, available online at: *https://www.thoughtco.com/end-of-social-security-paper-checks-3321402* and the U.S. Government Accountability Office, Electronic Transfers, *Many Programs Electronically Disburse Federal Benefits, and More Outreach Could Increase Use,* GAO-08-645, June 2008 and comments by Treasurer Rosie Rios, available online: http://usgovinfo.about.com/od/federalbenefitprograms/a/No-More-Paper-Social-Security-Checks.htm.

> reuse information to build tools that help individual consumers to make more informed choices in the marketplace.[57]

3. Participant Cost Savings – Allowing pension plan administrators to use default electronic delivery (with an opt-out feature) would reduce the costs associated with their plans. Plan administrators would experience reduced printing, processing, mailing, and storage costs. These cost savings would reduce their overall administrative costs and will ultimately benefit participants.[58] Reducing administrative costs translates to lower expenses – and higher net investment returns – to the participant.[59]

The basis for estimating such cost savings rely upon the economic theory (incidence) and industry characteristics that are consistent with the economic theory. Appendix A provides a detailed description of the theory and empirical support for passing cost savings along to the participant. Incidence theory states that in competitive markets (for plan administration), when costs fall, if some portion of the cost savings is not passed on to the consumer (plan), the plan will seek another supplier (administrator). Industry data indicates that the market is competitive with many providers (4,694), and with 400 firms with 100 workers or more.[60]

The quantitative steps necessary to estimate the savings from moving to electronic disclosure requires first estimating per-participant cost savings, which would apply only to participants that currently receive traditional mailing and would convert to electronic delivery if that default were available to plans. Therefore, the analysis must characterize the current delivery status of participants and assumptions regarding the behavioral response of these plan participants (regarding the potential to opt-out). To characterize the current delivery status, we rely on the experience from several large pension plan providers and plan administrators.

Based on the documents displayed in Table 1, the analysis assumes that each participant receives an estimated 8 to 12 plan documents that could be delivered electronically. The cost associated with preparing the documents includes certain fixed costs associated with producing the documents and the variable costs associated with printing and sending the documents. The plan administrator would still incur the fixed costs. But variable costs – attributable to reduced paper costs, printing services, labor associated with mailing the documents, and postage – would be eliminated through electronic delivery.[61] To estimate comparable costs for allowing plan administrators to move to electronic delivery (with an opt-out provision), our analysis relies on a

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[57] Refer to the Office of Management and Budget, Executive Office of the President, *Reducing Reporting and Paperwork Burdens,* Memo dated June 22, 2012 and Office of Management and Budget, Executive Office of the President, *Informing Consumers through Smart Disclosure,* Memo dated September 8, 2011.

[58] Refer to Appendix A for a description of the estimated cost savings and the assumptions supporting the benefits to plan participants.

[59] The provision would not affect the gross investment rate of return that a given investment instrument would earn. However, the participant receives the investment return net of fees and administrative costs. Reducing these costs would result in a higher net investment return.

[60] Refer to the Census Bureau, Economic Census, County Business Patterns, by Employment Size.

[61] Compared to traditional mailing of plan documents, electronic delivery has significantly lower costs. A study of the costs of sending paper purchase orders estimates that moving from paper to electronic delivery of certain documents could reduce costs of producing communications by 36 percent. Refer to Martin Murray, *Electronic Data Interchanges,* Supply Chain Logistics, updated June 11, 2018 available online: https://www.thebalancesmb.com/electronic-data-interchange-edi-2221329.

study produced by the mutual fund industry in connection with the Securities and Exchange Commission's summary prospectus rule.[62] This study provided per document printing costs for various printing quality (color versus black and white documents). The analysis relied on U.S. Postal Service rates for first class mailing and bulk mailing rates for the postage fees.

Applying these costs to retirement plan participants (total 131 million participants adjusted for likely behavioral responses and eliminating those that receive electronically certain documents) and the number of communications required by law (estimated 8 to 12 documents per participant), this analysis, outlined in Appendix A, finds that total annual savings associated with moving to electronic delivery would range between $450 and $750 million each year, of which an estimated ***$250 to $450 million in savings would accrue directly to plan participants annually***.[63]

III. Participant Outcomes

Behavioral economic research supports the use of electronic communication and tools as a means to overcome inertia and resolve inadequate retirement savings patterns.[64] The economic theory indicates that electronic communication and technology can improve participant interactions and ultimately help participants reach their savings goal. Such technology and electronic communication include automatic enrollment, automatic escalation of deferral rates, default electronic delivery of retirement plan documents, periodic messaging with account or investment information, and access to online tools and investment analysis and education. Each of these contributes to improving participation, participant engagement, as well as improving financial outcomes.

A. Enhancing Retirement Savings through Technology

The previous section contains estimates of the aggregate benefits that would accrue from the efficiencies and cost savings of electronic delivery. However, it is important to quantify the various benefits that accrue to plan participants. These benefits are observed through two important advancements in technology: (1) automatic enrollment and (2) technology that improves savings behavior once enrolled. Evidence shows that technology and automation is able to overcome the human tendency toward inertia. When an event – like retirement – looms

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[62] Refer to Investment Company Institute, *Cost-Benefit Analysis of the Summary Prospectus Proposal,* February 28, 2008, Appendix B.

[63] Given the degree of competition for plan administration services, an estimated 50 to 60 percent of the cost savings are likely to pass through to the participant in the form of lower fees and result in higher net investment return. These results are consistent with other estimates of this savings. Refer to Peter P. Swire & DeBrae Kennedy-Mayo, *Update to Delivering ERISA Disclosure for Defined Contribution Plans, Why the Time Has Come to Prefer Electronic Delivery*, April 2018. These estimates are consistent with those released by the Department of Labor in their October proposal. However, these estimates assume a greater number of paper communications, as well as a lower percentage of participants currently with electronic delivery (based on provider data).

[64] Refer to Shlomo Benartzi, Professor of Behavioral Decision Making, UCLA Anderson School of Management, *All Auto Everything—Shlomo Benartzi on 401ks in the Digital Age,* by John Sullivan, available online: https://401kspecialistmag.com/all-auto-everything-shlomo-benartzi-on-401ks-in-the-digital-age/.

in the distance, it is easy to procrastinate or feel as if there is ample time to act. It is important to first, consider the many benefits of automation and technology, and then, in real-time, quantify those benefits.

1. Behavioral Response – Automatic enrollment has long been associated with increased participation rates in retirement savings plans. After more than ten years of experience, automatic enrollment clearly overcomes inertia that most plan participants display when having to affirmatively opt-in to participate in retirement savings. However, empirical evidence provides a fuller picture of participant behavior after they are automatically enrolled.

The most direct way to measure the benefits of default electronic communication to plan participants is through deferral rates or account balances. These straightforward variables provide a tangible way to measure the benefits. Invariably, account balances will accrue more quickly over time, as the deferral rates increase. And as account balances increase, the evidence shows that participants demonstrate greater engagement.

Auto Enrollment Increases Participation – Automatic enrollment is the most common feature when considering measures to overcome inertia. The trend toward automatic enrollment began in earnest in 2006.[65] Concern for participation in and adequacy of retirement savings encouraged more employers to adopt automatic enrollment.

The Bureau of Labor Statistics (BLS), National Compensation Survey reported that only 6 percent of all workers had a defined contribution plan with an automatic enrollment feature in 2005.[66] In 2017, according to a recent Vanguard study of their defined contribution plans, 46 percent of their plans have an automatic enrollment feature.[67] However, only considering the largest plans, the percentage with automatic enrollment increases to 63 percent for Vanguard plans.

Overall, defined contribution plan participation is 81 percent, but this figure obscures the benefits of automatic features. Vanguard finds that 92 percent of eligible employees participate in the plan when automatic enrollment is available, but only 57 percent participate when no such feature is available.[68]

These figures are more significant when we consider the age of the participant. According to a recent Forbes article, workers aged 25 or younger had a participation rate of 27 percent when

[65] The Pension Protection Act of 2006 allowed employers to automatically enroll workers into such workplace retirement plans as 401(k) plans.

[66] Refer to the Bureau of Labor Statistics, *2005 National Compensation Survey*, Table 64, Savings and Thrift Plans: Summary of Provisions.

[67] Vanguard, *How America Saves 2018,* Vanguard 2017 Defined Contribution Plan Data, 2018.

[68] These numbers are consistent with the national averages, according to the BLS, where they find that defined contribution rates are 72 percent. Refer to the Bureau of Labor Statistics, *2019 National Compensation Survey*, Table 2, Retirement Benefits: Access, participation, and take-up rates, March 2019. In this case, the take-up rate is the analogous measure, as it reflects for those with a plan, the percentage that are actively participating in the plan.

they had to voluntarily enroll in a plan, compared to 85 percent participation when they were automatically enrolled.[69]

Few Opt-Out – These high participation rates have held steady over time, with very few participants opting out of the plan. In addition to automatic enrollment for new employees, many employers are implementing an automatic enrollment 'sweep,' referring to periodic attempts to enroll those employees hired before the policy. A recent survey of plan administrators found that 16 percent of plans implemented periodic automatic enrollment "sweeps" for eligible employees that were not participating.[70]

One benefit of these efforts is to identify those employees whose situation may have changed. In many cases, conditions that may have encouraged someone to opt-out previously may no longer be relevant. Therefore, these forms of automation often identify such participants and put them on a savings trajectory. Many believe that this covers those that would not save, in the absence of such a plan. However, despite enrolling participants and retaining them in a qualified plan, inertia still remains an issue.

Effect of Inertia on Deferral Rates – Keeping participants in a plan is only the first step toward reaching retirement savings goals; it is also important for the participant to increase their rate of savings overtime. However, this is often not the case, with those that are automatically enrolled, as many remain at the deferral rate prescribed at enrollment. If the initial deferral rate is low, simple inertia may cause some automatically enrolled employees to defer at rates lower than similar counterparts (that actively engage). Therefore, while automatic enrollment can increase participation, it can depress the overall average deferral rates for the plan.

A TIAA Institute study of participant behavior found that "procrastination played an important role in explaining who remains at the default rate."[71] This study finds significant differences between participants who enrolled prior to the implementation of automatic enrollment, having effects on both returns and deferral rates.

The Vanguard study found automatic enrollment had similar dampening effects on the average deferral rate. Vanguard found that participants in plans with voluntary enrollment had a deferral rate of 7.0 percent, slightly higher than 6.7 percent for those in plans with automatic enrollment.[72]

However, plan sponsors have employed additional technology and automation to eliminate these human tendencies with automatic escalation of deferral rates. Vanguard indicates that two-thirds of plans with automatic enrollment have automatic escalation features.[73] This figure is comparable with another national survey of plan providers, which found that 74 percent of plan

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[69] Scott, John, *Automatic Enrollment for Retirement Savings: An Increasingly Available Option with a Large Impact*, Forbes, September 4, 2018.
[70] Cerulli, *DC Recordkeeper Survey Results 2018,* prepared for the SPARK Institute.
[71] TIAA Institute, *Mechanisms behind Retirement Saving Behavior: Evidence from Administrative and Survey Data*, Trends and Issues, February 2018.
[72] Vanguard, *How America Saves 2018*, Vanguard 2017 Defined Contribution Plan Data, 2018.
[73] *Ibid*, page 6.

providers encourage participants to increase their savings rate through automatic escalation features.[74]

B. Electronic Nudges Improve Engagement – Empirical Evidence

Research by leading behavioral economists indicates that carefully designed 'electronic nudges' will create the proper incentives for participants to improve their retirement savings trajectory.[75] These nudges take the form of electronic mail and electronic delivery of statements.

Over the past ten years, ICMA-RC, a large provider, has seen nearly a 400 percent increase in participants choosing electronic delivery (377 percent increase), with 62 percent of participants electing electronic delivery in 2018.[76] In 2012, a system wide effort by ICMA-RC was responsible for educating participants on the benefits of electronic delivery.[77]

Given the nature and frequency of online activity, by using electronic nudges, plans can encourage participants to view their accounts and make necessary changes to those accounts, as needed. Participant contact, through electronic means, is an important component of improving retirement savings. Once plans have a dynamic means by which to communicate, i.e., electronic delivery rather than paper delivery, they can use various technological tools to improve the participants' experience.

It is important to mention that the economic literature does not account separately for participant characteristics that may inherently create greater incentives to save or engage in savings behavior. Often, questions arise regarding the direct effect of such a change as moving to electronic delivery and communication. Yet, notwithstanding these questions, it is likely that e-delivery can provide an important nudge towards increasing savings rates.

The economic analysis of electronic nudges represents the subset population of plan participants (subset of the total population including participants and non-participants). Therefore, the participant population demonstrates a bias toward saving. Regardless of how the individual was enrolled in the plan (auto-enroll or affirmative election to enroll), once they begin saving for retirement, the data allow for a controlled experiment between electronic delivery and paper communication.

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[74] Deloitte, *Defined Contribution Benchmarking Survey from Oversight to Participant Experience: Plan Sponsors are Taking Their Fiduciary Role up a Notch*, 2017 Edition.

[75] Refer to the various publications by Benartzi, Shlomo, *How Digital Tools and Behavioral Economics Will Save Retirement,* Harvard Business Review, December 7, 2017, as well as Benartzi, Shlomo and Richard H. Thaler, *Behavioral Economics and the Retirement Savings Crisis,* Science, March, 2013.

[76] ICMA-RC internal analysis of proprietary participant data.

[77] The 2015 Greenwald & Associates survey found that 84 percent of plan participants find it acceptable to make electronic delivery the default option (with the option to opt-out at no cost to the participant). On average, participants receiving electronic delivery range from 40 to 50 percent. It is important to note, while not widely used, some participants may have been defaulted into electronic delivery using the existing DOL wired at work safe harbor. While the ICMA-RC figures may be higher than average, they are consistent with the electronic habits of most plan participants.

The following sections present the historical data from provider experience with electronic delivery. The analysis does not intend to explain causality, in terms of changes in behavior following electronic delivery. However, consistent with the economic literature, it does demonstrate the relationship between responses to electronic communication (nudges) and improved participant outcomes.

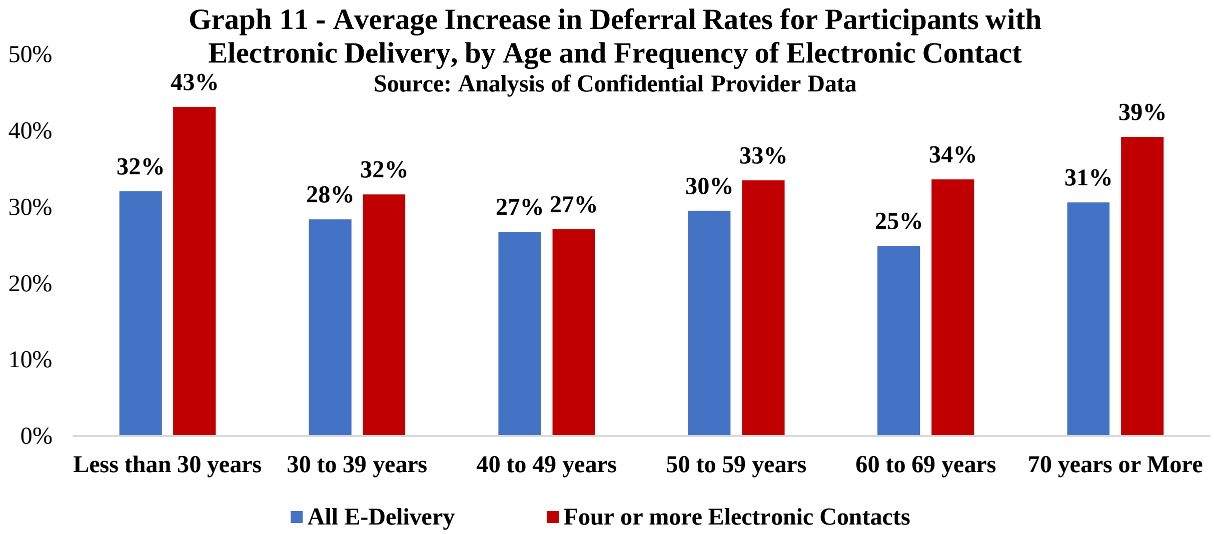
***1. Benefits of Increased Electronic Delivery* –** Empirical evidence indicates that plan participants become more actively engaged with their retirement savings program after electronic delivery. Higher deferral rates for participants with electronic delivery indicate a greater degree of engagement with their retirement savings plan. Under the current rules, generally participants must affirmatively elect to receive their plan statements electronically. For some participants, this may indicate an existing degree of engagement, because they initiated the activity. However, the higher deferral rates are a consistent feature of the actual plan activity, based on provider data.

The blue bar in Graph 11 summarizes the higher deferral rates among participants choosing electronic delivery.[78] The average deferral rates for plan participants with electronic delivery was at least 25 percent higher than for those not using electronic delivery.

The greatest difference was among younger participants, with those under age 30 receiving electronic documents deferring 32 percent more than their counterparts receiving paper documents. For example, one provider indicated that the average deferral rate was 6.04 percent for participants under the age of 30 without electronic communication, while it was 7.77 percent for those that did choose electronic delivery of plan documents. This behavior early in a person’s saving history translates into greater account balances (and better rates of income replacement) at retirement. Refer to the final section for estimates of the benefits.

Electronic delivery and communication may indicate a plan participant that is more highly engaged in their retirement planning. However, while this may be true for some, it is also likely that electronic communication provides a stimulus or a nudge to encourage the participant to view and engage with their account. The red bar in Graph 11 provides a meaningful sense of the benefits of greater engagement. Participants with four or more electronic communications had even higher deferral rates compared to those that were not digitally engaged.

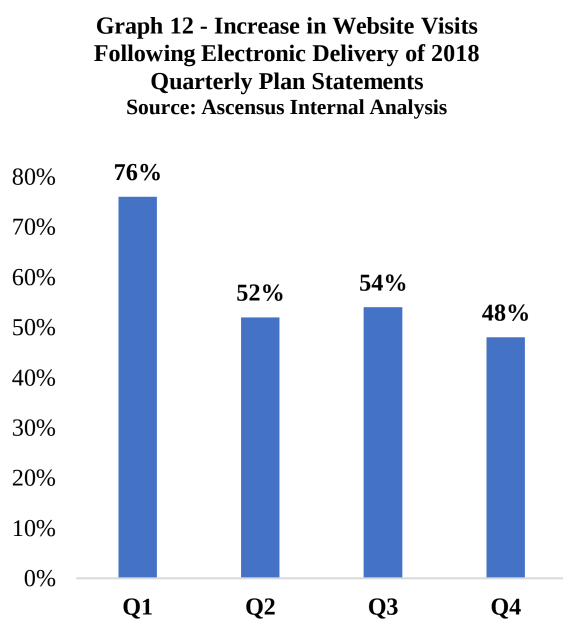
[78] Actual participant activity provided by five large plan providers supports this analysis.



It is important to stress that electronic delivery may not be the only factor influencing the participant's significantly higher deferral rate, but it certainly is an important factor. This economic analysis of electronic nudges considers only the subset population of plan participants (subset of the total population including participants and non-participants). Therefore, the participant population demonstrates a willingness to save. Further, as the previous section details, online habits and electronic communication is the overwhelming practice among all age groups. As a consequence, electronic delivery is simply meeting people where they are. Once doing so, they can be encouraged to take positive steps to enhance their retirement savings experience.

2. Electronic Communication Leads to Increased Participant Engagement – Driving participants to a secure website where their retirement plan information is accessible is an important part of improving retirement savings behavior. Therefore, it is important to evaluate whether or not electronic delivery accomplishes this.

One large provider found a significant increase in the number of participants that accessed their account through the website following the electronic delivery of their statement.[79] Graph 12 displays the spike in website activity after electronic delivery of the quarterly plan statement. This demonstrates the likelihood that the electronic communication acts as a reminder to access the account online.



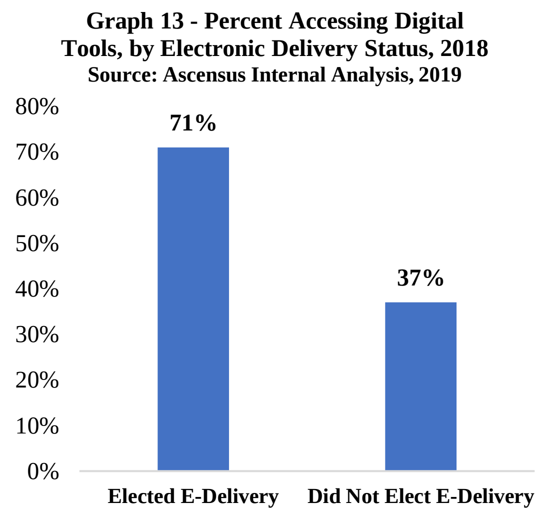
In 2017, 64 percent of participants with Vanguard accounts contacted the provider. This percentage

[79] Ascensus analysis of proprietary provider data, 2019.

represents a significant improvement over the 57 percent in 2008. Of these contacts, 68 percent of participant contacts were through the secure website. Vanguard reports that, for those using the website, they tended to contact the provider about 15 times per year.[80] More importantly, mobile access accounted for 25 percent of contacts. Vanguard indicates that this is a relatively new means by which to contact participants, but it outpaced the number of phone contacts by 8 to 1.

For most providers, adequacy of retirement savings is the most important area for communication. Having a secure means by which to communicate, quickly and easily, means that plan participants can educate themselves through the plan site, engage with a wide array of tools, and address shortfalls in their existing saving behavior. A recent survey of retirement plans found more than 90 percent agreed that email and record keeper websites were the best means by which to communicate with participants.[81]

***3. Access to Online Tools and Educational Resources* –** We observe that participants receiving electronic delivery of plan information tend to defer at a significantly higher rate. We also know that once electronic communication exists, the plan can engage in further communication and education, which also results in higher deferral rates. Reaching participants electronically and keeping their attention offers a means by which they can use online tools and educational resources to achieve their retirement savings goals. Graph 13 shows that plan participants with electronic communication are twice as likely to use online tools to evaluate their progress. Lincoln Financial found that participants that engaged with their 'high-touch, high-tech' model had 50 percent higher contribution rates.



Innovative online tools offer plan participants an opportunity to evaluate their retirement saving behavior. These tools vary across providers. Historically, the analysis of retirement savings was simply projecting an account balance through a static calculator. However, with defined contribution plans, an account balance did not provide a good sense of savings adequacy. As a result, plans are offering a wide array of tools focused on overall financial wellness.

Empower Retirement shifted its focus from account balances to evaluating monthly income replacement in retirement. This allows the participant to have a clearer sense of adequacy of their retirement savings. Approximately 37 percent of web sessions during which individuals engaged with the landing page tools resulted in savings rate changes; the average savings rate increase was 18.8 percent. In addition, they offered a "How do I Compare" tool, where participants can compare progress with those in comparable demographics (age, gender, income). This tool resulted in a 21.7 percent increase in savings rates.

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[80] Vanguard, *How America Saves 2018*, Vanguard 2017 Defined Contribution Plan Data, 2018.
[81] Callen, *2018 Defined Contribution Trends Survey*.

Ascensus found that use of e-delivery tends to drive deeper engagement with digital tools that allow savers to more actively manage their retirement savings strategy. In 2018, Ascensus found that when 401(k) participants visited the Ascensus website, they viewed an average of 9 pages per session and remain engaged with the site for an average duration of over 6 minutes.[82]

Overall, providers overwhelmingly offer tools and education to plan participants, with 100 percent of those surveyed indicating they offer such services. Further 67 percent offered financial wellness and benchmarking or data analysis portals for participants.[83] In addition to tools for evaluating financial wellness, a recent Callan survey indicated that 75.2 percent of plan providers offered investment guidance or advisory services, with 65 percent offering online investment services.[84] Likewise, a recent Deloitte benchmarking survey found that providers offer such tools as automatic fund rebalancing service, which is just beginning to see greater participant response.[85]

C. Projections of Potential Benefits to the Participant, Electronic v. Paper Delivery:

Automation and technology have improved participation rates among workers with access to workplace retirement savings. And once enrolled, electronic communication has measurable benefits to participants through: (1) reduced administrative fees (cost savings passed through to the participant), (2) increased deferral rates, (3) improved savings behavior from electronic communication (fighting inertia and using electronic nudges), and (4) improved investment returns from use of online tools and educational resources.

The assumptions that support the following analysis include: (1) participant is a median salaried individual earning $50,000 at age 35; (2) annual growth rate in this salary is 3.5 percent; (3) initial deferral rate is 3 percent; and (2) average rate of return over the life of the investment is 5.5 percent.[86]

Figure 1 – ASSUMPTIONS FOR PARTICIPANT PROJECTIONS

Participant age 35, saves 30 years
Initial salary = $50,000, 3.5 percent annual increase
Deferral rate = 3 percent
Rate of return = 5.5 percent

***1. Cost Savings for Participants* –** Cost savings derived from default electronic delivery of retirement plan documents would accrue to the plan participant in the form of lower fees and greater investment growth overtime.[87] Given the

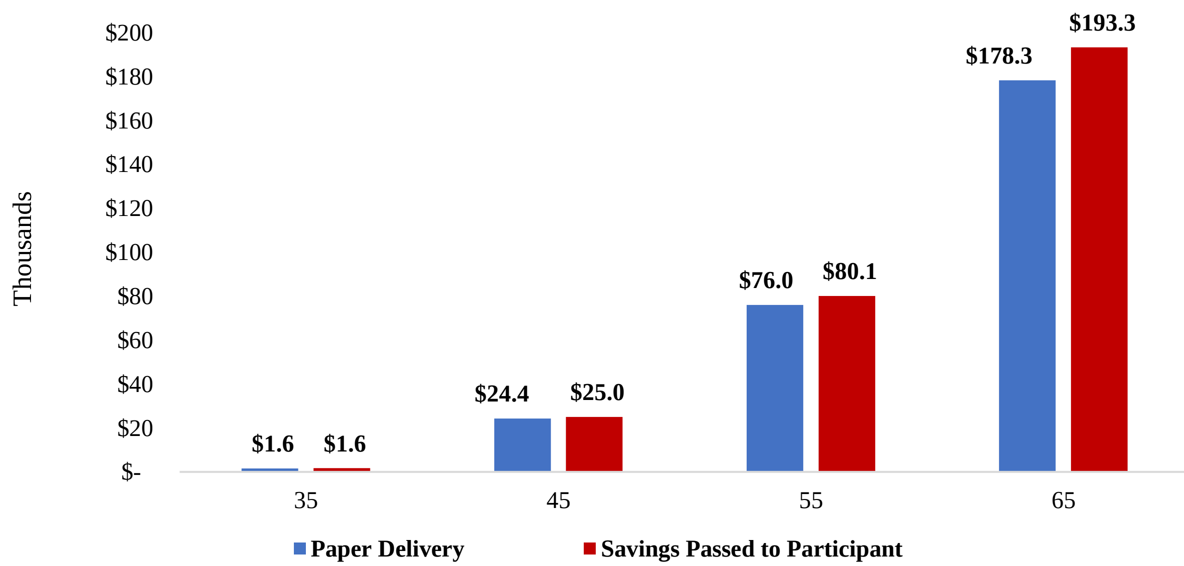
[82] Ascensus analysis of proprietary provider data, 2019.
[83] Cerulli, *DC Recordkeeper Survey Results 2018*, prepared for the SPARK Institute.
[84] Callen, *2018 Defined Contribution Trends Survey*.
[85] Deloitte, *Defined Contribution Benchmarking Survey from Oversight to Participant Experience: Plan Sponsors are Taking Their Fiduciary Role up a Notch,* 2017 Edition.
[86] The assumptions selected for this analysis are intended to represent a hypothetical 'median' plan participant. In other words, the assumptions may not necessarily reflect the behavior and/or response of all plan participants. The assumptions and this example are intended to demonstrate the cumulative potential effects of each of these benefits.
[87] The Federal Thrift Savings Plan has been a leader in electronic delivery of plan information and communications. Beginning in 2006, the instituted default electronic delivery of many documents and plan communication. While other features enable the plan to maintain lower costs (e.g., ability to retrieve certain unclaimed benefits), the Federal plan has had historically lower costs that are passed on to plan participants.

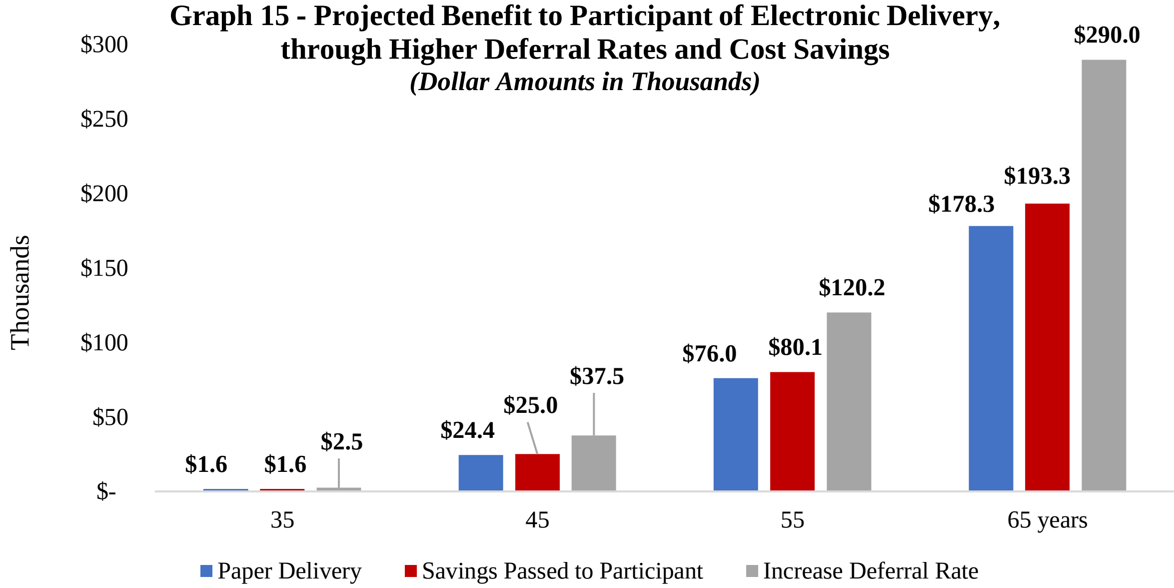
competitive nature of the plan administration industry and the current fee structure, participants are likely to realize the benefits of lower costs for record keepers and plan sponsors.

Under the current fee structure, in large part, plan participants pay or share these retirement plan costs. Cost sharing for the plan services (e.g., recordkeeping and administrative fees, investment options, or tax reporting) take many forms. A recent survey of plan providers of 401(k) and 403(b) plans indicate that approximately 47 percent pay costs that are imbedded in the investment process (wrap fee or added basis points or as a share of investment revenue). The plan participant pays or shares the administrative cost, in all but a limited number of cases (13 percent).

Consistent with the previous analysis, it is assumed that roughly half of the cost savings would pass to the participant. This is expressed in terms of basis points for the rate of return. For instance, if a reduction in costs associated with plan disclosures translated to an increased net investment return of one-half basis point (0.005), participant balances would increase by approximately 9 percent during the accumulation phase holding everything else constant. Graph 14 shows that even with this modest assumption, the participant would realize considerable benefits, with no other changes to their account. Holding all else constant over 30 years, the participant would increase their account balance by approximately 9 percent or $15,014 through increased savings from default electronic delivery.

Graph 14 - Projected Cost Sharing Benefit to Participant from Cost Savings of Default Electronic Delivery
(Dollar Amounts in Thousands)





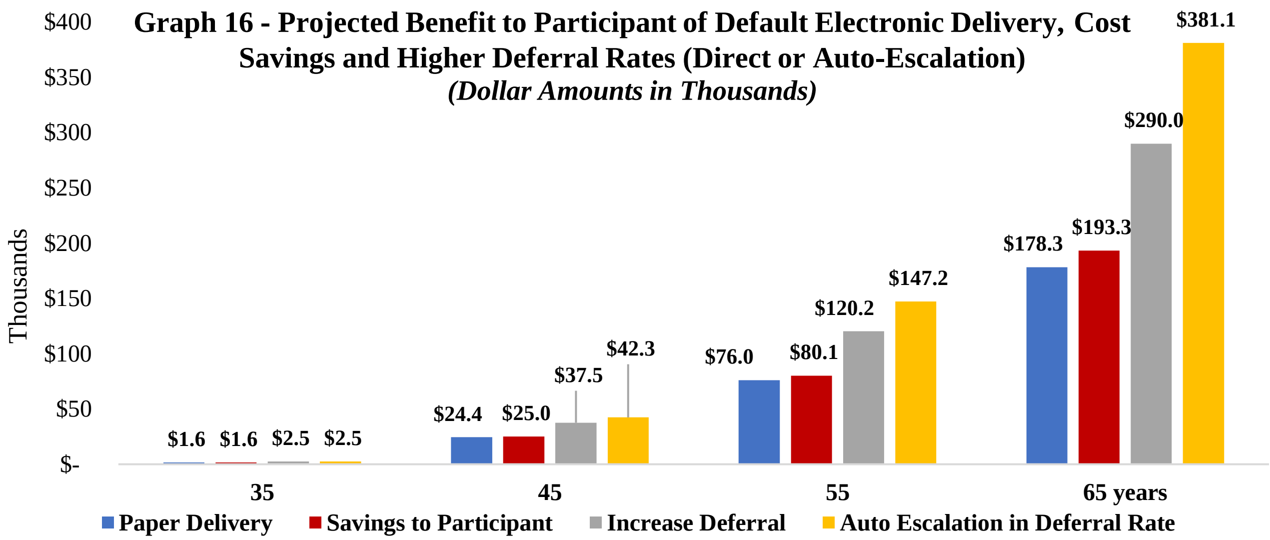
2. Increased Deferral Rate for Participants **–** Provider experience indicates that participants with electronic delivery have higher deferral rates compared to those with paper delivery. This translates into significant benefits to the participant, in terms of the accumulated account balance. Keeping the same assumptions (refer to Figure 2), following default electronic delivery, if the participant increases their deferral rate and a portion of the cost savings passes to the participant, the benefits are even more dramatic.

Graph 15 shows that increasing the deferral rate from 3 percent to 4.5 percent, coupled with the cost savings from default electronic delivery, would dramatically increase by 63 percent (over paper delivery). The benefits attributable to increasing the deferral rate would increase by more than $96,000 the final savings accumulation over the life of the participant, holding everything else constant.

3. Electronic Nudges and Auto-escalation to Increase Participant Engagement – Improving engagement through default electronic delivery is one way to increase deferral rates, however participants can also receive electronic communications (nudges) that encourage them to modify their current level of savings.

In addition, many plans implement an automatic escalation feature. In most cases, if the participant is not engaged actively, the plan would automatically increase the deferral rate each year. However, in situations where the participant is responding to electronic communication and other nudges, the need to automatically escalate the deferral rate would not be necessary. In an effort not to overstate the effects, the analysis assumes that auto-escalations would increase the deferral rate every 10 years – for those participants that demonstrate active engagement. In this case, we can see that the same participant would realize greater account accumulation, holding all else constant.

Graph 16 demonstrates the cumulative benefit of the cost savings, increased deferral (either through direct or auto-escalation actions), and ongoing electronic nudges (education, guidance and reminders) would continue to provide greater retirement savings and increased account balance accumulation over time. In this example, the participant could increase their account balance by 114 percent (over paper delivery) or about $91,000 additional savings over the 30-year period, holding all else constant.



4. Improved Investment through Tools – The final potential for benefits to the participant include having access to online tools. As the tools become more innovative and sophisticated, the participant can improve their overall financial wellness. This includes becoming a more informed investor, and receiving greater return on their overall investment, holding all else constant.

One example of a financial tool that could improve investment returns is an automatic fund rebalancing tool. Other examples include peer comparison tools, financial wellness measures, or investment portfolio tools (risk assessment tools). Assuming that these types of tools could increase the return from 5.5 to 6.5 percent, the participant would realize significantly greater benefits from improved engagement resulting from electronic communication.[88]

Graph 17 shows the final account balance for the participant, with the addition of each incremental benefit received from electronic delivery and communication. Again, the improvement in participant accumulated benefits could reach 149 percent (over paper delivery) or an additional $63,000 of savings over the 30-year period.

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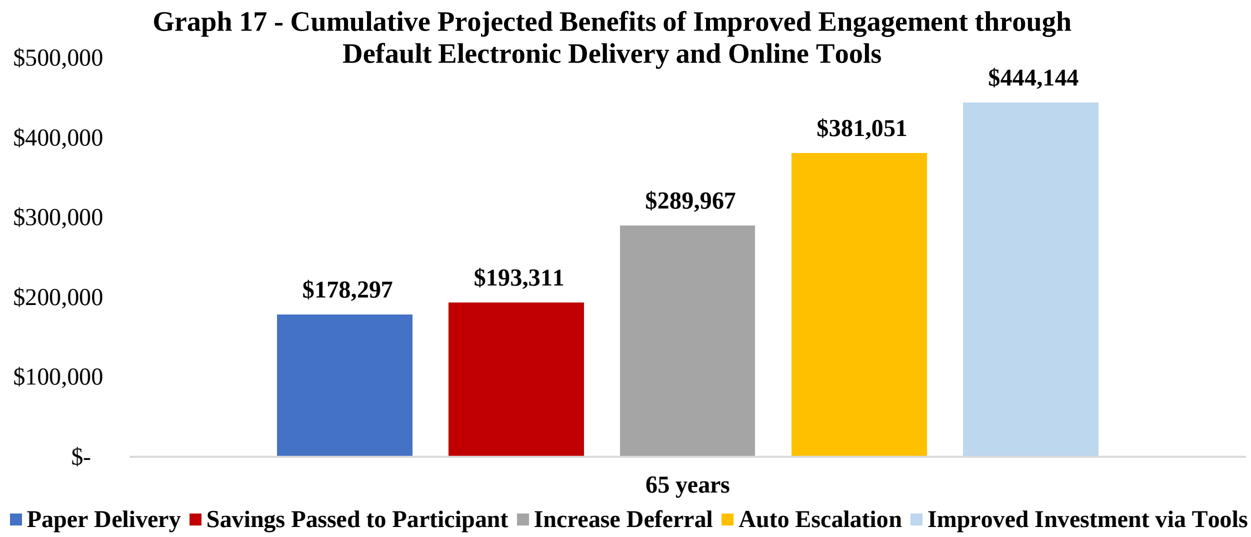
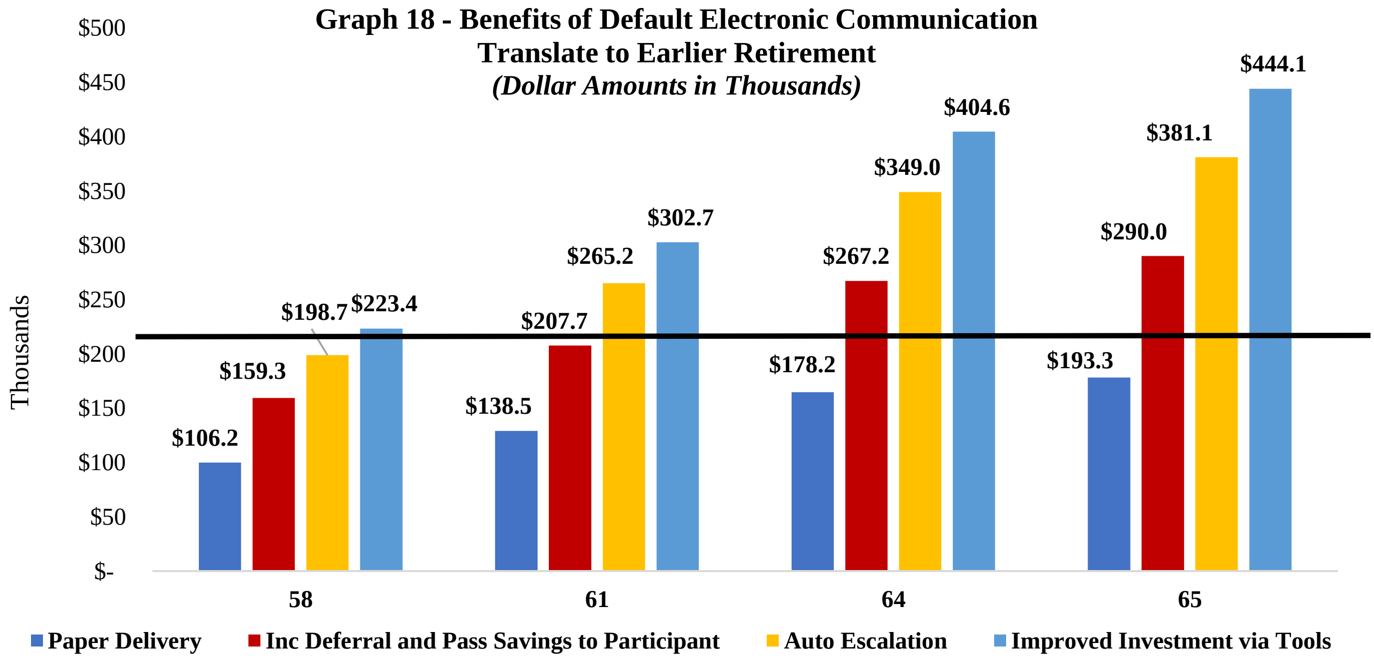
[88] The increase associated with improved education, asset rebalancing, and greater engagement reflects the most recent Congressional Budget Office assumptions used in their Baseline Projections. Found online at: https://www.cbo.gov/about/products/budget-economic-data#4. Further, proprietary provider data indicates that account performance is likely to improve by 20 percent for those participants that engage with educational financial tools.



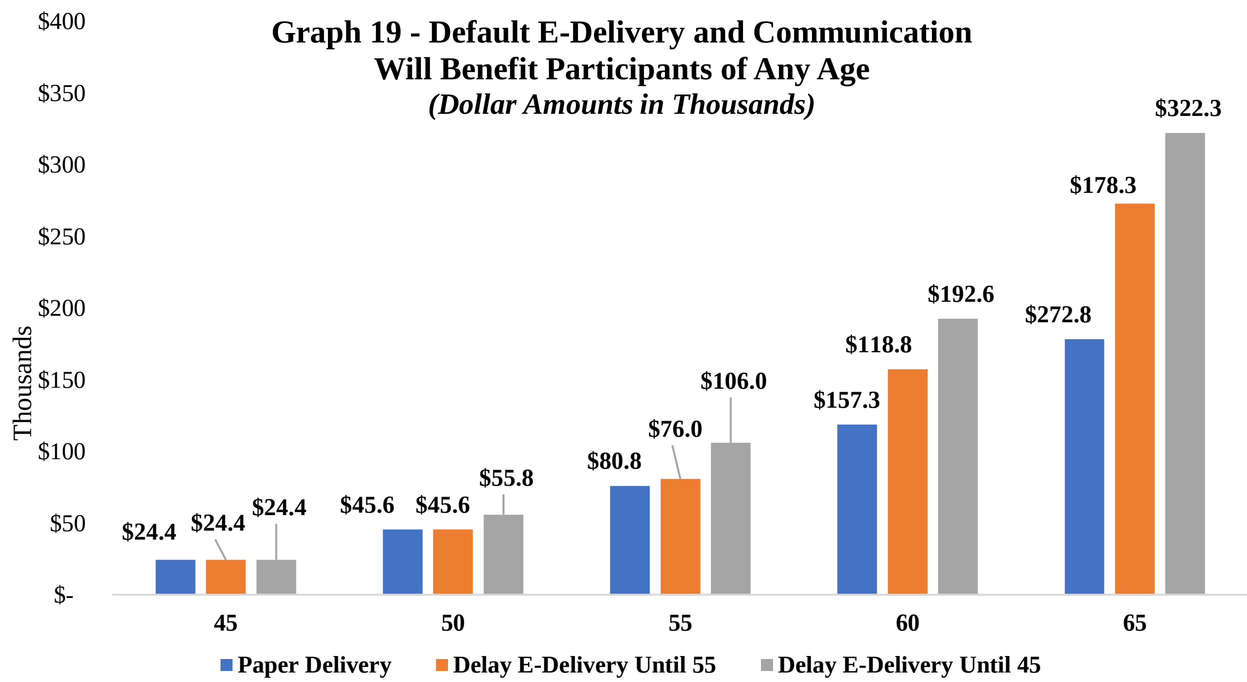
5. ***Affecting the Timing of Retirement*** – An additional benefit of default electronic communication is that the participant may realize their retirement savings goals sooner. This means that, with the proper planning, the participant may be able to retire earlier. As Graph 18 indicates, if the participant intends to reach a $210,000 balance, they would have the option of retiring 7 years sooner at age 58, if they were able to receive the cumulative benefits of electronic delivery and communication (cost savings, increased deferral rates, auto-escalation, and online tools). In the case of participants that had not taken advantage of online tools, they would find that the other benefits (cost savings, increased deferral rates, auto-escalation) could allow them to reach their savings goal at age 61.



Clearly, the cumulative effect of all the benefits available to participants through default electronic delivery and communication would mean that remaining in the workforce until retirement age (65 years in this example) provides the greatest benefit. So, whether the participant chooses to retire sooner, or remain in the workforce, the benefits afforded through electronic communication means that the participant will be made better off.

6. ***Benefits to All Participants* –** Clearly, having a longer saving horizon generates the greatest and most dramatic benefits for any plan participants. However, the benefits from default electronic delivery and communication are not limited to those younger participants and the newly enrolled.

Consider the case of a plan participant that enrolled at age 35 (keeping all the original assumptions), but through inertia maintained the same savings pattern until age 55. However, at age 55, the participant was default enrolled in electronic delivery and began to reap the benefits of electronic communication (nudges and online tools). This participant would increase their account balance by 73 percent over the baseline case (paper delivery and inertia). More dramatically, if the participant were default enrolled at age 45 and benefited from the electronic delivery, communication, and tools, their account balance would increase by 118 percent over the paper delivery scenario.



This analysis relies on actual provider experience and characteristic differences of those participants that opt for electronic delivery. These participants tend to defer at higher rates, respond to electronic communication and nudges, as well as take advantage of the online tools to improve their investment performance and evaluate their financial wellness.

Having a means by which plans can communicate effectively and efficiently – electronic delivery – allows the participant to become fully engaged and focused on their retirement goals.

IV. CONCLUSION

Many plans would like, as a default, to distribute retirement plan information electronically. All participants would be given the right to "opt out" and receive paper communications at no direct charge. However, current rules stand in the way. The 2019 Department of Labor (DOL) proposed safe harbor reflects the changing nature of electronic communication and improved internet access for all Americans, but in particular for retirement plan participants.

Plan participants' adoption of digital technology indicates that electronic delivery would provide seamless access to plan information. Further participant views, reported in a 2015 Greenwald & Associates survey, show overwhelming acceptance for the move to electronic delivery as the default delivery method. Participants surveyed indicate an awareness of the many potential benefits of electronic delivery. Allowing plan sponsors to use default electronic delivery would help overcome the inertia that currently results in many plan participants remaining in default paper delivery despite their preference for electronic delivery.

Electronic delivery of retirement plan information provides an efficient, secure, and reliable means of communicating important plan information, which reduces costs and facilitates superior outcomes. Evidence of participant experience demonstrates that they are reaping the benefits of electronic delivery, communication, and tools to achieve superior outcomes.

Behavioral economists have demonstrated the importance of electronic communication and electronic nudges to engage plan participants. Accordingly, in the landmark Pension Protection Act of 2006, Congress promoted the use of "automatic" rules that facilitate "automatic" behavior for retirement savings. The evidence is clear that this shift has had a critical impact on driving superior outcomes through: (1) automatic enrollment; (2) automatic escalation; (3) increased deferral rates; and (4) improved investment choices.

Further, economic theory indicates that in a competitive marketplace, a significant portion of the cost savings will pass through to plan participants (Refer to Appendix A). Allowing retirement plan sponsors to make electronic delivery a default would reduce the costs associated with operating their retirement plans. These cost savings would reduce their overall administrative costs and will ultimately benefit participants, translating to lower expenses – and higher net investment returns – to the participant. This translates to an estimated ***$250 to $450 million in savings that would accrue directly to individual retirement plan participants annually***.

These measurable benefits from default electronic delivery are demonstrated for all participants from current workers to the newly enrolled, and across all age cohorts from younger to older participants alike (Section III). Under conservative assumptions, a ***35-year old worker who is defaulted into electronic delivery could have 149 percent (or a cumulative $265,000) more in retirement savings after their working career,*** through the cumulative effects of electronic communication, direct cost savings, increased deferral rates, engagement with online tools and access to educational resources, in addition to other enhancements like automatic escalation. Collectively, the benefits from default electronic delivery and electronic communication will help facilitate superior retirement saving outcomes.

APPENDIX A – TECHNICAL DESCRIPTION OF COST SAVINGS

Economic incidence theory provides the framework for analyzing the potential benefits passing to participants from reduced costs. Applying incidence theory to this cost savings requires analysis of several aspects of the market, including the: (1) demand for plan administration and the ability of the plan to negotiate pricing (and/or increased services); (2) competition in the market for plan administration; and (3) potential magnitude of the estimated cost savings from allowing electronic delivery as the default delivery method (with a provision allowing the participant to "opt-out" at no additional cost).

***1. Incidence Theory* –** The costs associated with retirement plan administration are similar to a tax on a good or service. When the price of a good or service includes a tax (or in this case a fee), either the consumer or the producer must bear the burden of the taxes or fees. In the case of retirement plan administration, when the fee increases, plan administrators do not always have the ability to pass along these higher fees to the participants. The ability to do so will depend heavily on which party is able to change their behavior (*i.e*., who has the greatest elasticity).[89]

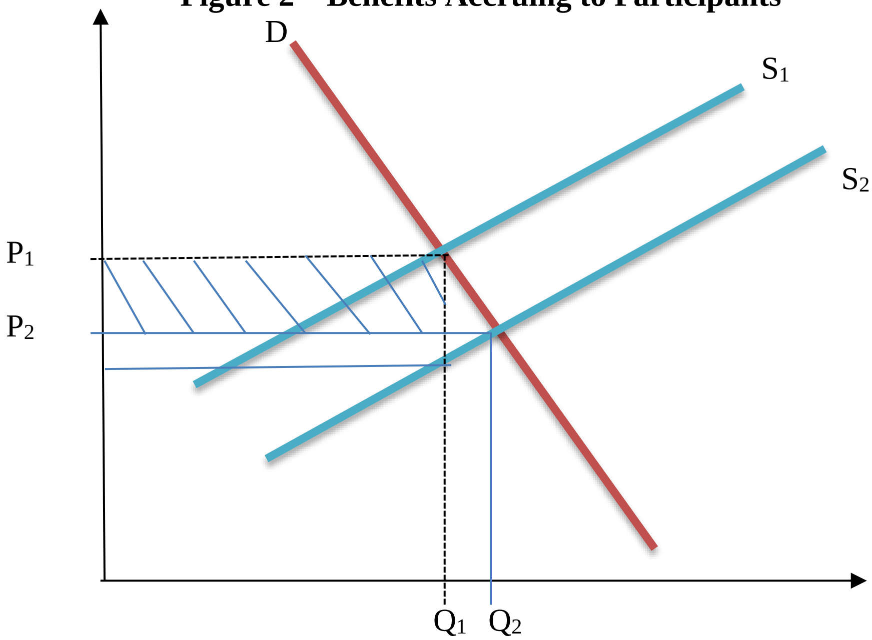
With respect to a cost savings from moving to electronic delivery, incidence or burden theory indicates that in competitive markets, the administrator must pass along most of these savings to the consumer or plan participants. In competitive markets, when costs fall, if the administrator does not extend most (or all) of the cost savings to the plan participants, the plans will change administrators in order to benefit from these cost savings. Other administrators have an incentive to extend the lower prices to gain market share.

Figure 2 depicts the potential benefits that would accrue to the plan participants, if plan administrators were to realize cost savings from electronic delivery of plan documents. In this figure, the savings are represented by the downward shift of supply (S_1 to S_2). The demand for the services is represented by D. The upper rectangle (P_1 to P_2) represents the savings that would accrue to the participants. The lower rectangle (below P_2) represents the potential savings that would accrue to administrators. The degree of competitiveness in the market for administrators will influence the size of each rectangle. The price sensitivity indicates that the incidence of this cost savings will flow to the participants.

When the price of a good or service includes a tax (or in this case a fee), either the consumer or the producer must bear the burden of this cost. In the case of retirement plan administration, when the cost decreases, plan administrators do not have the ability to retain these cost savings (in the form of higher profits).

[89] The combination of the price elasticity of demand and the price elasticity of supply will determine whether the participant or the administrator receive the benefit of the cost savings. Refer to Kotlikoff, Laurence J. and Lawrence H. Summers, *Tax Incidence,* Chapter 16, in the Handbook of Public Economics, Volume II, edited by A.J. Auerbach and M. Feldstein, 1987, for a discuss of the economic theory of incidence.

Figure 2 – Benefits Accruing to Participants



The less elastic the demand (*i.e.*, the steeper line D) and more elastic the supply (*i.e.*, the flatter line S), the more the cost savings will transfer to the plan participants. The magnitude of the benefit that passes to the participant depends upon assumptions of the degree of competition in the market and the elasticity of demand for plan administration services. Estimates of the elasticity of supply in competitive markets is about 0.68.[90] Research indicates that empirical estimates of the elasticity of demand range from -10 to zero.[91] However, given the high degree of specialization and the need to adapt to new technologies in plan administration, it is likely that demand is somewhat inelastic.

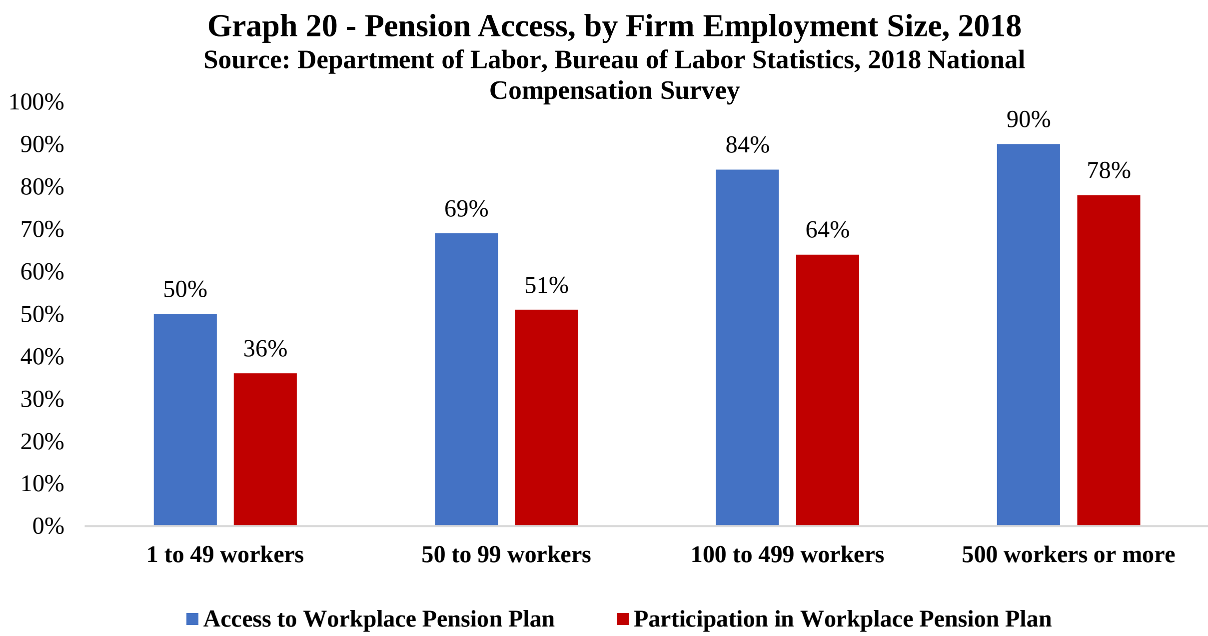
Incidence theory indicates that the benefit of lower costs will pass to the participant, if the market for plan administration is competitive. Competition in the marketplace means that there are many businesses offering plan administration services and no single plan administrator determines the market price.

2. Demand for Plan Administration **–** Generally, the ability to negotiate terms for plan administration will increase as the plan size increases. The vast majority of participants are in large and medium size plans. Graph 21 shows that access to pension plans increases as the size of the employer increases. As employment increases, the likelihood of the employer offering a plan also increases. Participation (as shown in the graph) correlates positively with firm size as

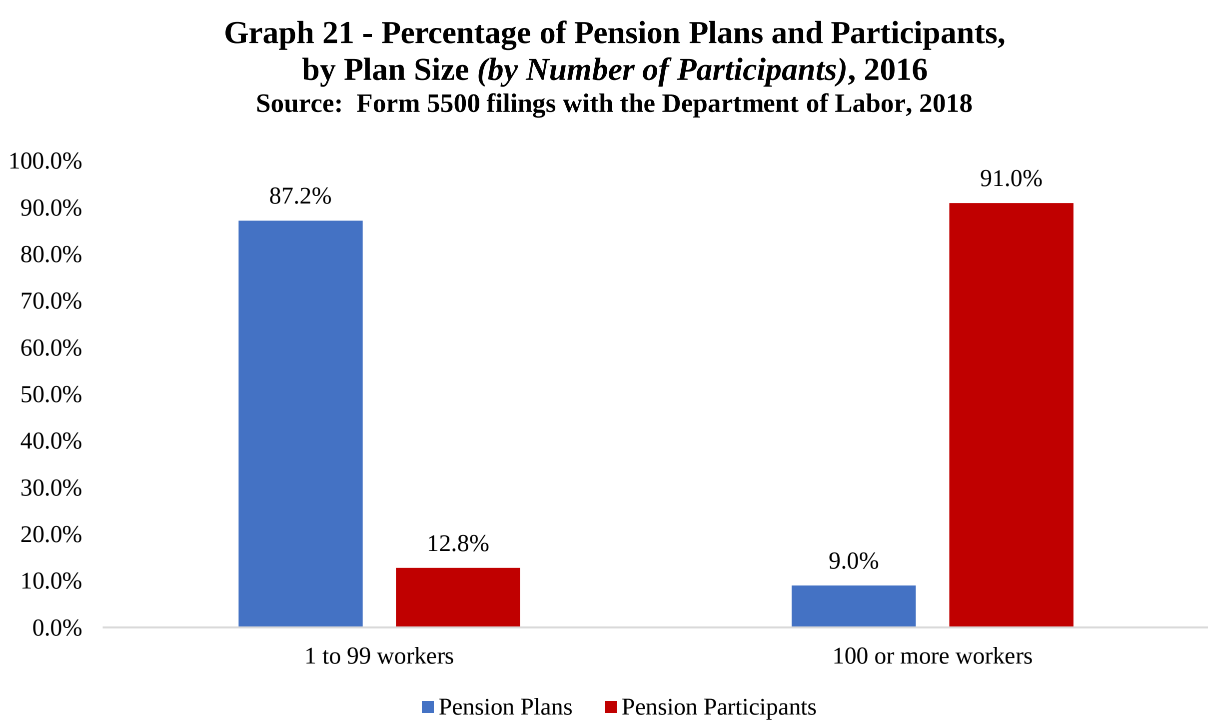
[90] Refer to Industrial Organisation Economics and Competition Law, compiled by R. S. Khemani and D. M. Shapiro, commissioned by the Directorate for Financial, Fiscal and Enterprise Affairs, OECD, 1993.

[91] *Ibid.* In theory, elasticity of demand ranges from negative infinity to zero. In addition, refer to Refer to Liu, L., *Do Taxes Distort Corporations' Investment Choices? Evidence from Industry Level Data*, mimeo, Centre for Business Taxation, Oxford University, 2011. The author's literature review includes empirical results of recent work including Cummins et al. (1994, 1996), Caballero et al. (1995), Goolsbee (2000), Ramirez Verdugo (2005) Schaller (2006) and Dwenger (2010).

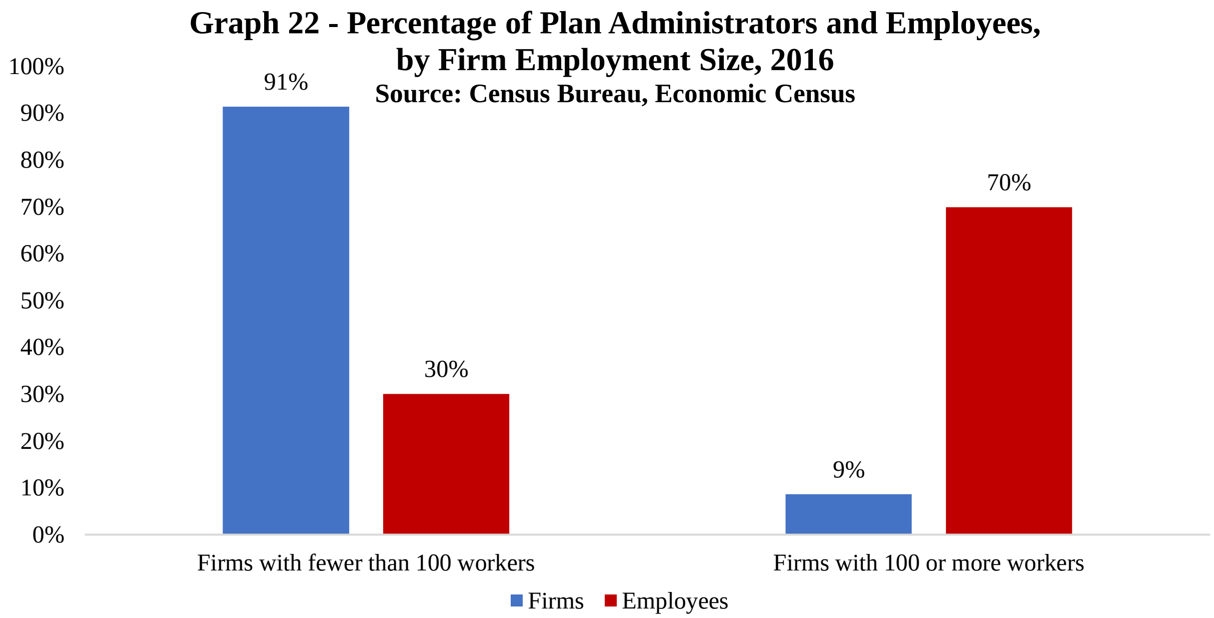
well. Employees in larger firms are more likely than their counterparts in smaller firms to participate in an employer plan.



In aggregate, these access and participation rates result in the majority of participants (91 percent) in a small percentage of plans (just over 12 percent). Conversely, majority of plans are very small (about 87 percent) and they cover about 13 percent of participants.



3. Competition in the Market for Plan Administration **–** Data from the Economic Census provides a sense of the competition in the market for plan administrators.[92] Graph 22 displays the establishments offering third-party plan administration as well as the corresponding employment, distributed by firm size (defined as the number of employees). Data from the 2016 Economic Census, County Business Patterns by Employment Size Class indicates that there were approximately 4,694 establishments, with nearly 203,000 employees. As the data indicates, about 400 firms have 100 workers or more.



The market for plan administrators is diverse with many large and small employers.[93] The market for plan administration reflects a high degree of entry and exit from the market as well as a degree of consolidation.[94] This suggests a highly competitive marketplace and more importantly, the inability of one or a few firms to control prices – indicating that most or some cost savings would pass through to the retirement plan participants.[95]

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[92] Refer to the Economic Census from the U.S. Census Bureau, North American Industrial Classification System, Third Party Administration of Insurance and Pension Funds (524292). The Census Bureau has not yet released an update to this data set.

[93] Four characteristics or conditions must be present for a perfectly competitive market structure to exist. First, there must be *many firms* in the market, none of which controls individually the market. Second, firms should be able to *enter and exit the market easily.* Third, each firm in the market produces and sells a non-differentiated or *homogeneous product.* Fourth, all firms and consumers in the market have *complete information* about prices, product quality, and production techniques.

[94] Refer to (NAICS 524292) U.S. Census Bureau, County Business Patterns by Employment Size Class, 2010 through 2016. Data indicate a high degree of firm births and deaths (entry and exit in the market place) as well as growth or concentration in employment as firm size increases.

[95] Conversely, if there were a small number of firms, or if employment were concentrated among a few large firms, this would suggest less competitive market structure. However, plan administrators face considerable competition both from existing firms, as well as new firms entering the market.

Given that there are a large number of plan administrators in the market, and that the market is comprised of a variety of firm sizes, the ability to negotiate prices will depend upon the size of the plan administrator relative to the plan size.

Employers with larger plans have meaningful bargaining power vis-à-vis plan administrators (of any size). The larger plans tend to hold a significant segment of the assets associated with pension plans. Therefore, the plan administrator would want to retain or add larger plans to their base.

Employers with very small plans (fewer than 100 participants) will have less bargaining power when dealing with the larger plan administrators. But if they seek services from the many small plan administrators, they will find that they have greater powers to negotiate.[96]

This market (supply) for plan administrators and the market (demand) for plan administration is a bi-modal market. In other words, there appears to be two distinct competitive markets for plan administration – one for larger plans and larger administrators and another for smaller plans and smaller administrators.

When the plan has the option to choose another administrator, the administrators must pass along these savings. This would be increasingly important as the cost margins to the providers begin to decrease. In other words, as efficiencies from electronic delivery emerge, plan administrators will face more and more price competition for the services they offer and would need to reflect this in their price structure.

Otherwise, the competition in the market means that another service provider could reduce their prices (pass along the cost savings) to gain market share. Since there are a large number of plans and administrators (large and small plans and administrators) to support competitive market forces, this will induce the administrators to pass cost savings (most or all) to the plans to retain or gain market share.[97]

4. Estimating the Potential Benefits to Participants **–** Estimating the savings from moving to electronic disclosure depends upon the scope of documents covered by electronic delivery and the frequency of delivery of those documents, as well as the cost of preparing the documents for mailing. The plan administrator faces certain fixed costs associated with producing the documents, but the variable costs associated with sending the documents would decrease with electronic delivery. The variable cost savings would be attributable to reduced paper costs, printing services, labor associated with mailing the documents, and postage.

To estimate comparable costs for allowing plan administrators to move to electronic delivery (with an opt-out provision), the analysis relies on a study produced by the mutual fund industry

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96 When smaller plans receive services from the larger plan administrators, these smaller plans may benefit from cost savings negotiated by the larger plans. While they do not have the ability to negotiate directly, they may benefit through the 'free-rider' effect of larger plan negotiated savings.

97 Plan administrators also use other services to distinguish themselves from one another. These services include online tools and education to the plan participants.

in connection with the Securities and Exchange Commission's summary prospectus rule.[98] This study provided per document printing and postage costs for various printing quality (color versus black and white documents). In addition, assumptions regarding the current use of electronic delivery rely on a recent survey conducted by Greenwald & Associates in 2015.

Applying these costs to retirement plan participants (total 131 million participants adjusted for likely behavioral responses and eliminating those that receive electronically certain documents) and the number of communications required by law (estimated 8 to 12 documents per participant), we find that total annual savings associated with moving to electronic delivery would range between $450 and $750 million each year, with an estimated ***$250 to $450 million accruing to the plan participants***.[99]

In brief, the range of estimates relies on assumptions regarding the percentage of plan participants (based on the experience from several large pension plan providers and plan administrators) that currently receive electronic delivery.

Behaviorally, those receiving documents in both formats are likely to transition smoothly to electronic delivery and are less likely to exercise the opt-out option. The remaining participants are likely to have a percentage that will exercise the opt-out option, as the transition to electronic delivery may initially seem less attractive. The lower cost savings assumes a greater percentage (50 percent) of the paper-only participants elect to opt-out of electronic delivery. The higher cost savings assumes that a majority (80 percent) of paper-only participants will continue to receive documents through electronic delivery.

Modest decreases in the costs associated with plan administration are likely to flow through to participants in the form of lower fees. As the fee decreases, the net return increases to the participant, thereby increasing the net return on their retirement savings.

Empirical estimates indicate that an increase in the net investment return received by participants could improve retirement security by 9 percent during the accumulation phase. For instance, if a reduction in costs associated with plan disclosures translated to an increased net investment return of one-half basis point (0.005), participant balances would increase by 9 percent during the accumulation phase, holding everything else constant. In other words, the extent to which these cost savings pass through to participants will influence the net investment return. The reduced fees that pass to the participant as an increase in the net investment return will improve the participant's rate of accumulation and improve the adequacy of their retirement savings.

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[98] Refer to Investment Company Institute, *Cost-Benefit Analysis of the Summary Prospectus Proposal,* February 28, 2008, Appendix B.

[99] Given the degree of competition for plan administration services, nearly 60 percent is likely to pass through to the participant in the form of lower fees (higher net investment return).

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