ADVANCED ANALYTICAL
CONSULTING GROUP

SELF-INSURED HEALTH BENEFIT PLANS 2022
Based on Filings through 2019

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Advanced Analytical Consulting Group, Inc.

Constantijn W.A. Panis, PhD
stanpanis@aacg.com

Megan Yeretsian, MA
meganyeretsian@aacg.com

SUMMARY

This document analyzes the funding mechanism of employer-sponsored health benefit plans that filed a *Form 5500 Annual Return/Report of Employee Benefit Plans* ("Form 5500"). It compares fully insured, self-insured, and mixed-funded (funded through a mixture of insurance and self-insurance) health plans for reporting periods that ended in 2019 and presents select historical series for the years 2010 through 2019. For a subset of health plan sponsors, publicly available corporate financial data were also used.

The analysis separates plans with at least 100 participants at the start of the reporting period ("large plans") from plans with fewer than 100 participants at the start of the reporting period ("small plans"). This is because small plans are generally required to file a Form 5500 only if they operate a trust, which is associated with self-insurance. As a result, small plans in the analysis are a selective subset of small plans nationwide. The primary findings for large plans are as follows:

- In 2019, 56,348 large health plans covered 78.8 million participants. Both the number of plans and participants were up by 1.9% from 2018.
- Almost one-half (44.5%) of large plans were self-insured or mixed-funded in 2019, and those plans covered 81.0% of plan participants.
- At the plan level, the shares of self-insured (37.5%), mixed-funded (7.0%), and fully insured (55.5%) large plans are unchanged from 2018.
- In 2019, self-insured large plans covered 45.1% of plan participants, mixed-funded plans covered 36.0%, and fully insured plans covered 19.0%. These participant-level shares are almost identical to those in 2018.
- The prevalence of self-insurance among large plans generally increased with plan size. For example, 26.7% of plans with 100–199 participants were mixed-funded or self-insured in 2019, compared with 89.7% of plans with 5,000 or more participants. The pattern was similar in earlier years.
- Mixed-funding is found primarily among very large plans. For example, 1.6% of plans with 100–199 participants were mixed-funded in 2018, compared with 41.1% of plans with 5,000 or more participants.
- As reported in Form 5500 filings, stop-loss coverage among large self-insured plans declined from 22.6% in 2018 to 22.2% in 2019, while among mixed-funded large plans it remained unchanged at 17.3%. These figures likely understate the true prevalence of stop-loss insurance for large plans because stop-loss insurance for the benefit of the sponsor (as opposed to the plan) need not be reported in Form 5500 filings.
- Self-insurance rates varied by industry for large plans, with participants in utilities, retail trade, and communications & information firms being most commonly in a self-insured or mixed-funded plan.
- Large plans of for-profit and not-for-profit organizations differed mostly in mixed-funding and self-insurance. Mixed funding was far less prevalent at not-for-profit entities than at for-profit firms; the opposite is the case for self-insurance.
- We found no consistent evidence that the financial health of large fully insured plan sponsors is better or worse than that of mixed-funded or self-insured sponsors.

For small plans that filed a Form 5500, the primary findings are as follows:

- Continuing their recent increases, the number of small plans that filed a Form 5500 rose by 83% from 5,169 in 2018 to 9,450 in 2019, covering about 158,000 participants. The inflow of small plans is mostly because a growing number of small plans with a trust appear to participate in a non-plan Multiple Employer Welfare Arrangement (MEWA).
- A large majority (95.5%) of small plans that filed a Form 5500 were self-insured, 2.8% were mixed-funded, and only 1.8% were fully insured. External sources of information about small plans, such as the Insurance Component of the Medical Expenditure Panel Survey (MEPS-IC), document far less self-insurance among small plans nationwide, underscoring the selective nature of small plans in our analysis due to Form 5500 filing requirements.
- Insofar as reported on Form 5500 filings, small plans were roughly twice as likely to have stop-loss coverage than large plans. Stop-loss coverage among mixed-funded small plans is declining over time, while rising over time among self-insured small plans.
- Most self-insured small plans are concentrated in the services and construction sectors.

In addition to group health plans discussed above, this report briefly characterizes Group Insurance Arrangements (GIAs), which are fully insured by definition. For 2019, 42 GIAs filed a Form 5500. They covered about 315,000 participants, were generally larger than group health plans, and were disproportionately active in the finance, insurance, and real estate industry.

CONTENTS

1. INTRODUCTION

The 2010 Patient Protection and Affordable Care Act (ACA) (§1253) mandates that the Secretary of Labor prepare annual reports with general information on self-insured group health plans (including plan type, number of participants, benefits offered, funding arrangements, and benefit arrangements), as well as data from the financial filings of self-insured employers. The U.S. Department of Labor (DOL) engaged Advanced Analytical Consulting Group, Inc. (AACG) to assist with the ACA mandate. This document is intended to serve as an appendix to the Secretary's 2022 *Report to Congress*.

As required by the ACA, the primary data source for this document is the information provided to the DOL by health plan sponsors on *Form 5500 Annual Return/Report of Employee Benefit Plans* ("Form 5500") filings. For a subset of health plan sponsors, publicly available corporate financial data were also used.

This report is the twelfth installment of a series that began in 2011. While the analysis has been refined over time, no major methodological changes affected the current report relative to last year's iteration. However, the current report introduces changes to the presentation of results. The number of plans with fewer than 100 participants ("small plans") that file a Form 5500 has been rising disproportionately in recent years. Unlike plans with 100 or more participants ("large plans"), only a small subset of small plans file a Form 5500, and their disproportionate growth, discussed below, is driving some analysis results that may not reflect changes in the aggregate market of employer-sponsored health plans. For that reason, this report analyzes certain aspects of small plans and large plans separately.

The current report presents results for Form 5500 filings for plan years that ended in 2010–2019 (i.e., several years before and after the effective implementation of the ACA in 2014). For large plans, the primary findings for 2019 are similar to those for 2018. In contrast, the number of small plans that filed a Form 5500 increased sharply from 2018 to 2019, and increasingly many of them are self-insured.

Section 2 of this report describes Form 5500 and other data sources, including data quality, consistency issues, and the extent to which financial data were matched to health plan filings. Section 3 defines funding mechanism as used in this report. Section 4 presents the results of our data analysis for large health plans, while small plans are discussed in Section 0. Section 6 briefly characterizes Group Insurance Arrangements (GIAs), and Section 7 concludes.

The views, opinions, and/or findings contained in this report should not be construed as an official Government position, policy, or decision, unless so designated by other documentation issued by the appropriate governmental authority.

2. DATA SOURCES

The quantitative analysis in this report is based on three data sources: Form 5500 group health plan filings, Internal Revenue Service (IRS) *Form 990 Return of Organization Exempt From Income Tax* ("Form 990") filings, and Bloomberg data with corporate financial records. This section discusses the data sources and the algorithms to match the three sources.

Form 5500 Filings of Health Benefit Plans

The ACA stipulates that the Secretary's Report to Congress on self-insured group health plans be based on Form 5500 filings. The Form 5500 Series was developed to assist employee benefit plans in satisfying annual reporting requirements under Title I and Title IV of the Employee Retirement Income Security Act (ERISA) and under the Internal Revenue Code. Including required schedules and attachments, the Form 5500 collects information concerning the operation, funding, assets, and investments of pensions and other employee benefit plans.

Health, disability, and any other benefits that are not pension benefits are collectively referred to as welfare benefits. Generally, companies file separate Forms 5500 for pension benefits and for welfare benefits. This report centers on health benefits only and is thus based on a subset of welfare benefit filings.[1]

The Form 5500 consists of a main Form 5500 and a number of schedules and attachments, depending on the type of plan and its features. The main Form 5500 collects such general information as the name of the sponsoring employer, the type of benefits provided (pension, health, disability, life insurance, etc.), the effective date of the plan, and the number of plan participants, along with limited information on funding and benefit arrangements. If some or all plan benefits are provided through external insurance contracts, Form 5500 plan filings must include one or more Schedules A with details on each insurance contract (name of insurance company, type of benefit covered, number of persons covered, expenses, etc.). If any assets of the plan are held in a trust, a Schedule H or Schedule I must be attached with financial information. Schedule H applies to large plans, whereas small plans may file the shorter Schedule I. Certain small plans may file a Form 5500-SF (Short Form) with less detailed information.[2]

Non-ERISA plans, such as governmental plans and church plans, do not need to file a Form 5500 and are therefore not covered by the analysis in this report. Also, plans

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[1] While this report only addresses health benefit information, 80% of 2019 Form 5500 health plans provided both health and other types of benefits (dental, disability, etc.).

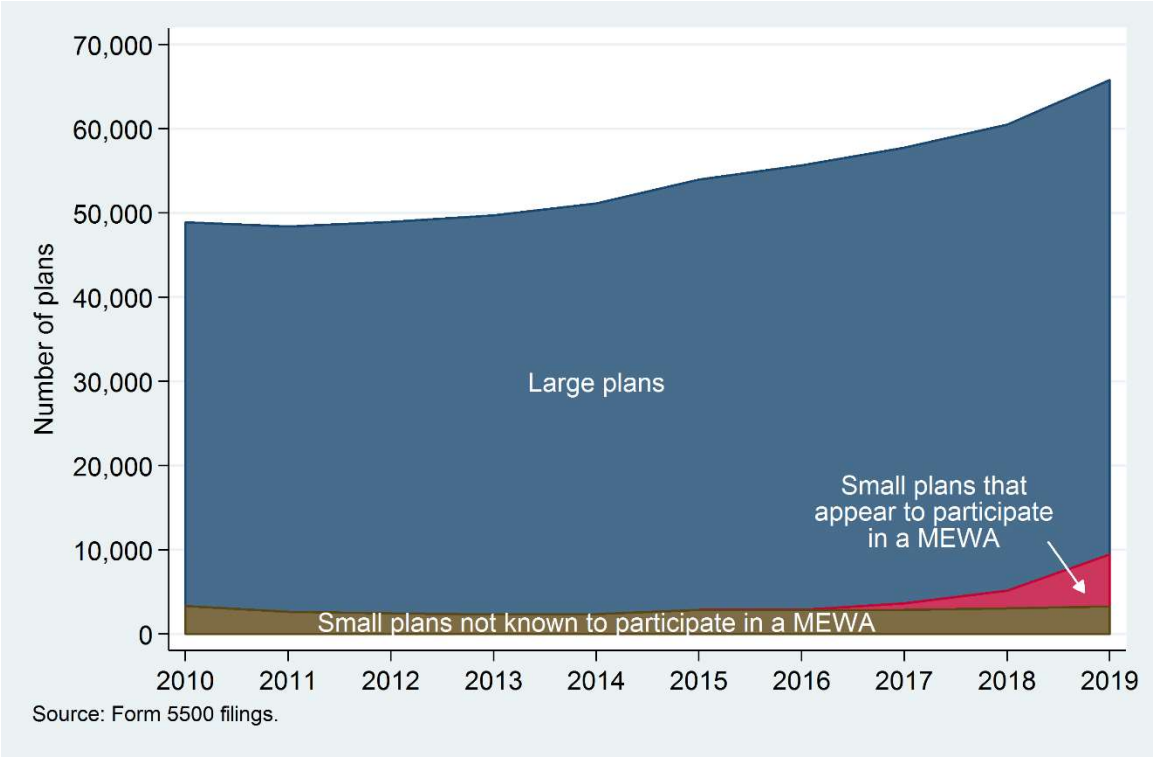
[2] To be eligible to use the Form 5500-SF, the plan must generally have fewer than 100 participants at the beginning of the plan year, meet the conditions for being exempt from the requirement that the plan's financial records be audited by an independent qualified public accountant, have 100% of its assets invested in certain secure investments with a readily determinable fair value, hold no employer securities, not be a multiemployer plan, and not be required to file a Form M-1, *Report for Multiple Employer Welfare Arrangements (MEWAs) and Certain Entities Claiming Exception (ECEs)* for the plan year (2019 Instructions for Form 5500-SF).

with fewer than 100 participants at the beginning of the plan year ("small plans") are generally exempt from filing a Form 5500, except if they operate a trust or are a Multiple Employer Welfare Arrangement (MEWA) that is a single plan. As a result, small health benefit plans that do not need to file a Form 5500—more than 99% of small health benefit plans—are not covered by the analysis in this report.[3]

Because plans with 100 or more participants at the beginning of the plan year ("large plans") are generally required to file a Form 5500, we believe our analysis covers nearly all large ERISA-covered plans in the United States. In contrast, small plans are generally exempt from filing a Form 5500 unless they hold assets in a trust, which is associated with self-insurance. As a consequence, small plans that filed a Form 5500 are not representative of small plans in the United States.

The number of small health benefit plans that filed a Form 5500 was approximately constant until 2016 and grew substantially in recent years—see Figure 1.

Figure 1. Number of Small and Large Health Benefit Plans That Filed a Form 5500 (2010–2019)



The growth was largely caused by plans that appear to participate in a MEWA, which is a vehicle to offer welfare benefits to the employees of two or more employers. A MEWA may or may not be a welfare benefit plan itself. If a MEWA is not a welfare benefit plan, Form 5500 filing requirements apply to individual employer plans that

[3] In 2016, the DOL estimated that 2,158,000 health plans covered fewer than 100 participants (Federal Register Vol. 81, July 21, 2016, p. 47502). Based on participants at the beginning of the plan year, only 11,039 such plans plans (0.5%) filed a Form 5500.

participate in the MEWA; otherwise, the MEWA may itself file a Form 5500. Based on their names, we identified 6,138 plans that appear to participate in eight non-plan MEWAs in 2019.[4] Prior to 2016, we did not identify any such plans.[5]

Form 5500 filings are almost universally available for large, ERISA-covered health benefit plans, while Form 5500 filings are only selectively available for small plans. Because these groups are so distinct, much of this report analyzes "large" and "small" plans separately.

Aside from amended filings, there were 57,793 filings of large plans that reported covering health benefits and a reporting period that ended in 2019 ("statistical year 2019"). Filings are excluded if (1) the filing was followed by another filing of the same plan for a later period in the same year (1,022 filings in 2019), (2) the plan name suggests that it does not offer health benefits that are the subject of the ACA (381 filings in 2019), or (3) the filing was submitted by a GIA (42 filings in 2019). The remaining 56,348 large plans together covered 78.8 million participants.[6] Throughout this report, participants may include active and retired or separated employees, but exclude dependents.[7]

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[4] Form 5500 and 5500-SF filings do not contain direct information about participation in a non-plan MEWA. We infer likely participation from plan names that contain the name of a MEWA. For example, many plan names contain the string "SOCA BENEFIT PLAN," which suggests participation in a MEWA sponsored by the Southern Ohio Chamber Alliance (https://www.joinsoca.com/soca-benefit-plan/faqs). Similarly, many plan names contain the names of MEWAs sponsored by the Ohio Farm Bureau, Builders Exchange of Ohio, Ohio State Medical Association, Canton Regional Chamber of Commerce, Missouri Chamber Federation, Community Bankers of West Virginia, and Georgia Chamber Federation.

[5] In 2018, DOL issued a Final Rule on Association Health Plans (AHPs), which are a type of MEWA (Federal Register Vol. 83, June 21, 2018, pp. 28912–28964). The Final Rule aimed to facilitate the adoption and administration of AHPs. While it is currently under legal challenge, the rule may have spurred increased interest in MEWAs.

[6] Following the Form 5500 filing requirements, the distinction between small and large plans is based on participant count at the beginning of the reporting period. For all other purposes (unless specified otherwise), the number of participants is measured at the end of the reporting period, because that count is most up-to-date. The difference between participant counts at the beginning and the end of the reporting period implies that large plans (with 100 or more participants at the *beginning* of the reporting period) may cover fewer than 100 participants at the *end* of the period (see Table 1), and that small plans may cover more than 100 participants at the end of the period (see page 5).

[7] The number of participants is based on the number reported in Form 5500 filings and may overestimate the number of plan participants who received health benefits. A single Form 5500 filing may reflect multiple welfare benefit types/options available under a single plan, and some participants may opt out of the health benefit option but participate in a different welfare benefit option. For example, in a welfare plan that provides multiple types of benefits, 500 employees may receive long-term disability benefits while only 400 employees are covered by health benefits. The number of plan participants reported on the Form 5500 would be 500.

Table 1 presents the distribution of large plan size, as measured by the number of participants at the end of the reporting period, for filings in statistical year 2019.

Table 1. Distribution of Large Health Plans and Plan Participants, by Plan Participant Counts at the End of the Reporting Period (2019)

Participants in plan	Large Plans	Percent	Participants (millions)	Percent
0–99*	2,665	4.7%	0.1	0.1%
100–199	19,401	34.4%	2.8	3.6%
200–499	18,176	32.3%	5.7	7.2%
500–999	6,941	12.3%	4.8	6.1%
1,000–1,999	4,040	7.2%	5.6	7.2%
2,000–4,999	2,901	5.1%	9.0	11.4%
5,000+	2,224	3.9%	50.8	64.5%
Total	56,348	100.0%	78.8	100.0%

Source: Form 5500 health plan filings.
* The definition of a large plan is based on number of participants at the beginning of the reporting period; some large plans have fewer than 100 participants at the end of the period.
Percentages may not sum to 100% due to rounding.

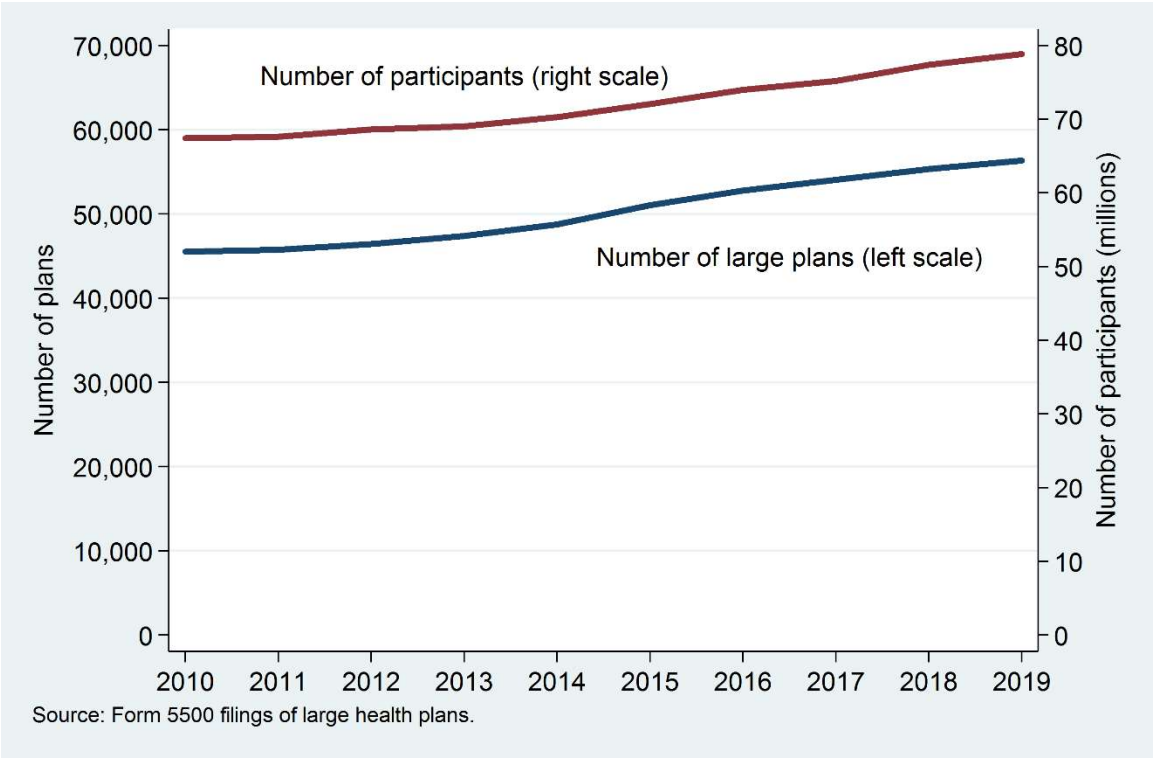
Large plans with fewer than 100 participants at the end of the plan year account for 4.7% of plans in our large plan analysis. The majority of large plans have between 100 and 499 participants. The majority of participants, however, are in the largest plans. Plans with 5,000 or more participants make up only 3.9% of all plans in our sample, but they account for 64.5% of all participants.

Similarly, aside from amended filings and filings with zero participants at both the beginning and the end of the reporting period, there were 11,080 filings of small plans that reported covering health benefits in 2019. As with the large plans discussed above, filings are excluded if (1) the filing was followed by another filing of the same plan for a later period in the same year (36 filings in 2019), (2) the plan did not hold assets in a trust and was therefore exempt from filing a Form 5500 (1,593 filings in 2019), or (3) the plan name suggests that it does not offer health benefits that are the subject of the ACA (1 filing in 2019). There were no GIAs among small-plan filers. The remaining 9,450 small plans together covered about 158,000 participants. Almost all (99.2%) had fewer than 100 participants at both the beginning and the end of the reporting period, while 73 plans (0.8%) had grown to 100 or more participants by the end of the period.

The Number of Health Benefit Plans and Their Participants

Our analysis covers statistical years 2010 through 2019. As shown in Figure 2 below and its underlying counts in Table 2, each year includes between approximately 45,000 and 56,000 large plans providing health benefits. The number of participants ranged from approximately 67 million to 79 million per year. From 2010 to 2019, the number of plans and plan participants increased every year. Between 2018 and 2019, the number of large plans grew by 1.9% to 56,348, and the number of participants also increased by 1.9% to 78.8 million.

Figure 2. Large Health Plans and Participants, by Statistical Year



Similarly, Figure 3 and Table 2 show the number of small health plans and their participants. As discussed above, the number of small plans increased rapidly in recent years, to 9,450 in 2019. The number of participants has fluctuated over time, mostly because of a few small plans that covered many participants at the end of the reporting period. For example, much of the volatility in participants stems from just two new health plans in 2011 and 2015 with about 239,000 and 128,000 participants at the end of the reporting period, respectively. In 2019, small plans covered approximately 158,000 participants.

Figure 3. Small Health Plans and Participants, by Statistical Year

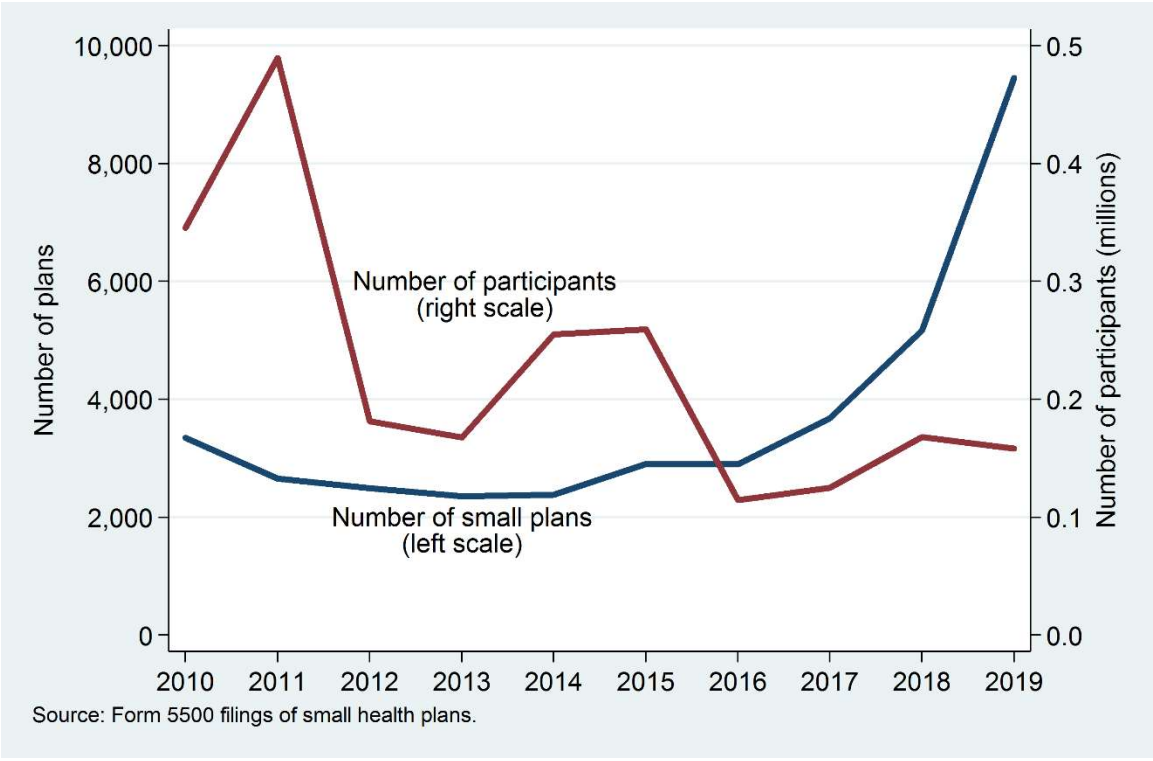


Table 2. Health Plans and Participants, by Statistical Year

	Large Plans		Small Plans	
Statistical year	Number	Participants (millions)	Number	Participants (millions)
2010	45,537	67.4	3,350	0.345
2011	45,751	67.7	2,656	0.490
2012	46,453	68.6	2,490	0.181
2013	47,387	69.1	2,358	0.168
2014	48,759	70.3	2,382	0.255
2015	51,057	72.1	2,901	0.259
2016	52,769	74.0	2,900	0.115
2017	54,071	75.2	3,679	0.125
2018	55,361	77.4	5,169	0.168
2019	56,348	78.8	9,450	0.158

Source: Form 5500 health plan filings.

Table 3 shows the percentage of health plan filings that could be matched to their corresponding filing in the previous year. It covers both large and small plans. The match rate ranged from 83% (in 2019 when many small plans first filed a Form 5500) to 89%. In order to gauge consistency in the reporting of the number of participants, the table illustrates to what extent participant counts of matched pairs of plan filings changed from one year to the next. At the median, plans reported approximately the same size as in the prior year, suggesting that the matches are generally accurate and that there is consistency in the reporting. The distributions

are fairly stable over time and the interquartile range (the difference between the 75th and 25th percentiles) of plan size growth was about 15 percentage points.

Table 3. Distribution of Year-on-Year Participant Increases in Plans Matched across Years

Statistical year	Number of plans in year t	Percentage matched to a plan in t-1	Year-on-year increase		
			25th pct	Median	75th pct
2010	48,887	84.2%	-8.7%	-0.7%	6.1%
2011	48,407	89.2%	-6.9%	0.0%	7.1%
2012	48,943	89.2%	-5.9%	0.5%	8.1%
2013	49,745	89.0%	-6.0%	0.5%	8.2%
2014	51,141	87.9%	-5.6%	1.0%	9.2%
2015	53,958	86.0%	-5.8%	1.3%	9.8%
2016	55,669	87.1%	-6.1%	1.1%	9.6%
2017	57,750	86.7%	-5.8%	1.0%	9.2%
2018	60,530	86.3%	-5.7%	1.1%	9.6%
2019	65,798	83.3%	-6.4%	0.7%	9.2%

Source: Form 5500 health plan filings.
Match rates based on all Form 5500 health plan filings.
Participant increases based on the matched sample only.

Financial Information from IRS Form 990 and Bloomberg

Several of our research questions seek to understand the relationship between a plan sponsor's financial health and the plan's funding mechanism. To address these questions, we matched Form 5500 health plan filings with two sources of financial information: Form 990 and Bloomberg corporate financial data. We obtained plan sponsors' not-for-profit status from the Form 990 and some of their financial information from Bloomberg. This section describes our approach and the number of Form 5500 filers for which we achieved a statistical year 2019 match with Form 990 or Bloomberg records.

Not-for-Profit Status from Form 990

We determined whether health plan sponsors are for-profit or not-for-profit by matching Form 5500 filings to Form 990 filings. Not-for-profit plan sponsors are identified by the existence of a Form 990 filing from the plan sponsor. Unless exempt from filing, tax-exempt organizations file a Form 990 annually with the IRS. The IRS makes select fields of Form 990 filings, including Employer Identification Numbers (EINs) and the organizations' names, publicly available on its website. If the corporate sponsor listed on a Form 5500 health plan filing was matched to a Form 990 filing, and the entity that filed a Form 990 was not itself a benefit plan, we identify the plan sponsor as a not-for-profit organization; otherwise, it is considered for-profit.[8]

[8] Some welfare plans of for-profit corporations were themselves not-for-profit entities. For example, the Form 5500 plan sponsor could be listed as XYZ

The match is carried out by EIN and organization name. To reduce mismatches due to name spelling variations, we normalized names and removed plan labels prior to matching.[9] Of the 56,348 large plans in 2019, 9,321 (16.5%) had sponsors that filed a Form 990 and were thus classified as not-for-profit. They covered 12.9 million participants, or 16.4% of the total participant count of large plans under study. Of the 9,450 small plans, 727 (7.7%) were identified as not-for profit. They covered approximately 26,000 participants, or 16.4% of the total participant count of small plans.

Financial Metrics from Bloomberg

Corporate financial information comes from Bloomberg, a provider of financial and other data for companies in the United States and elsewhere. Bloomberg culls Form 10-K filings and other sources to collect data on companies with public financial statements, which generally include companies with publicly traded stock or bonds.[10] Our extract from its database contains information on the 2019 financial performance for about 7,600 companies with public financial information that are based in the United States or listed on a US stock exchange.

We extracted the following fields that capture company size and financial health.

- Market capitalization: Total value of outstanding common stock as of the end of the year;
- Revenue: Total revenue net of sales returns and allowances during the year;
- Profit: Amount of profit the company made after paying all of its expenses during the year;
- Cash and cash equivalents: Amount of cash in vaults, deposits in banks, and short-term investments with maturities under 90 days as of the end of the year;
- Total debt: Short-term borrowings, long-term debt, and long-term capital leases as of the end of the year;

Corporation Employee Benefits Plan, a not-for-profit entity that filed a Form 990. In such cases, we ignored the Form 990 entry for XYZ Corporation Employee Benefits Plan and looked for XYZ Corporation among Form 990 filings to determine its for-profit status. To this end, we excluded Form 990 filings by Voluntary Employees' Beneficiary Associations (VEBAs), Teachers Retirement Fund Associations, Supplemental Unemployment Compensation Trusts or Plans, Employee-Funded Pension Trusts, Multiemployer Pension Plans, and any filer with names that include such labels as *HEALTH PLAN* or *WELFARE PLAN*. For-profit status thus refers to the plan sponsor, not to the plan itself.

[9] The algorithm removes punctuation, streamlines abbreviations, and removes strings that denote health plans. For example, "ABC Incorporated Employee Benefit Trust" and "ABC Inc." both normalize to "ABCINC".

[10] A Form 10-K is an annual financial report filed with the U.S. Securities and Exchange Commission.

- Altman Z-Score: An index commonly used for predicting the probability that a firm will go into bankruptcy within two years.[11] The lower the score, the greater the probability of insolvency; and
- Number of employees.

Matching Form 5500 Filings and Bloomberg Records

Form 5500 health plan filings and Bloomberg data both contain the names of sponsors/companies. However, in part because of spelling variations, the match rate on name alone is low. Both data sources also contain EINs, but that field is available for only 5% of Bloomberg records.

Bloomberg records may further identify companies through their Central Index Key (CIK), a number used by the U.S. Securities and Exchange Commission (SEC) to identify corporations and individuals who have filed a disclosure with the SEC. CIKs were available for 84% of Bloomberg records. SEC filings, electronically available from the SEC's Electronic Data Gathering, Analysis, and Retrieval (EDGAR) system, often include both a company's CIK and its EIN. Using an automated algorithm that extracts CIK-EIN combinations from SEC filings, we located EINs for 82% of Bloomberg records with non-missing CIKs.

Next, we defined clusters of EINs, CIKs, and company names that appeared to relate to the same company. For example, a company may have used two EINs, or an EIN may have been associated with multiple (similar) names. To improve the clustering, we normalized the company names and removed plan labels.

All related EINs, CIKs, and company names were mapped into a unique cluster. Finally, we matched Bloomberg records and Form 5500 health plan filings by cluster.

Corporate fiscal years do not need to correspond to health plan reporting periods. In an effort to accurately match a 2019 Form 5500 health plan filing with its sponsor's 2019 financial information, we required that the end date of the fiscal year captured in Bloomberg and the end date of the Form 5500 plan year differed by no more than 183 days. Only if the closest fiscal and plan years differed by no more than 183 days did we consider this a match. For example, a health plan sponsor could have a plan year from January 1 to December 31, but a fiscal year that ran from April 1 to March 31 of the next year. Under these circumstances, we would match the Form 5500 health plan filing ending December 31, 2019 with the Bloomberg financial information for fiscal year ending March 31, 2020.

The analysis of corporate financial health relates to large plans only.[12] Table 4 shows that we matched 961 plans with 5,000 or more participants (43.2%) and 3,852 plans

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[11] The Altman Z-Score in the Bloomberg data is calculated as 1.2 times the ratio of working capital to tangible assets, plus 1.4 times the ratio of retained earnings to tangible assets, plus 3.3 times the ratio of earnings before interest and taxes to tangible assets, plus 0.6 times the ratio of the market value of equity to total liabilities, plus 1.0 times the ratio of sales to tangible assets (source: Bloomberg).
[12] Insofar small plans are sponsored by small companies, corporate financial information is rarely available. That said, 41 sponsors of small plans were matched to Bloomberg data. Almost all appeared to be large companies.

(6.8%) overall.[13] This is the set of companies that appear in our matched analyses below. The 3,852 matched plans covered 30.2 million participants, or 38.4% of all participants in the Form 5500 large health plan data.

Table 4. Form 5500 Large Health Plan Filings Matched with Financial Information, by Plan Size (2019)

Number of participants	Large Plans			Participants		
	Number	Percent	Match rate	Number (millions)	Percent	Match rate
0–99*	122	3.2%	4.6%	0.0	0.0%	3.1%
100–199	374	9.7%	1.9%	0.1	0.2%	2.0%
200–499	675	17.5%	3.7%	0.2	0.7%	3.9%
500–999	545	14.1%	7.9%	0.4	1.3%	8.1%
1,000–1,999	544	14.1%	13.5%	0.8	2.6%	14.0%
2,000–4,999	631	16.4%	21.8%	2.1	6.8%	22.8%
5,000+	961	24.9%	43.2%	26.7	88.4%	52.6%
Total	3,852	100.0%	6.8%	30.2	100.0%	38.4%

Source: Form 5500 large health plan filings and Bloomberg data.
* The definition of a large plan is based on number of participants at the beginning of the reporting period; some large plans have fewer than 100 participants at the end of the period.
Numbers or percentages may not sum to total due to rounding.

The match rate increases with plan size, presumably because larger plans are sponsored by larger companies and larger companies are more likely to disclose financial information than smaller companies. However, even very large plans did not match universally. Plans that were not matched include those of hospitals and universities without public financials, but also of U.S. operations of large international firms with public financials. We restricted Bloomberg records to companies that were based in the United States or listed on a US stock exchange. Mismatches could arise from differences between corporate names in Bloomberg (e.g., XYZ Holdings Inc) and sponsor names on Form 5500 filings (e.g., XYZ Inc). A more inclusive name matching algorithm could boost the matching rate, but it also increases the risk of false matches which in turn could dilute any analysis results based on the matched subset of plans. Instead, we opted for a more conservative approach, with a smaller subset of matched plans but more reliable matches.

[13] While the overall match rate of 6.8% is a relatively small number, many companies that filed a Form 5500 are not represented in Bloomberg data because they have no requirement to issue publicly available financial statements. The sponsor may be privately held and without publicly issued bonds, the sponsor may be based overseas, or the plan may be a multiemployer or multiple-employer plan.

3. THE DEFINITION OF SELF-INSURANCE

The Form 5500 does not require plan sponsors to report the funding mechanism of health benefits with sufficient specificity for us to determine definitively whether plans that report using both a trust and insurance should be classified as self-insured, fully insured, or mixed-funded. This section describes how we classify individual plans by funding mechanism for the purposes of this report.

The Definition of Funding Mechanism Is Driven by Certain Available Data

For the purpose of the analysis in this report, funding mechanism is assigned based on information in Form 5500 health plan filings. Plans are categorized as self-insured, fully insured, or mixed-funded. A mixed-funded plan contains both self-insured and fully insured components. For example, an employer may offer its employees a choice between a fully insured HMO option and a self-insured PPO option. If both plan components were reported on a single Form 5500 filing, the plan would be mixed-funded. In some cases, the data are incomplete or internally inconsistent. For example, while Schedules A are intended to report on insurance contracts, some plans attached a Schedule A for a contract that appears to be for administrative services only (ASO) rather than for insurance. Given these limitations, the classification in this report should not be interpreted as an official or legal definition.

The classification of funding mechanism is based on data from the main Form 5500, Form 5500-SF, Schedule A, and Schedule H/I, when available. As depicted in Figure 4 below, there are multiple ways in which a plan may be classified as self-insured, mixed-funded, or fully insured. Two important issues are evidence of an external health insurance contract (on a Schedule A) and of a plan trust (on a Schedule H or I).

> *Evidence of Health Insurance*. Information on insurance contracts needs to be reported on a Schedule A. Many Schedules A relate to dental, vision, disability, or other non-health benefits. Only Schedules A that specify "Health (other than dental or vision)" benefits or reflect an "HMO contract," "PPO contract," or "Indemnity contract" are considered evidence of health insurance. However, some Schedules A may have been filed in error and some health benefits—such as business travel insurance with limited emergency medical care benefits—may be outside the focus of the ACA. The algorithm rejects as evidence of health insurance any Schedule A with per capita annualized premiums that were less than 30% of the average cost of single health coverage in the United States, as documented by the Kaiser Family Foundation's *Employer Health Benefits Annual Survey* ("KFF Survey").[14] In 2019, the average cost for single coverage was $7,188, so the algorithm requires annualized premiums to be at least 30% × $7,188 = $2,156 per covered person.[15]

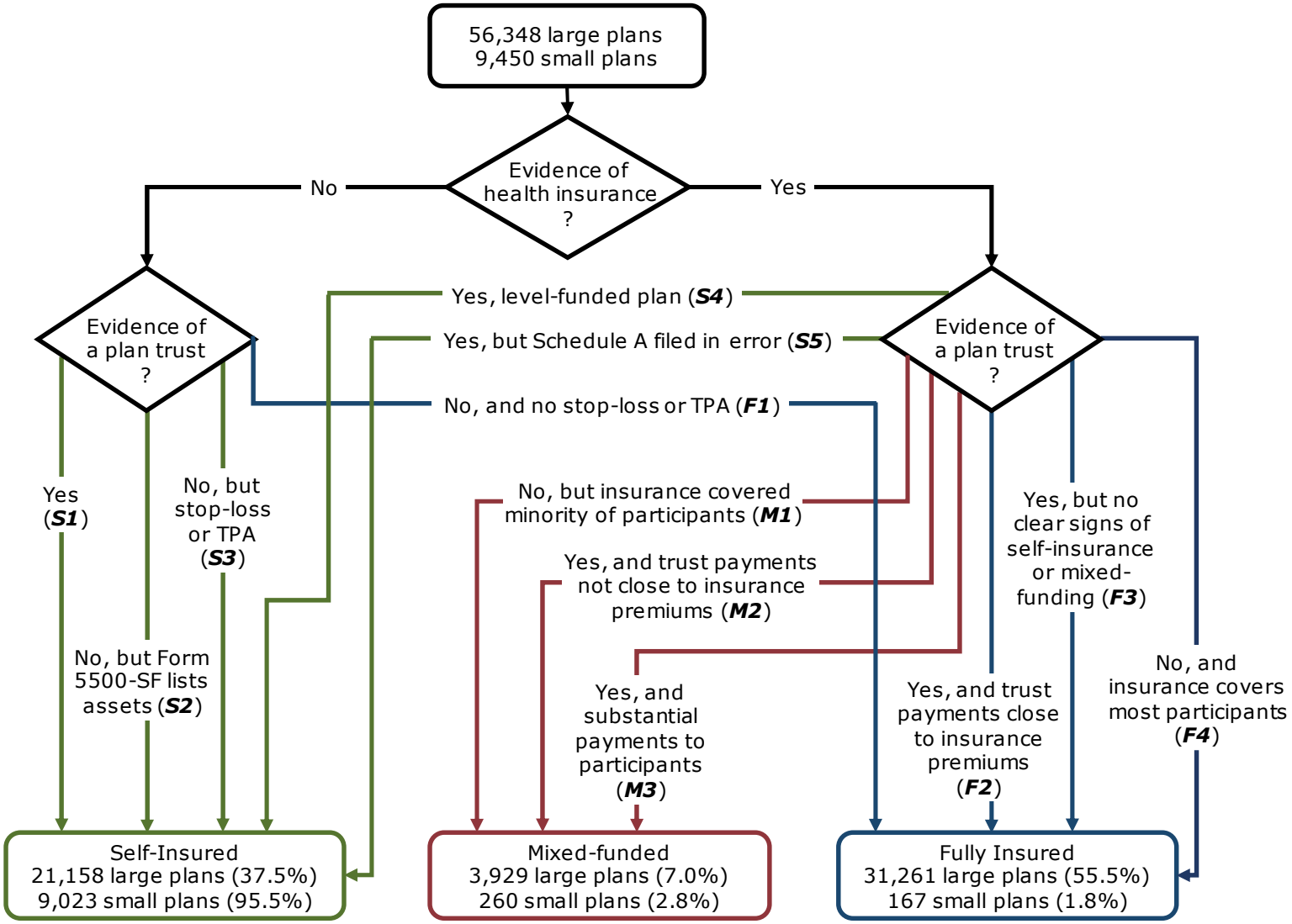
[14] *Employer Health Benefits, 2019 Annual Survey.* Kaiser Family Foundation. Available at https://kff.org/health-costs/report/2019-employer-health-benefits-survey.

[15] The average cost of single coverage rose from $5,049 in 2010 to $7,188 in 2019.

Evidence of a Trust. Information on a plan's trust, if any, needs to be reported on a Schedule H or I. In addition to assets and liabilities, the Schedules H and I list contributions and expenses (such as benefit payments directly to participants and payments to insurance carriers). Some plans attached a Schedule H or I that was blank (not common since the introduction of electronic filing) or reported on compliance issues only. The algorithm accepts as evidence of a trust only Schedules H/I with at least some information on assets, liabilities, income, or expenses.

Figure 4 illustrates the algorithm that classifies plans by funding mechanism based on detailed information on the main Form 5500, Schedules A, and Schedule H/I, where available. The main issues are whether plans provided evidence of a health insurance contract or a plan trust. Of 56,348 large plans in the 2019 analysis file, 21,158 (37.5%) are classified as self-insured, 3,929 (7.0%) as mixed-funded, and 31,261 (55.5%) as fully insured. Of the 9,450 small plans, 9,023 (95.5%) are classified as self-insured, 260 (2.8%) as mixed-funded, and 167 (1.8%) as fully insured.

Figure 4. Classification of Plans by Funding Mechanism



The branches in Figure 4 are labeled and described in detail in the sections below. The Technical Appendix lists the data fields that the algorithm uses.

Self-Insured Plans

S1: No Evidence of Health Insurance; Evidence of a Plan Trust

All plans in the analysis reported sponsoring health benefits. If there is no evidence of health insurance, and financial information for a plan trust is provided, then the plan is classified as self-insured.

S2: Short Form Filers with Fewer Than 100 Participants or with Assets

Some plans with fewer than approximately 100 participants at the beginning of the year may file a Form 5500-SF. Such filings are not required to attach any schedules, and any financial information would be entered on the Form 5500-SF itself.[16] Plans that filed a Form 5500-SF and reported fewer than 100 participants at the beginning of the year are presumed to be self-insured. Further, if they reported between 100 and 120 participants at the beginning of the year and listed plan assets, they too are classified as self-insured.

S3: No Evidence of Health Insurance or of a Plan Trust; Indicators of Self-Insurance

Consider plans that provided evidence of neither health insurance nor a plan trust. If the funding or benefit arrangement was through a trust or from general assets, then the plan is classified as self-insured. Also, if the only Schedules A attached to the filing were for stop-loss coverage or non-health benefits, or a Schedule A indicated third party administrator services rather than insurance,[17] then the plan is classified as self-insured.

S4: Evidence of Health Insurance and of a Plan Trust; Financial Information Indicates Self-Insurance

Consider plans that provided evidence of health insurance and of a plan trust that listed payments both directly to participants and to insurance carriers. Depending on the magnitude of certain trust payments and insurance premiums, such plans may be self-insured, mixed-funded, or fully insured. The algorithm sequentially checks for various scenarios, including the possibility that the Schedule A reflects a level-funded plan contract.[18] In such cases, the plans are classified as self-insured.

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[16] Small plans that filed a Form 5500-SF without financial information are presumed to be exempt from filing and excluded from the analysis.
[17] Some plans attached a Schedule A for administrative services only despite directives to the contrary (2019 Instructions for Form 5500).
[18] A level-funded plan is a self-insured plan that is bundled with stop-loss coverage with a relatively low attachment point. Often, the insurer calculates an expected monthly expense for the employer, which includes a share of the estimated annual cost for benefits, premium for the stop-loss protection, and an administrative fee. The employer pays this "level premium" amount, with the potential for some reconciliation between the employer and the insurer at the end of the year, if claims differ significantly from the estimated amount. Some plans may confuse their contract with the insurer for an insurance policy (2019 KFF Survey; see page 18).

S5: Evidence of Health Insurance, but Schedule A May Have Been Filed in Error

Consider again plans that provided evidence of health insurance and of a plan trust that listed payments both directly to participants and to insurance carriers. In addition to the possibility discussed under branch *S4*, the Schedule A may have been filed in error. Having excluded certain other scenarios, if Schedule A reported experience-rated charges but no corresponding premiums, it presumably did not reflect an insurance contract. The Schedule A is then assumed to have been filed in error and the plan is classified as self-insured.

Mixed-funded Plans

M1: Evidence of Health Insurance; No Evidence of a Plan Trust; Funding through Trust or General Assets and Insurance Covered a Minority of Participants

In principle, when a plan provided evidence of health insurance and not of a plan trust, it is classified as fully insured. However, it may additionally cover some participants in a self-insured plan component, namely from general assets or through a trust (for which no information is provided). The algorithm first considers funding and benefit arrangements. If both arrangements involve insurance only, the plan is classified as fully insured (discussed below under branch *F4*). However, if the funding or benefit arrangements mention a trust or general assets, and fewer than one-half of plan participants (indicated on the main Form 5500) are covered by health insurance (indicated on Schedule A), the plan is classified as mixed-funded.

M2: Evidence of Health Insurance and of a Plan Trust; Trust Payments not Close to Insurance Premiums

Consider plans that provided evidence of both health insurance and of a plan trust. The trust may serve to funnel insurance premiums to insurance carriers, in which case it is generally classified as fully insured (discussed below under branch *F3*). However, if trust payments to insurance carriers differ by more than 20% from insurance premiums, the trust presumably funds self-insured benefits, and the plan is classified as mixed-funded.

M3: Evidence of Health Insurance and of a Plan Trust; Substantial Payments Directly to Participants

Consider again plans that provided evidence of health insurance and of a plan trust that listed payments both directly to participants and to insurance carriers. These plans may be classified as mixed-funded if payments directly to participants were substantial enough to plausibly reflect health benefit payments. The monetary criterion is the same as for determining whether a

Schedule A plausibly reflects health insurance (above $2,069 per participant per year in 2019; see above).[19]

Fully Insured Plans

F1: No Evidence of Health Insurance or of a Plan Trust; No Indicators of Self-Insurance

Some plans provided evidence of neither health insurance nor a plan trust. If such plans meet the criteria discussed above under branch *S3*, they are classified as self-insured. Otherwise, they are classified as fully insured.

F2: Evidence of Health Insurance and of a Plan Trust; Trust Payments Close to Insurance Premiums

Some fully insured plans use a trust to funnel premiums to insurance carriers. Oftentimes, this applies to plans with multiple contributing parties, such as multiple-employer and multiemployer plans. If a plan provided evidence of both health insurance and a plan trust, and trust payments to insurance carriers were within 20% of insurance premiums, the plan is classified as fully insured.[20] An exception exists in the case of substantial trust payments directly to participants; see branch *M3*.

F3: Evidence of Health Insurance and of a Plan Trust; No Clear Indicators of Self-Insurance or Mixed-Funding

Consider again plans that provided evidence of health insurance and of a plan trust that listed payments both directly to participants and to insurance carriers. Trust payments and insurance premiums may point to self-insurance (discussed above under branches *S4* and *S5*) or to mixed-funding (discussed above under branch *M3*). In the absence of clear indicators of self-insurance or mixed-funding, such plans are classified as fully insured.

F4: Evidence of Health Insurance; No Evidence of a Plan Trust; Funding through Insurance Only or Insurance Covered Most Participants

In principle, when a plan provided evidence of health insurance but not of a trust, it is classified as fully insured. Branch *M1* allows for the possibility that the plan additionally covers some participants in a self-insured plan component. If the plan does not meet the criteria specified under branch *M1*, it is classified as fully insured.

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[19] The per-participant payment calculation may understate the actual average payment to participants in the self-insured component of the plan because it is based on the number of participants as reported on the main Form 5500, which likely overstates the number of participants in the self-insured component of the plan.

[20] To accommodate scenarios in which non-health insurance premiums are paid outside of the trust, the algorithm checks all insurance premiums separately from all health insurance premiums. If trust payments are within 20% of either amount, branch *F3* applies.

While this approach is subject to some data quality issues (further discussed below), we believe it results in a meaningful characterization of health plans' funding mechanism.

Issues in Defining Funding Mechanism

The information on Form 5500 may be incomplete, ambiguous, or inconsistent for some plans with respect to the funding mechanism. Some of the issues affecting the funding mechanism definition are as follows:

- An employer may set up a subsidiary that acts as an in-house or "captive" insurance company or rent an outside "captive" to offer health insurance. These "captive" insurance companies are subject to state regulations regarding insurance companies. Plans purchasing insurance from a captive insurance company would file a Schedule A, which does not require disclosing that the insurance company is captive. In the classification, such plans would thus be considered fully insured, even though the employer group to which they belong may incur a risk substantially similar to that of a self-insured plan. Since nothing on the Form 5500 permits the identification of captive insurance companies, we were not able to quantify how frequently this issue arises.
- As explained above, 7.0% of large health plans contained both externally insured and self-insured health components in 2019. While the distinction may be clear conceptually, Form 5500 data limitations imply that the health plan as a whole must be categorized as mixed-funded. The issue arises in part because Forms 5500 are required for each plan, not for each type of benefit offered under a plan. Where a plan provides multiple types of welfare benefits or multiple types of health benefit options, it is not always possible to attribute responses to the health benefit component(s) of the filer's welfare plan. Also, a plan may indicate funding benefits through insurance contracts and from general assets without specifying which plan components are funded in either way. Separately, Form 5500 data limitations arise from the fact that the Form 5500 does not ask details about self-insured plan components. At the participant/policy level, however, a benefit is either self-insured or fully insured.
- As noted above, plans may offer self-insured health benefits to some participants and fully insured benefits to others, but the Form 5500 provides little insight about the number of participants in the self-insured component. Reflecting such scenarios, plans may also be classified as mixed-funded if fewer than one-half of plan participants are covered by health insurance contracts. The comparison is less than perfect. First, the number of "persons covered" by insurance contracts, as reported on Schedule A, is inclusive of dependents,[21] whereas the definition of "participant" for Form 5500 explicitly excludes dependents (see 2019 Instructions for Form 5500). Second, because the total number of persons whose benefits are provided through the

[21] Although the Schedule A specifically calls for filers to enter the approximate number of persons covered, it is our understanding that there may be some filers who enter only the number of participants, even if there are more covered persons, such as due to family coverage.

insurance policy or contract listed on the Schedule A is reported, where plans that provide multiple types of benefits and participants select some, but not all of the insured benefits offered, not all reported participants may in fact be participants in the health benefits component of the plan.

- The classification may not recognize mixed-funding where only "carve-out services" are covered by insurance. For example, a plan may purchase insurance coverage for mental health benefits and self-insure other health benefits. Its Form 5500 filing would include a Schedule A with details of the mental health carve-out but might list the benefits provided under the contract as "Health (other than dental or vision)" because there is no separate category for "mental health" benefits on Schedule A, as there is for "Dental," "Vision," and "Prescription drugs."
- Among large plans that reported a funding or benefit arrangement through insurance, 0.2% did not file a Schedule A with insurance contract details. Another 0.7% filed no Schedule A for health benefits but one or more Schedules A without listing the type of benefit that the insurance contract covered. In such cases, it was assumed that the insurance contract provided health benefits.

For more details on data anomalies that stood in the way of unambiguous funding mechanism classifications, see the report on *Strengths and Limitations of Form 5500 Filings for Determining the Funding Mechanism of Employer-Provided Group Health Plans.*[22]

Stop-Loss Insurance

While sponsors of self-insured plans generally bear the financial risks of health benefits and claims, some self-insured plans purchase insurance against particularly large losses (catastrophic or "stop-loss" insurance). Stop-loss coverage mitigates financial risks, but a plan that has no insurance for health benefits other than stop loss insurance is still considered self-insured.

[22] Available at https://www.dol.gov/sites/default/files/ebsa/researchers/analysis/health-and-welfare/strengths-and-limitations-of-form-5500-filings-for-determining-the-funding-mechanism-of-employer-provided-group-health-plans.pdf.

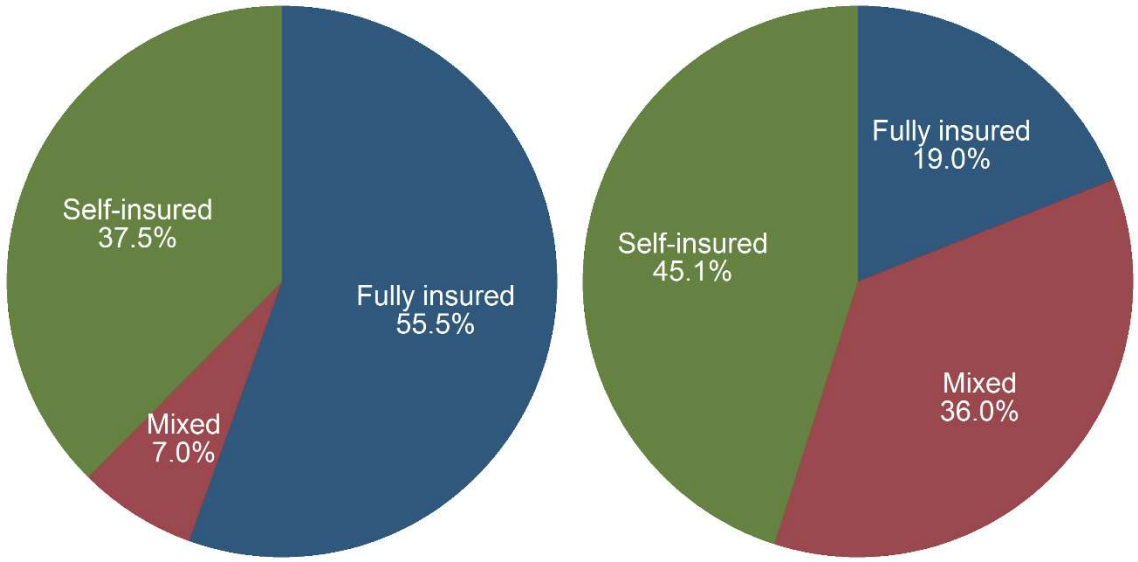
4. LARGE PLAN ANALYSIS

This section documents the findings of our analyses of large group health plans. (See Section 0 for small plans and Section 6 for GIAs.) We first present the Form 5500 distribution of funding mechanism by plan and plan sponsor characteristics. Next, we follow plan filings over time and document the rates at which plans have switched funding mechanisms. Next, we discuss stop-loss coverage of self-insured and mixed-funded plans. Finally, we turn to health plan sponsors for which external financial information was available and present summary statistics for these sponsors by plan funding mechanism.

Funding Mechanisms for Large Plans and Their Participants

For statistical year 2019, Figure 5 shows the overall distribution of funding mechanisms among the 56,348 large health plans: 55.5% of plans were fully insured, 37.5% were self-insured, and 7.0% were mixed-funded. As shown further below, funding varies by plan size, so the funding distribution across participants is quite different than it is across plans: 19.0% of the 78.8 million participants were in fully insured plans, 45.1% were in self-insured plans, and 36.0% were in mixed-funded plans.

Figure 5. Distribution of Funding Mechanism (2019)



Percentages may not sum to 100% due to rounding.

To put our analysis in context, consider recent findings on self-insurance according to an external source: the Insurance Component of the Medical Expenditure Panel Survey (MEPS-IC), an annual survey of employers about their health benefit plans.[23]

[23] *Medical Expenditure Panel Survey Insurance Component Chartbook 2019*. Rockville, MD: Agency for Healthcare Research and Quality, October 2020. AHRQ Publication No. 20(21)-0052. Available at https://meps.ahrq.gov/data_files/publications/cb24/cb24.pdf.

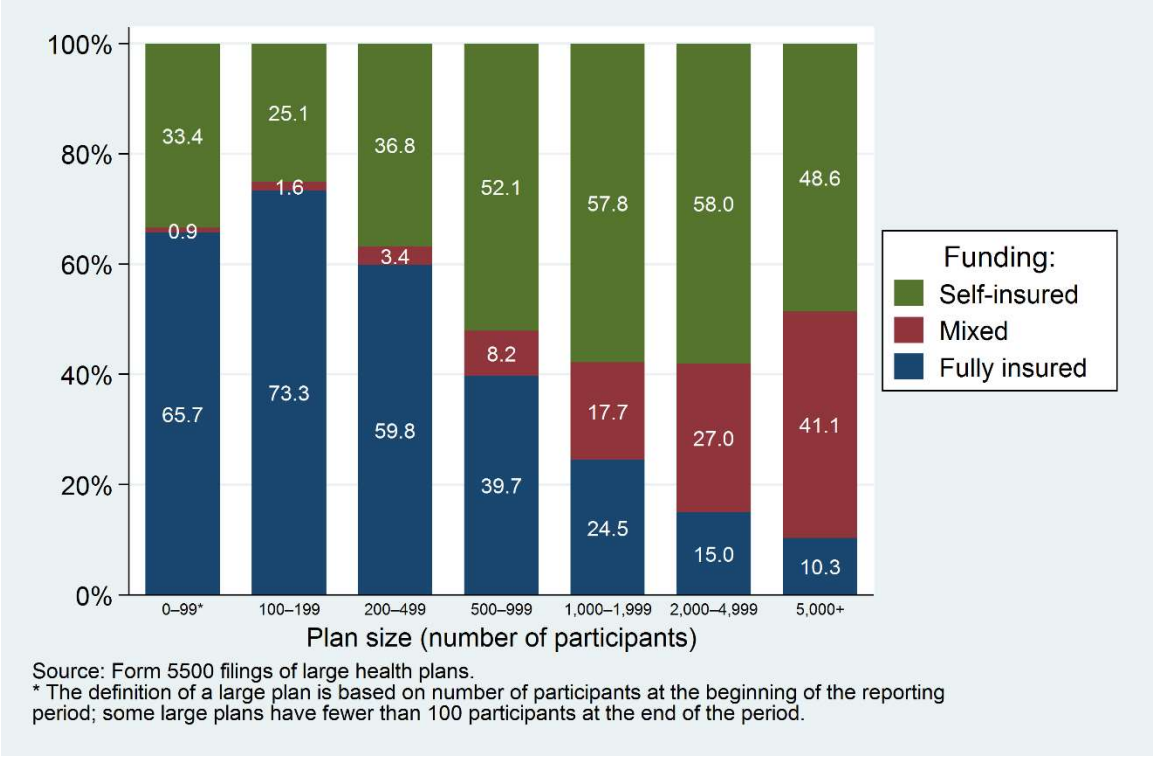
The findings are not strictly comparable, in part because the unit of observation is an establishment in the MEPS-IC and a plan in the Form 5500 data and in part because size is measured in covered employees in the MEPS-IC and plan participants in the Form 5500. That said, the results are similar. According to the MEPS-IC, 33.9% of establishments with 100–999 employees self-insured at least one plan in 2019, whereas we found that 37.4% of plans with 100–999 participants were self-insured or mixed-funded (calculated from the numbers underlying Table 5 below). Weighted by employees (MEPS-IC) or participants (Form 5500), the shares are 37.8% and 45.8%, respectively. For larger establishments (or plans) with 1,000 or more employees (or participants), 83.1% self-insured at least one plan, according to the MEPS-IC, while 82.0% were self-insured or mixed-funded according to Form 5500 filings. Weighted by employees (MEPS-IC) or participants (Form 5500), the shares are 84.1% and 88.3%, respectively.

Funding Mechanisms by Plan Size

Figure 6 shows the distribution of funding mechanism by plan size for large health plans in 2019. The likelihood that a plan is self-insured generally increases with plan size.[24] The pattern is particularly pronounced for mixed-funded plans, presumably because larger plans may offer multiple plan options, some of which are fully insured and some of which are self-insured. The share of plans with 5,000 or more participants that are self-insured or mixed-funded is 89.7%, compared with 26.7% among plans with 100–199 participants.

[24] Large plans with 0–99 participants do not fit this pattern. By definition, these plans had 100 or more participants at the beginning of the reporting period (BOY), but fewer than 100 by the end of the plan year. The category thus reflects a mix of other BOY plan-size categories and their funding mechanisms.

Figure 6. Distribution of Funding Mechanism for Large Plans, by Plan Size (2019)



Source: Form 5500 filings of large health plans.
* The definition of a large plan is based on number of participants at the beginning of the reporting period; some large plans have fewer than 100 participants at the end of the period.

Table 5 shows the numbers underlying Figure 6. It also shows the participant-weighted distribution of funding mechanism by plan size, which is similar to the plan-weighted distribution.

Table 5. Distribution of Funding Mechanism for Large Plans, by Plan Size (2019)

Participants	Large Plans			Participants		
in plan	Fully insured	Mixed	Self-insured	Fully insured	Mixed	Self-insured
0–99*	65.7%	0.9%	33.4%	73.1%	1.4%	25.5%
100–199	73.3%	1.6%	25.1%	73.0%	1.6%	25.4%
200–499	59.8%	3.4%	36.8%	58.1%	3.7%	38.2%
500–999	39.7%	8.2%	52.1%	38.6%	8.6%	52.8%
1,000–1,999	24.5%	17.7%	57.8%	24.1%	18.3%	57.6%
2,000–4,999	15.0%	27.0%	58.0%	14.5%	28.0%	57.5%
5,000+	10.3%	41.1%	48.6%	9.9%	47.5%	42.6%
All	55.5%	7.0%	37.5%	19.0%	36.0%	45.1%

Source: Form 5500 large health plan filings.
* The definition of a large plan is based on number of participants at the beginning of the reporting period; some large plans have fewer than 100 participants at the end of the period.
Percentages may not sum to 100% due to rounding.

The finding that larger plans are more likely to adopt mixed-funding or self-insurance is consistent with the 2019 KFF Survey. That study found that 17% of covered

workers at firms with 3–199 employees were covered by self-insured plans in 2019, compared with 86% of covered workers at firms with 5,000 or more employees.

Funding Mechanisms by Year

Figure 7 shows the funding mechanism distribution for large health plans by statistical year for 2010–2019; see Table 6 and Table 7 for the underlying percentages, plan counts, and participant counts. The percentage of large plans that were self-insured or mixed-funded (i.e., plans with a self-insured component) generally increased slowly from 42.6% in 2010 to 44.5% in 2019. Between 2018 and 2019, the fraction of large plans with a self-insured component did not change.

The share of participants in large health plans that self-insured or were mixed-funded increased from 79.4% in 2010 to 81.1% in 2016 and remained approximately flat thereafter to 81.0% in 2019. In comparison, the KFF Survey documented a similar increase toward self-insurance from 2010 to 2013 and, apart from a one-year deviation in 2015, an approximately flat share thereafter. Thus, the overall trend toward self-insurance among participants—which began well before 2010—appears to have flattened out, based on findings from both this study and the KFF study.

Figure 7. Distribution of Funding Mechanism for Large Plans, by Statistical Year

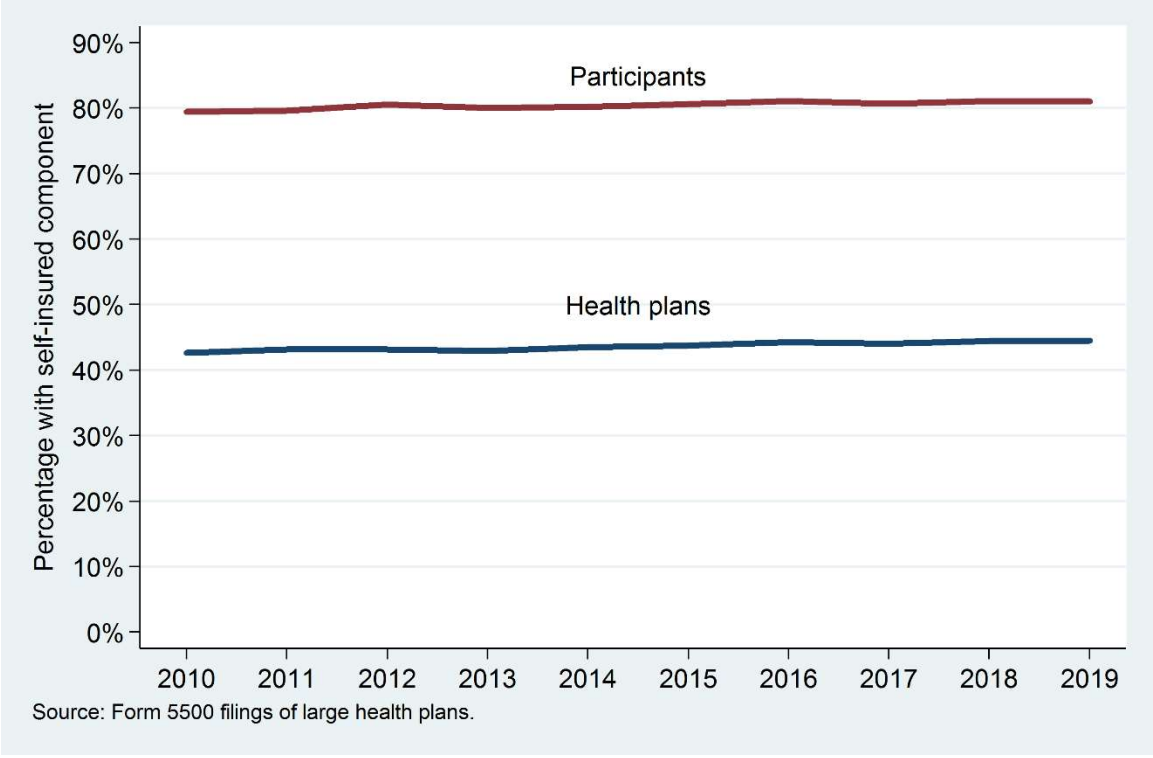


Table 6. Distribution of Funding Mechanism for Large Plans, by Statistical Year

Statistical	Plans			Participants		
year	Fully insured	Mixed	Self-insured	Fully insured	Mixed	Self-insured
2010	57.4%	6.9%	35.7%	20.6%	35.4%	44.0%
2011	56.8%	7.0%	36.2%	20.4%	34.6%	45.0%
2012	56.8%	6.9%	36.3%	19.5%	34.9%	45.7%
2013	57.1%	7.0%	35.9%	20.0%	35.2%	44.8%
2014	56.5%	6.8%	36.7%	19.8%	33.6%	46.5%
2015	56.2%	6.7%	37.1%	19.4%	33.9%	46.7%
2016	55.7%	6.8%	37.5%	18.9%	34.9%	46.2%
2017	55.9%	6.7%	37.4%	19.4%	35.0%	45.6%
2018	55.5%	7.0%	37.5%	18.9%	35.9%	45.2%
2019	55.5%	7.0%	37.5%	19.0%	36.0%	45.1%

Source: Form 5500 large health plan filings.
Percentages may not sum to 100% due to rounding.

Table 7. Number of Large Plans and Their Participants, by Funding Mechanism and Statistical Year

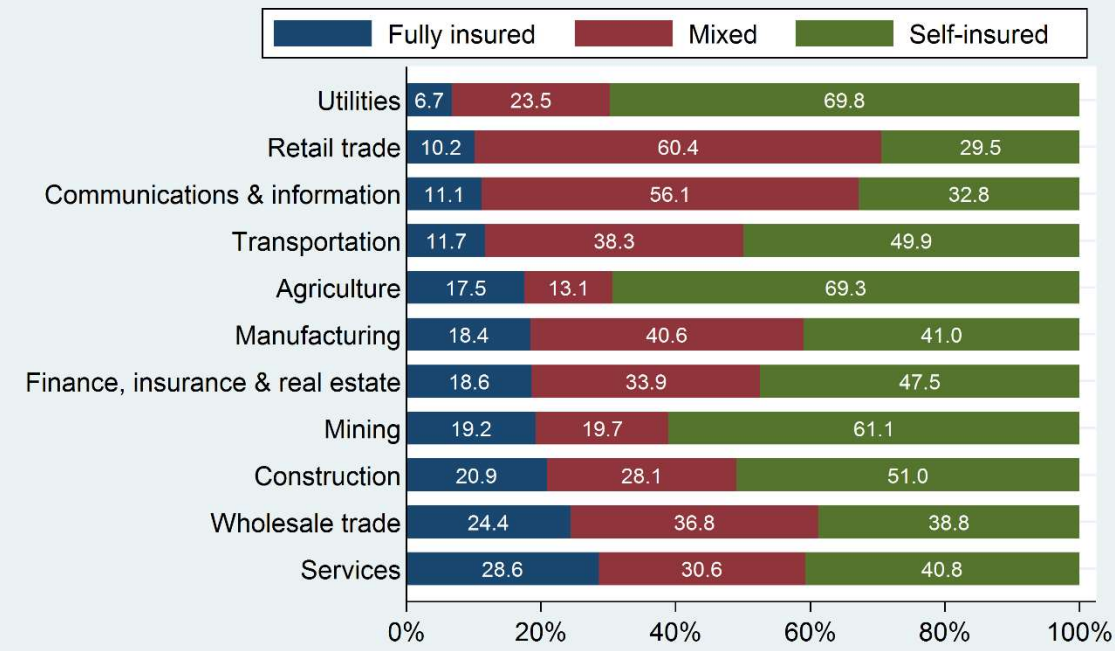
Statistical	Plans			Participants (millions)		
year	Fully insured	Mixed	Self-insured	Fully insured	Mixed	Self-insured
2010	26,136	3,136	16,265	13.9	23.9	29.7
2011	26,007	3,195	16,549	13.8	23.4	30.4
2012	26,406	3,207	16,840	13.4	23.9	31.3
2013	27,042	3,311	17,034	13.8	24.3	31.0
2014	27,549	3,330	17,880	13.9	23.6	32.7
2015	28,706	3,423	18,928	14.0	24.4	33.7
2016	29,409	3,597	19,763	14.0	25.8	34.2
2017	30,246	3,601	20,224	14.6	26.3	34.3
2018	30,740	3,877	20,744	14.6	27.8	35.0
2019	31,261	3,929	21,158	15.0	28.4	35.5

Source: Form 5500 health plan filings.

Funding Mechanisms by Industry

Figure 8 shows the participant-weighted distribution of funding mechanism by industry for large plans, as identified by the business code provided on Form 5500 filings. Participants in the utilities, retail trade, and communications & information sectors are the most likely to be in a mixed-funded or self-insured large plan, whereas those in the services and wholesale trade industries are the most likely to be in a fully insured large plan. Some of the relationship between funding mechanism and industry may be due to variation across industries in health plan sizes, but differences across sectors remain after controlling for plan size. For example, among 11 industries, the utilities sector ranks first in self-insurance and eighth in plan size (measured by the average number of plan participants), whereas the services sector ranks last in self-insurance and seventh in plan size.

Figure 8. Participant-Weighted Distribution of Funding Mechanism, by Industry for Large Plans (2019)



Source: Form 5500 filings.
Percentages may not sum to 100% due to rounding.

Funding Mechanisms over the Life Cycle of Plans

Figure 7 above shows the aggregate trends in self-funding for large plans at the plan and participant levels over time. It does not show how often plans switch into or out of self-funding. To gain a fuller understanding of such movements, we now turn to funding mechanisms over the life cycle of large plans.[25]

We distinguish between plans at the beginning of their life, at the end of their life, and during the years in between. For example, it is unclear whether the observed trends in self-funding were due to the funding mix of new plans, the funding mix of terminating plans, net switches among established plans, or a combination of factors. The analysis is somewhat hampered by the fact that some Form 5500 filings contain incomplete information about the beginning and end of plans' lives. Plans are categorized as follows:

- *New*—We identify the beginning of a plan's life cycle based on the Form 5500's "first return/report" check box and the plan's effective date. A plan is considered new if it checked the "first return/report" box and the start of the

[25] For the life cycle perspective in this section, we follow filings of individual plans over time. Plans' life cycle status is based on all filings, including voluntary filings and prior filings in the same year. A plan is uniquely identified by the EIN of its sponsor and a plan number (PN). Some EIN/PN combinations appear to have been used for more than one plan. Unlike in prior reports, the analysis excludes all filings of such EIN/PN combinations.

reporting period differed by no more than two years from the plan's effective date.[26] In 2019, 2,646 large plans were new.

- *Cease filing*—We attempt to capture the end of a plan's life cycle in two ways. First, a plan may have indicated on its Form 5500 that it is terminating, namely by checking the "final return/report" box, by reporting a resolution to terminate the plan, or by documenting that all assets were transferred out of the plan.[27] Second, a plan may stop filing a Form 5500 without the required prior indication. Doing so does not necessarily imply that the plan terminated; it may be non-compliant or it may have shrunk and become exempt but incorrectly neglected to note this by writing "4R" on Line 8b of the Form 5500. To mitigate this issue, we ignore gaps in filings. Recognizing that some plans in this category have in fact not reached the end of their life cycle, we label them as plans that "ceased filing."[28] In 2019, 4,902 large plans fell into this category (including plans that last filed in 2018 without indicating that it was their final filing).
- *Established*—This category captures the middle of a plan's life cycle. Plans that were neither "new" nor "ceased filing" are labeled "established" plans. In 2019, 51,058 large plans fell into this category (including plans that first filed in 2019 but reported a plan effective date more than two years before the start of the reporting period).

Table 8 shows the funding distribution of new large plans in 2019. Of the 2,646 new plans, 74.6% were fully insured, 3.4% were mixed-funded, and 22.0% were self-insured. The new plans covered 1.25 million participants of whom 37.8% were in a fully insured plan, 19.5% in a mixed-funded plan, and 42.7% in a self-insured plan.

Table 8. Funding Distribution of New Large Plans (2019)

	Plans		Participants	
	Number	Percent	Number (millions)	Percent
Fully insured	1,974	74.6%	0.47	37.8%
Mixed	89	3.4%	0.24	19.5%
Self-insured	583	22.0%	0.53	42.7%
Total	2,646	100.0%	1.25	100.0%

Source: Form 5500 large health plan filings.

We will discuss plan-level and participant-level trends separately. Starting with plan-level developments, Figure 9 shows the mixed-funded or self-insured share of new large plans, established large plans, and large plans that ceased filing. (Since most

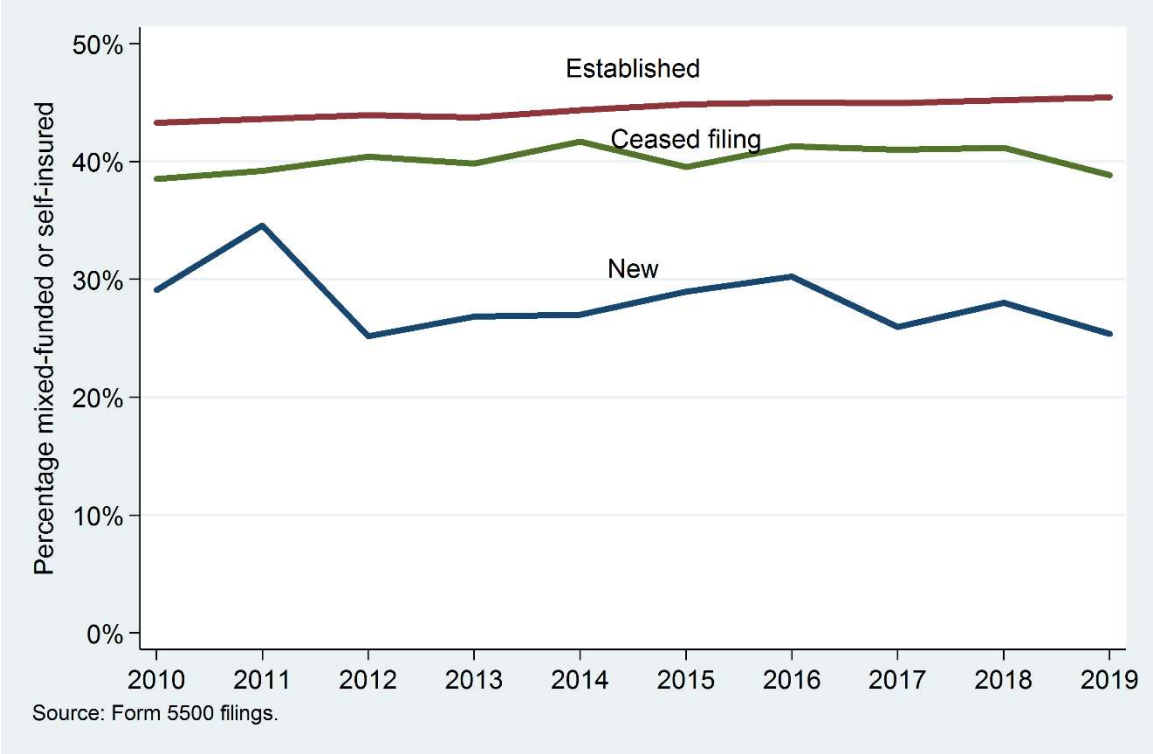
[26] Some plans never checked the "first return/report" box, or not until later in their life cycle. If the box was not checked until the, say, fourth filing, we exclude the earlier filings from the analysis. If the box was checked multiple times, we identify the plan as "new" only the first time.

[27] Some plans repeatedly indicated terminating but continued submitting filings. We ignore indications of terminating if the plan continued filing in subsequent years. Separately, plans that reported termination on their initial filing were included in both the "new" and "ceased filing" categories. (See Figure 12 below.)

[28] In terms of timing, if a plan indicated on its 2013 filing that it was terminating, we consider it as having ceased filing in 2013. If a plan submitted filings through 2013 but not in any later year, we consider it as having ceased filing in 2014.

plans are established, the overall share is very close to the share among established plans.) Both new large plans and large plans that ceased filing were less often self-insured than established large plans in 2019. New plans generally outnumber plans that ceased filing, so the net effect would be a decrease in self-insurance for large plans. However, Table 6 pointed at a gradual increase in self-insurance over time, suggesting that switching behavior played an important role.

Figure 9. Percentage Mixed-Funded or Self-Insured among New Plans, Established Plans, and Plans That Ceased Filing, by Statistical Year

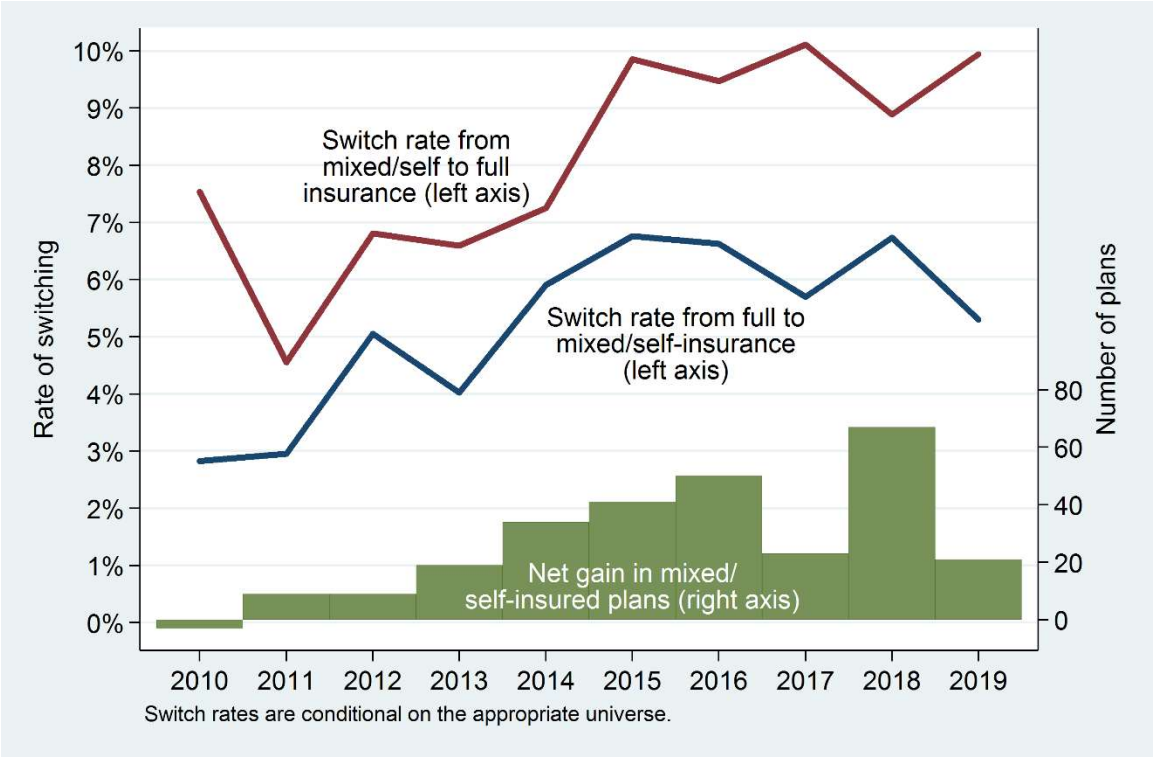


Changes in Mixed/Self-Insurance Due to Plans Switching Funding Mechanism

This section discusses funding mechanism switch rates among new and established large plans and the resulting flows of plans toward or away from self-insurance.

Figure 10 shows the historical switch rates for new large plans, i.e., funding mechanism changes between plans' first and second filings. Mixed-funded or self-insured large plans generally were more likely to switch to full insurance (red line) than fully insured large plans were to switch to a form of self-insurance (blue line). For example, 9.9% of large plans that started in 2018 as mixed-funded or self-insured had switched to full insurance by 2019, compared with 5.3% of fully insured large plans that had switched to mixed-funding or self-insurance. Figure 9 above showed that most new, large plans were fully insured in 2018, and even though they are less likely to switch funding mechanism, the number of these plans switching toward self-insurance exceeded the number moving toward full insurance. The flows were small; on net, generally only a few dozen plans moved annually (green bars, right axis).

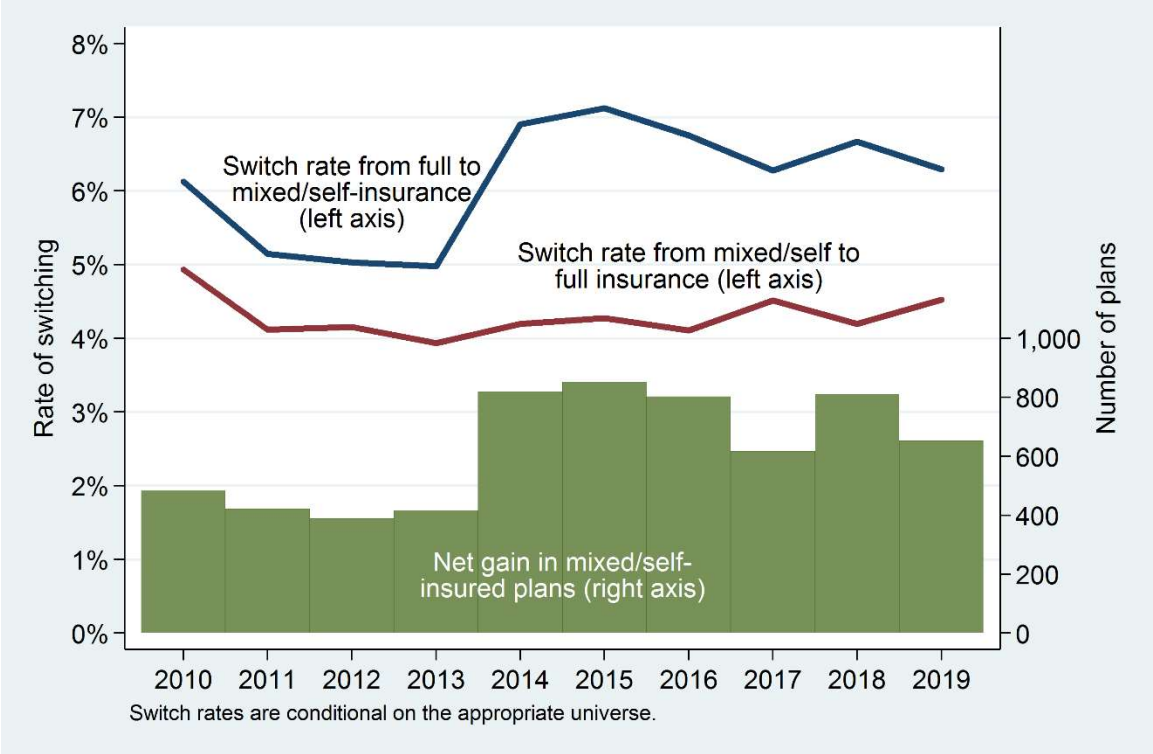
Figure 10. Rates of Funding Switching among New Large Plans and the Resulting Net Gain in Plans with a Self-Insured Component, by Statistical Year



Similarly, Figure 11 shows the historical switch rates for established large plans and the resulting net flow of these plans toward self-insurance. In contrast to the patterns among new large plans, switch rates were higher toward self-insurance (blue line) than away from it (red line), especially since 2014. For example, 6.3% of established large plans that in 2018 were fully insured had switched to mixed-funding or self-insurance by 2019, compared with 4.5% of mixed-funded or self-insured large plans that had switched to full insurance.[29]

[29] Some plans appear to switch funding more often than is plausible, possibly because incomplete information on Form 5500 filings may result in conflicting categorizations from one year to the next. The switch rates in Figure 11 may thus be overstated, but the net effect on plan flows should be approximately zero.

Figure 11. Rates of Funding Switching among Established Large Plans and the Resulting Net Gain in Plans with a Self-Insured Component, by Statistical Year



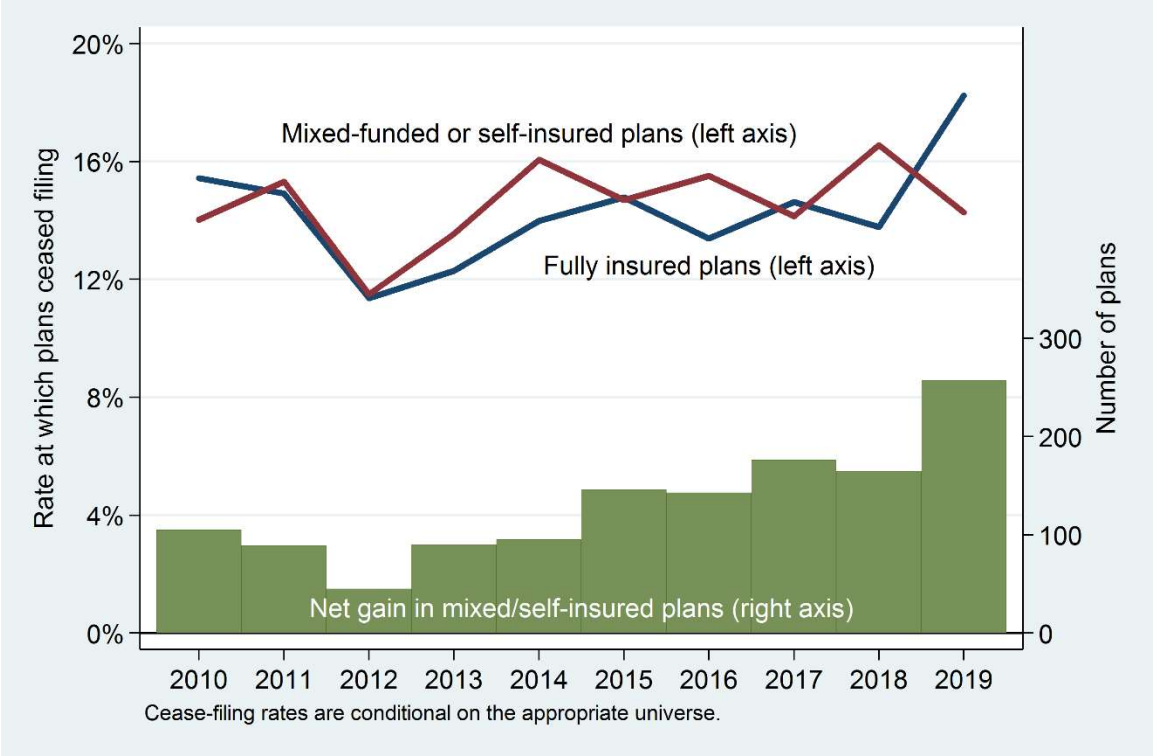
The green bars in Figure 11 indicate the net gains in large plans with a self-insured component as a result of switching by established large plans. On net, switching by established large plans added to the number of large plans with a self-insured component, especially starting in 2014. The flows were larger among established large plans than among new plans, with roughly 600–800 plans annually moving toward self-insurance in 2014–2019.

Figure 7 showed that the fully insured share of large health plans was approximately constant through 2013 and gradually increased starting in 2014, which is consistent with the net gains in mixed-funded and self-insured plans due to switching behavior.

Changes in Mixed/Self-Insurance Due to Plans Ceasing Filing

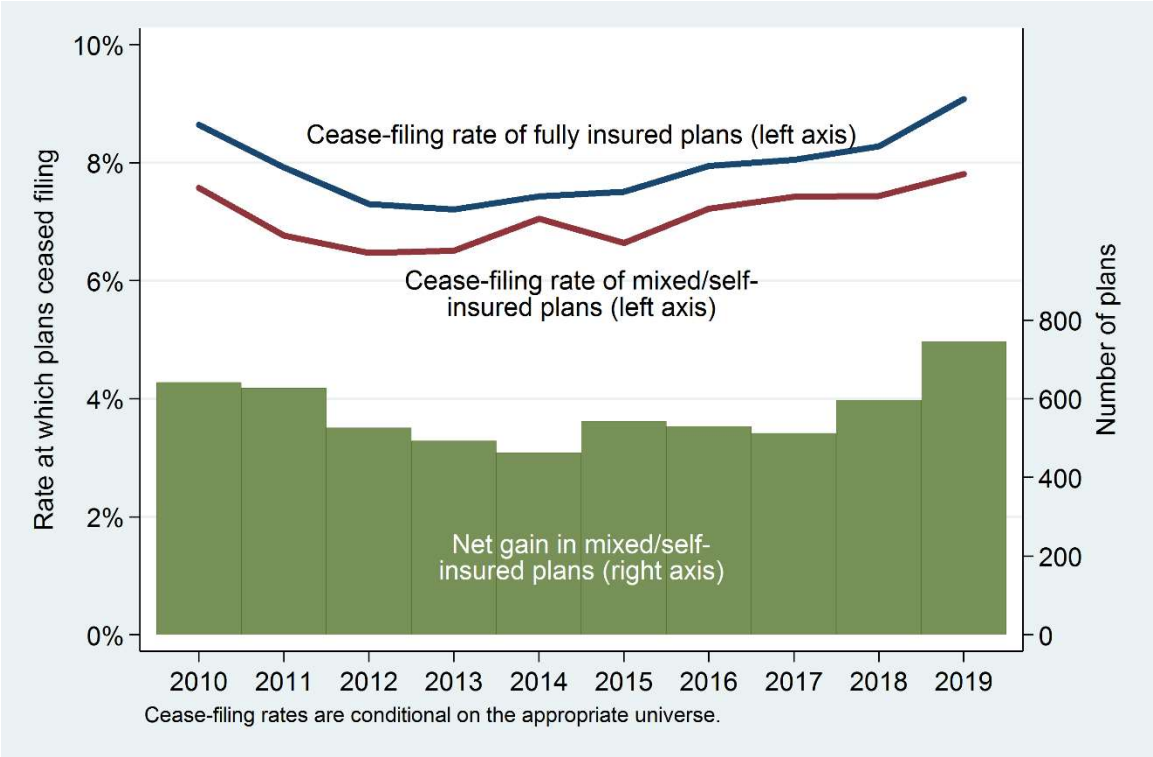
Figure 12 shows the rates at which new large plans ceased filing; they could have checked both the first and final return/report checkboxes, or they could have filed just a single Form 5500. In all years from 2010 to 2019, mixed-funded or self-insured new large plans were roughly as likely to cease filing (red line) as their fully insured counterparts (blue line). However, most new large plans were fully insured, so the net result was an increase in plans with a self-insured component (positive green bars).

Figure 12. Rates at Which New Large Plans Ceased Filing, by Statistical Year



Similarly, Figure 13 shows that rates at which established fully insured large plans ceased filing (blue line) exceeded those of mixed-funded or self-insured large plans (red line). Moreover, most established large plans were fully insured (see Figure 9), so the net effect was an increase in the prevalence of mixed/self-insured plans (green bars).

Figure 13. Rates at Which Established Plans Ceased Filing



In conclusion, the share of large plans that were mixed-funded or self-insured was approximately flat until 2013. New large plans tended to be fully insured, but switch and termination patterns resulted in modest net additions of mixed-funded or self-insured large plans. Starting in 2014, switching and terminations, on net, added more mixed-funded and self-insured large plans than before, and the fraction of large plans with a self-insured component grew slightly.

The ACA was enacted in 2010 and many of its provisions became effective in 2014, which coincides with increased self-insurance among new large plans and increased net switching toward self-insurance among all large plans. While our analysis of the trends documented above is agnostic with respect to causality, it is possible that the ACA prompted elevated interest in self-insurance. The share of large plans with a self-insured component rose by 1.6 percentage points from 42.9% in 2013 to 44.5% in 2019 (see Figure 7 and Table 6).

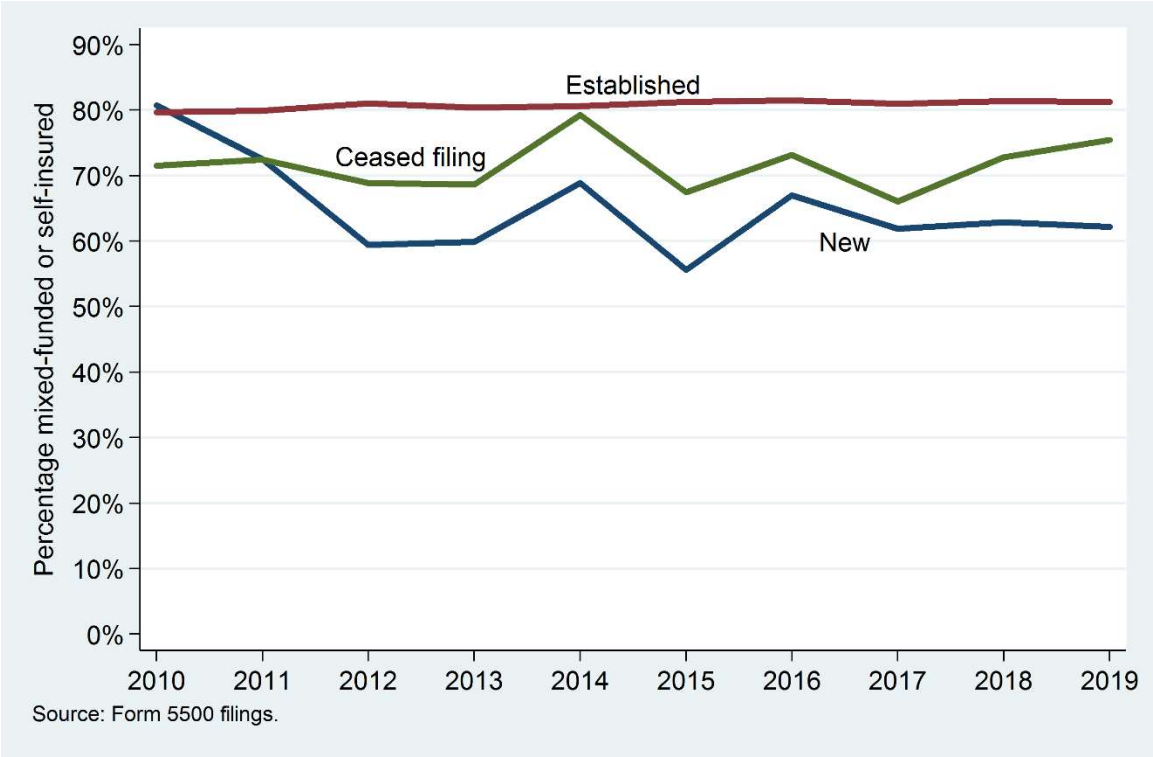
Very Large Plans Behaved Differently from Other Large Plans

The discussion above generally ignored plan size. However, while the overall fraction of large plans with a self-insured component was approximately flat through 2013 and increased slightly thereafter, the participant-weighted fraction increased slightly

through 2016 and has stabilized since then. Indeed, very large plans followed different patterns from other plans and drove participant-weighted trends, as demonstrated in this section.

Figure 14 shows the percentage of participants who were covered by a mixed-funded or self-insured large plan, by plan life cycle stage, from 2010 to 2019. It is the participant-weighted counterpart of Figure 9. Participants in new large plans were generally less likely to be in mixed-funded or self-insured large plans than those in established large plans or large plans that ceased filing. If large plans never switched funding mechanisms, this should drive down the overall fraction of participants in large plans with a self-insured component. However, self-insurance among participants generally increased until 2016 and remained approximately level thereafter, pointing at funding mechanism switching as the main cause of the observed pattern.

Figure 14. Participant-Weighted Percentage Mixed-Funded or Self-Insured among Large New Plans, Established Plans, and Plans That Ceased Filing, by Statistical Year



Before turning to switching patterns, consider that most participants are covered by very large plans (Table 1 and Table 9). We restrict the analysis to the most recent five years (2015–2019). Only 1.1% of new plans covered 5,000 or more participants, but those plans accounted for 35.5% of participants in all new large plans.[30] Among

[30] A manual review indicated that such plans commonly were successor plans to prior plans that were replaced or consolidated, such as after a corporate merger. Likewise, plans that ceased filing may have been replaced with other plans and secured continuing health benefit coverage for their participants.

established plans, 65.1% of participants were in plans with 5,000 or more participants. The behavior of plans with more than 5,000 participants is therefore key to understanding participant-weighted trends in funding.

Table 9. Distribution of Large Health Plans and Plan Participants, by Plan Participant Counts (2015–2019)

Participants	New Plans		Established Plans		Plans That Ceased Filing	
in plan	Plans	Participants	Plans	Participants	Plans	Participants
0-99*	7.8%	0.8%	2.2%	0.1%	44.0%	2.1%
100–199	56.5%	16.9%	34.0%	3.3%	26.2%	8.6%
200–499	23.3%	15.0%	33.5%	7.0%	17.9%	12.8%
500–999	6.1%	9.1%	12.9%	6.0%	5.7%	9.2%
1,000–1,999	3.2%	9.8%	7.5%	7.1%	3.0%	9.8%
2,000–4,999	1.9%	12.9%	5.5%	11.4%	1.9%	13.9%
5,000+	1.1%	35.5%	4.3%	65.1%	1.2%	43.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Form 5500 large health plan filings.
* The definition of a large plan is based on number of participants at the beginning of the reporting period; some large plans have fewer than 100 participants at the end of the period.
Percentages may not sum to 100% due to rounding.

Table 10 shows the annual rate of funding mechanism switching among new and established large plans. Overall, 6.2% of plans that started as fully insured switched to mixed-funded or self-insured during their second reporting period, but very large plans were much more likely to make that switch than smaller large plans. For example, 20.0% of fully insured new plans with 5,000 or more participants changed funding mechanism, compared with much lower fractions among plans with between 100 and 500 participants. Conversely, large plans with fewer than 500 participants that started life as mixed-funded or self-insured were more likely to switch to fully insured than their larger counterparts. A similar pattern exists among established large plans. Because most participants are in very large plans, the implication is that, on net, participants in both new and established large plans migrated to mixed-funding or self-insurance.

Table 10. Annual Rates of Funding Switching among New and Established Large Plans, by Plan Size (2015–2019)

	New Plans		Established Plans	
Plan participants	Switch to mixed or self-insured	Switch to fully insured	Switch to mixed or self-insured	Switch to fully insured
0-99*	4.4%	13.2%	6.8%	11.3%
100–199	4.8%	14.4%	4.6%	7.4%
200–499	7.2%	9.3%	6.4%	5.1%
500–999	12.8%	4.5%	10.3%	3.0%
1,000–1,999	15.9%	5.4%	13.6%	1.9%
2,000–4,999	15.4%	2.9%	15.8%	1.3%
5,000+	20.0%	3.0%	14.2%	1.4%
Total	6.2%	9.7%	6.6%	4.3%

Source: Form 5500 large health plan filings.
* The definition of a large plan is based on number of participants at the beginning of the reporting period; some large plans have fewer than 100 participants at the end of the period.
Rates are conditional on the appropriate universe. For example, the denominator for the first column is fully insured new plans.

Rates at which plans ceased filing also varied by plan size (Table 11), with very large plans generally less likely to stop filing in 2015–2019 than smaller plans.[31] Among plans with 5,000 or more participants, fully insured plans ceased filing at a higher rate than mixed-funded or self-insured plans.

Table 11. Annual Rates at Which New and Established Large Plans Ceased Filing, by Plan Size (2015–2019)

	New Plans		Established Plans	
BOY plan participants	Mixed or self-insured	Fully insured	Mixed or self-insured	Fully insured
100–199	18.2%	16.8%	11.5%	10.0%
200–499	15.6%	10.5%	7.4%	6.8%
500–999	12.9%	12.6%	6.4%	6.1%
1,000–1,999	10.2%	9.4%	5.6%	6.2%
2,000–4,999	6.9%	12.1%	5.1%	5.6%
5,000+	8.2%	14.8%	3.9%	4.5%
Total	15.0%	14.9%	7.3%	8.2%

Source: Form 5500 large health plan filings.

In conclusion, large plans on net switched away from full insurance, thereby increasing the fraction of participants in mixed-funded or self-insured plans. Further reinforcing this trend, large fully insured plans were more likely to cease filing than

[31] Given the focus on the end of the life cycle, Table 11 categorizes plans by the number of participants at the beginning (rather than the end) of the reporting period. The majority of large plans that covered fewer than 100 participants at the end of the reporting period ceased filing (not shown), which likely reflects reverse causality (i.e., plans tend to shrink as they prepare to close).

large mixed-funded or self-insured plans. The overall change was modest, with only 1.0 percentage point more participants in plans with a self-insured component in 2019 than in 2013.

Stop-Loss Coverage of Large Plans

Table 12 examines the presence of stop-loss insurance for large plans. These figures must be interpreted with caution. First, if stop-loss insurance identifies the health plan as the beneficiary or it is purchased with plan assets, it must be reported on a Schedule A.[32] However, if the employer/sponsor has purchased stop-loss insurance with itself as the beneficiary (rather than the plan), then it need not be reported on the Form 5500. Second, Table 12 is based on the "Stop loss (large deductible)" benefit type reported on Schedule A, but that benefit type may reflect a health insurance contract with a high deductible rather than stop-loss insurance. External studies indicate that Table 12 understates the prevalence of stop-loss insurance.[33]

Table 12. Percentage of Large Health Plans Reporting Stop-Loss Insurance, by Funding Mechanism and Statistical Year

Statistical	Plans		Participants	
year	Mixed	Self-insured	Mixed	Self-insured
2010	22.9%	27.0%	16.0%	14.1%
2011	21.2%	26.6%	15.5%	13.6%
2012	20.1%	26.2%	14.0%	13.5%
2013	19.1%	25.7%	14.2%	13.4%
2014	18.2%	26.2%	14.7%	19.5%
2015	18.8%	25.4%	15.5%	19.4%
2016	18.9%	24.7%	15.5%	19.1%
2017	18.6%	23.2%	15.7%	18.6%
2018	17.3%	22.6%	13.8%	18.9%
2019	17.3%	22.2%	14.4%	18.5%

Source: Form 5500 large health plan filings.
Reflects stop-loss coverage as reported on Form 5500.

In 2019, 17.3% of mixed-funded and 22.2% of self-insured large plans reported stop-loss coverage on a Schedule A, down from 2010 rates of 22.9% and 27.0%, respectively. Weighted by the number of participants, 14.4% of mixed-funded and 18.5% of self-insured large plans reported stop-loss coverage for 2019, indicating

[32] The analysis of stop-loss coverage excludes Form 5500-SF filings because Schedule A is not required to be attached to the Form 5500-SF.
[33] Our 2012 report, *Anomalies in Form 5500 Filings: Lessons from Supplemental Data for Group Health Plan Funding*, suggests that as many as four out of five self-insured or mixed-funded plans and roughly 55% of participants in such plans were covered by stop-loss insurance, possibly purchased for the benefit of the plan sponsor. These stop-loss coverage levels are consistent with those in the 2013 KFF/HRET study. More recent KFF studies documented that 60% (62%) of participants in self-funded plans were in a plan that had purchased stop-loss insurance in 2018 (2020). We note that stop-loss insurance reported on a Form 5500 filing does not necessarily relate to health benefits but could protect other self-insured benefits, such as disability benefits.

that smaller plans are more likely to report stop-loss insurance than larger plans (also see Figure 15 below).[34] The participant-weighted figures are historically more volatile than unweighted figures, mostly because a single, very large, self-insured plan reported stop-loss insurance in 2014–2019, but not in prior years.

Table 13 shows the annual per-person cost for large plans of stop-loss coverage, calculated as the ratio of premiums to "number of persons covered" by the stop-loss policy on Schedule A—both the premium and the number of people covered thus refer to the stop-loss policy only and not to the overall plan. The numbers are not adjusted for inflation. These results should also be interpreted with caution because the Form 5500 filing contains no information on attachment points or other stop-loss policy features that may reflect the amount of coverage provided by the policies.[35]

Table 13. Per-Person Annual Premiums for Stop-Loss Insurance (Large Plans)

	Mixed-funded			Self-insured		
year	25th pct	Median	75th pct	25th pct	Median	75th pct
2010	$177	$372	$716	$237	$540	$971
2011	$185	$378	$748	$255	$568	$1,022
2012	$173	$369	$755	$267	$611	$1,084
2013	$189	$427	$893	$283	$647	$1,167
2014	$186	$444	$921	$302	$685	$1,234
2015	$227	$470	$930	$334	$730	$1,301
2016	$219	$524	$993	$337	$774	$1,408
2017	$235	$529	$982	$370	$836	$1,503
2018	$246	$548	$1,103	$414	$897	$1,601
2019	$300	$611	$1,191	$437	$989	$1,736

Source: Form 5500 large health plan filings.
Reflects stop-loss coverage as reported on Form 5500.

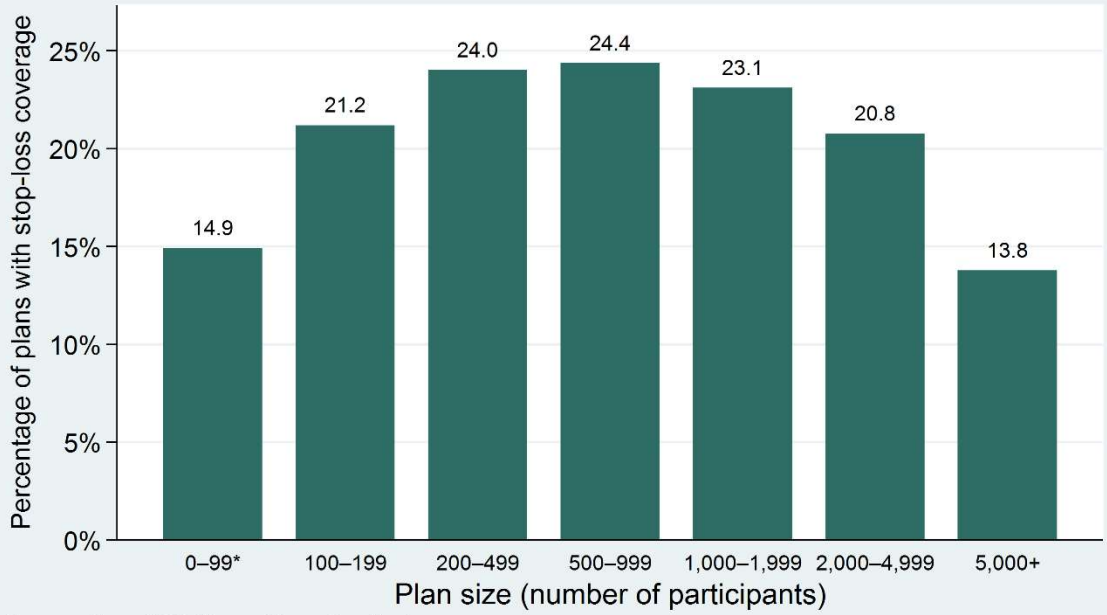
Figure 15 shows the rate of stop-loss coverage among large self-insured plans by plan size. Stop-loss coverage increases with plan size up to 500–999 participants and decreases with plan size among larger plans. Lower stop-loss coverage for smaller

[34] The annual KFF Survey collects information about stop-loss coverage, including for the benefit of the plan sponsor. Weighted by workers covered by self-insured health plans, stop-loss coverage was 59% in 2013, 65% in 2014, 60% in 2015, 57% in 2016, 58% in 2017, and 60% in 2018.

[35] Per person premiums were calculated from Schedules A that specified stop-loss coverage only or in combination with health benefits. Approximately 15% of such Schedules A specified additional benefits (e.g., prescription drugs in addition to stop-loss and health). The per person premium may thus reflect stop-loss coverage for benefits in addition to health benefits. Separately, since the analysis is based on "Stop loss (large deductible)" benefits reported on Schedule A, it may include high-deductible health contracts rather than just stop-loss policies. However, even at the 75th percentile, the average premium, $1,191 per person per year in 2019, was well below market rates for high-deductible health plans, suggesting this potential issue does not substantially affect the results. According to the 2019 KFF Survey, the average premium for single coverage on high-deductible health plans was $6,412 in 2019.

plans is not consistent with the notion that smaller plans face greater financial risks and should thus be more likely to purchase stop-loss coverage. Part of the explanation may relate to the fact that stop-loss coverage with the sponsor (rather than the plan) as beneficiary need not be reported on Form 5500; smaller employers may be more likely to designate the firm as the beneficiary than larger employers. The lower prevalence of stop-loss insurance among smaller large plans may also reflect market realities: insurance companies may not offer stop-loss insurance to small employers, or offer it only at very high prices. While the 2019 KFF Survey did not publish details on stop-loss coverage, the 2018 and 2020 KFF Surveys also documented lower stop-loss coverage rates among very large plans than among mid-sized plans.

Figure 15. Self-Insured Large Health Plans' Rate of Stop-Loss Coverage, by Plan Size (2019)



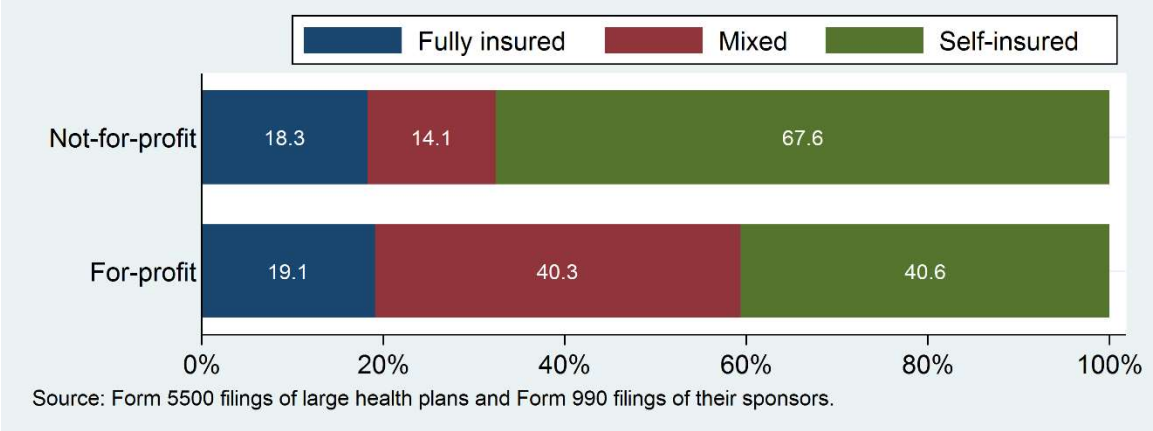
Source: Form 5500 filings of large health plans.
Reflects stop-loss coverage as reported on Form 5500; see text.
* The definition of a large plan is based on number of participants at the beginning of the reporting period; some large plans have fewer than 100 participants at the end of the period.

Funding Mechanisms and Financial Metrics

As described above, we matched the Form 5500 health plan data to Form 990 filings to identify whether a health plan sponsor is a for-profit or a not-for-profit entity. About one-in-six large plans (16.5%) were found to be sponsored by a not-for-profit entity. These plans covered 16.4% of participants. Figure 16 presents the participant-weighted breakdown in funding status for for-profit and not-for-profit firms. The two groups differ mostly in mixed-funding and self-insurance: 67.6% of participants in not-for-profit entity plans were covered by a self-insured plan, compared with 40.6% of participants in for-profit firms' plans. Conversely, mixed funding was far less prevalent at not-for-profit entities than at for-profit firms. It

appears that the differences are not driven by plan sizes, because the distribution of plan size is similar at not-for-profit entities and for-profit firms (not shown).

Figure 16. Participant-Weighted Distribution of Funding Mechanism, by For-Profit and Not-for-Profit Sponsors of Large Plans (2019)



Focusing on the subset of Form 5500 large health plan filers that could be matched to financial information in Bloomberg, Table 14 presents 2019 information on company size as measured by revenue, market capitalization, profit, and number of employees (and the number of observations on which each calculation is based). The table shows that companies offering fully insured health plans tend to be smaller than companies with self-insured or mixed-funded health plans. Companies offering mixed-funded health plans tend to be the largest.

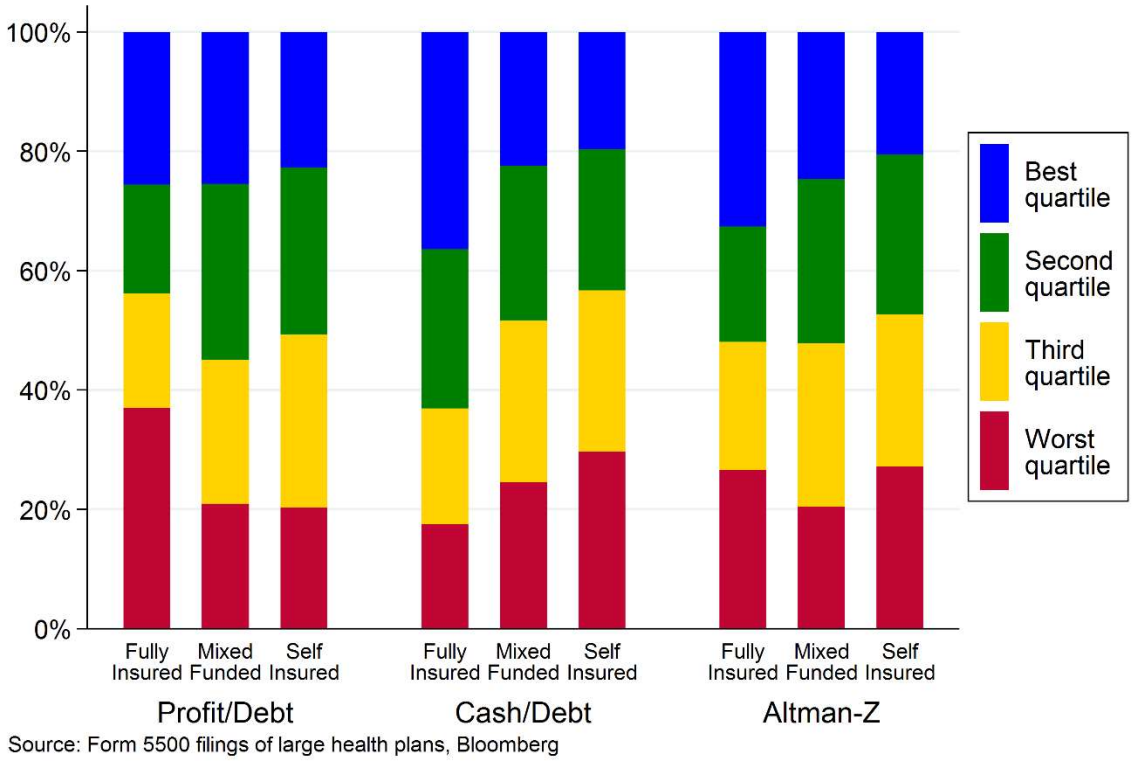
Table 14. Characteristics of Companies Matched to Form 5500 Health Plan Filings, by Funding Mechanism (2019)

		All	Fully insured	Mixed	Self-insured
Revenue ($ millions)	25 pct	357	104	1,470	527
	Median	1,690	356	4,580	2,050
	75 pct	8,110	1,780	14,400	8,740
	# Obs	3,838	1,098	946	1,794
Market capitalization ($ millions)	25 pct	760	280	1,970	1,010
	Median	3,400	1,120	6,690	3,850
	75 pct	15,800	5,110	30,200	18,100
	# Obs	3,161	895	837	1,429
Profit ($ millions)	25 pct	-1	-18	7	6
	Median	78	10	239	114
	75 pct	571	117	1,110	684
	# Obs	3,565	1,033	914	1,618
Number of employees	25 pct	1,237	327	4,265	1,788
	Median	5,400	1,000	13,000	5,989
	75 pct	21,700	6,200	41,571	21,000
	# Obs	3,173	883	853	1,437

Source: Form 5500 large health plan filings and Bloomberg data.

Figure 17 presents three metrics of the financial health of matched companies: the ratio of profit to total debt, the ratio of cash and cash equivalent holdings to total debt, and the Altman Z-Score.[36] For all three, higher values denote better financial health. We grouped all matched plans into quartiles; Figure 17 shows the share of fully insured, mixed-funded, and self-insured large plans in each quartile. Consider the ratio of profit to total debt. If financial health were unrelated to funding mechanisms, all bars would be approximately equal-sized. Instead, 37.0% of fully insured sponsors were in the bottom quartile, compared with 20.9% of mixed-funded and 20.3% of self-insured sponsors; see the red bars in the bottom-left portion of Figure 17. Based on how frequently their ratios of profit to total debt are in the bottom quartile, mixed-funded and self-insured companies thus appear to be in better financial health than fully insured companies.

Figure 17. Financial Health of Companies Matched to Form 5500 Health Plan Filings, by Funding Mechanism (2019)



Source: Form 5500 filings of large health plans, Bloomberg

The results are mixed for the other two metrics of financial strength. The ratio of cash holdings to total debt suggests that sponsors of fully insured plans are in better financial health than sponsors of mixed-funded and self-insured plans, while the

[36] The Altman Z-Score is an index summarizing five financial measures that are used to predict bankruptcy risk; see footnote 11 on page 10. A Z-Score greater than 2.99 is considered the "safe" zone, between 1.80 and 2.99 is the "grey" zone, and less than 1.80 is the "distress" zone. The 25th percentile of Altman Z-Scores of plan sponsors in our analysis was 1.53, i.e., all companies in the bottom quartile and some in the third quartile were considered to be in the "distress" zone. For details, see E.I. Altman (1968). "Financial Ratios, Discriminant Analysis and the Prediction of Corporate Bankruptcy." *Journal of Finance* 23(4): 589–609.

Altman Z-Score ranks sponsors of fully insured and self-insured plans lower than sponsors of mixed-funded plans. In short, there is no consistent evidence that mixed-funded or self-insured sponsors are in better or worse financial health than fully insured sponsors. These findings are generally consistent with those in prior reports. Finally, as in prior years, fully insured plans show a wider dispersion of financial health (as measured by the share of plans in the bottom and top quartiles combined) than mixed-funded and self-insured plans.

Table 15 shows the percentages and sample sizes corresponding to Figure 17.

Table 15. Financial Health of Companies Matched to Form 5500 Health Large Plan Filings, by Funding Mechanism (2019)

		All	Fully insured	Mixed	Self-insured
Profit over total debt	Best quartile	24.3%	25.6%	25.5%	22.7%
	Second quartile	25.7%	18.2%	29.5%	28.0%
	Third quartile	25.0%	19.2%	24.1%	29.0%
	Worst quartile	25.0%	37.0%	20.9%	20.3%
	# Obs	3,257	890	884	1,483
Cash (equivalent) holdings over total debt	Best quartile	24.9%	36.4%	22.5%	19.7%
	Second quartile	25.0%	26.7%	25.8%	23.7%
	Third quartile	25.0%	19.4%	27.2%	27.1%
	Worst quartile	25.0%	17.5%	24.5%	29.6%
	# Obs	3,522	953	917	1,652
Altman Z-Score	Best quartile	25.0%	32.6%	24.7%	20.6%
	Second quartile	25.0%	19.3%	27.4%	26.8%
	Third quartile	25.0%	21.4%	27.4%	25.5%
	Worst quartile	25.1%	26.6%	20.4%	27.2%
	# Obs	2,657	714	758	1,185

Source: Form 5500 large health plan filings and Bloomberg data.
Percentages may not sum to 100% due to rounding.

5. SMALL GROUP HEALTH PLANS

As discussed above, small plans that file a Form 5500 or 5500-SF are a select subset of all small plans in the United States because group health plans with fewer than 100 participants that are not MEWAs generally are required to file a Form 5500 only if they use a trust or separately maintained fund to hold plan assets (or act as a conduit for the transfer of plan assets), which is often associated with self-insurance.

Aside from amended filings and filings with zero participants at both the beginning and the end of the reporting period, there were 11,080 filings of small plans that reported covering health benefits in 2019. Filings are excluded if (1) the filing was followed by another filing of the same plan for a later period in the same year (36 filings in 2019), (2) a Form 5500 was filed even though the plan was exempt from filing (1,539 filings in 2019), or (3) the plan name suggests that it does not offer health benefits that are the subject of the ACA (1 filing in 2019). There were no GIA filings with fewer than 100 participants. This section focuses on the remaining 9,450 small plans. They covered about 158,000 participants at the end of the plan year. As noted before, most small plans in the United States are not required to file a Form 5500 and, therefore, are not included in this analysis. Figure 3 (on page 7) and Table 2 (on page 7) document the number of small plans and their participants for 2010–2019.

Most (82%) of the 9,450 small plans filed a Form 5500-SF rather than the Form 5500.

Funding Mechanism

As expected based on Form 5500 filing requirements, only 1.8% of small plans are classified as fully insured (Table 16). Presumably, these plans used their trust as a conduit for premium payments. A large majority (95.5%) were self-insured, and 2.8% were mixed-funded.

Table 16. Distribution of Funding Mechanism for Small Plans (2019)

	Small Plans		Participants	
	Number	Percent	Number	Percent
Fully insured	167	1.8%	11,445	7.2%
Mixed	260	2.8%	8,401	5.3%
Self-insured	9,023	95.5%	138,399	87.5%
Total	9,450	100.0%	158,245	100.0%

Source: Form 5500 small health plan filings.
Numbers or percentages may not sum to total due to rounding.

Weighted by plan participants at the end of the plan year, 7.2% of small-plan participants were in a fully insured plan, 87.5% in a self-insured plan, and 5.3% in a mixed-funded plan.

The MEPS-IC survey found that between 12.2% and 17.2% of private-sector establishments with fewer than 100 employees self-insured at least one plan in 2019, compared with 98.2% of small plans that filed a Form 5500. This large discrepancy underscores the selective nature of small plans that filed a Form 5500.

Figure 18 shows the funding mechanism distribution for small health plans by statistical year for 2010–2019; see Table 17 and Table 18 for the underlying percentages, plan counts, and participant counts. The fraction of small plans with a self-insured component generally increased from 90.0% in 2010 to 98.2% in 2019. Weighted by participants, the trend is subject to volatility because of plans that covered many employees at the end of the reporting period.

Figure 18. Distribution of Funding Mechanism among Small Plans, by Statistical Year

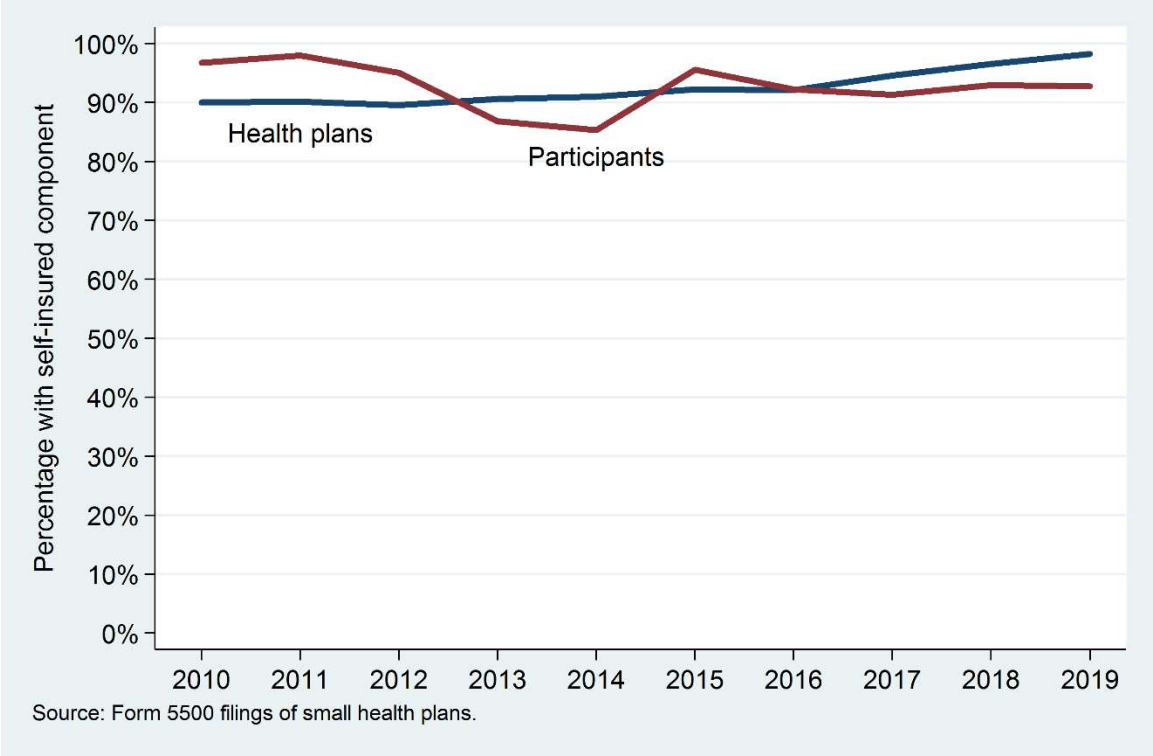


Table 17. Distribution of Funding Mechanism for Small Plans, by Statistical Year

Statistical	Small Plans			Participants		
year	Fully insured	Mixed	Self-insured	Fully insured	Mixed	Self-insured
2010	10.0%	6.4%	83.6%	3.3%	22.1%	74.6%
2011	9.9%	7.8%	82.3%	2.0%	71.1%	26.9%
2012	10.4%	7.3%	82.3%	5.0%	14.8%	80.3%
2013	9.4%	8.0%	82.6%	13.2%	32.8%	54.0%
2014	9.0%	7.6%	83.5%	14.7%	10.8%	74.5%
2015	7.8%	12.1%	80.1%	4.4%	60.7%	34.8%
2016	7.9%	5.7%	86.4%	7.7%	9.8%	82.5%
2017	5.4%	4.5%	90.1%	8.7%	7.3%	84.1%
2018	3.5%	4.1%	92.4%	7.0%	10.4%	82.6%
2019	1.8%	2.8%	95.5%	7.2%	5.3%	87.5%

Source: Form 5500 small health plan filings.
Percentages may not sum to 100% due to rounding.

Table 18. Number of Small Plans and Their Participants, by Funding Mechanism and Statistical Year

Statistical	Small Plans			Participants		
year	Fully insured	Mixed	Self-insured	Fully insured	Mixed	Self-insured
2010	335	213	2,802	11,234	76,435	257,752
2011	262	207	2,187	9,949	348,109	131,501
2012	259	182	2,049	9,016	26,746	145,496
2013	221	189	1,948	22,157	55,053	90,660
2014	214	180	1,988	37,488	27,572	189,934
2015	225	351	2,325	11,476	157,612	90,408
2016	229	164	2,507	8,852	11,209	94,447
2017	198	166	3,315	10,841	9,104	105,108
2018	180	213	4,776	11,821	17,435	138,643
2019	167	260	9,023	11,445	8,401	138,399

Source: Form 5500 small health plan filings.

We reiterate that the *distribution* of funding mechanism among small plans that filed a Form 5500 does not reflect that of small plans nationwide because the analysis generally includes small plans only if they operate a trust. Assuming that small plans comply with Form 5500 filing requirements, the data do inform about the *numbers* of small self-insured and mixed-funded plans that operate a trust (Table 18). The numbers likely underestimate self-insurance among small plans nationwide because self-insured plans may pay benefits from general assets rather than via a trust. Under the assumption that the fraction of self-insured small plans that operate a trust is approximately constant, the plan counts may be compared over time, across industries, et cetera. In that light, the main conclusion of this section is that the number of self-insured small plans was roughly constant from 2011 to 2014, and has increased rapidly between 2014 and 2019. The trend in mixed-funded small plans has been more volatile.

The numbers of participants covered by self-insured or mixed-funded small plans need to be interpreted subject to the caveat that participants are counted as of the end of the reporting period, and small plans may cover many participants at the end of the reporting period. Specifically, some new plans report zero participants at the beginning of the reporting period and many at the end. The resulting aggregate participant counts are volatile, as illustrated in Figure 3 (page 7) and Table 18.

Funding Mechanisms by Industry

Table 19 shows the number of small plans and the participants they cover by funding mechanism and industry, as identified by the business code provided on Form 5500 filings. Most small self-insured plans and participants are in the services and construction sectors.

Table 19. Number of Small Plans and Their Participants, by Funding Mechanism and Industry (2019)

	Small plans			Participants		
	Fully insured	Mixed-funded	Self-insured	Fully insured	Mixed-funded	Self-insured
Agriculture	1	4	181	14	140	1,188
Mining	0	5	43	0	118	966
Construction	52	27	1,422	1,764	568	24,093
Manufacturing	17	42	936	1,593	1,740	17,571
Transportation	7	6	235	293	260	6,056
Communications & information	5	4	371	433	144	4,271
Utilities	4	3	84	210	130	2,427
Wholesale trade	1	12	574	41	325	7,086
Retail trade	5	20	607	92	685	10,751
Finance, insurance, real estate	30	28	954	5,161	1,135	12,654
Services	33	103	3,366	1,167	2,954	44,256
Misc. organizations	12	6	249	677	202	7,077
Industry not reported	0	0	1	0	0	3
Total	167	260	9,023	11,445	8,401	138,399

Source: Form 5500 small health plan filings.

Small Plans by Life Cycle Stage

Unlike large plans, small plans that were (or switched to) full insurance would typically not file a Form 5500. The data therefore do not support an analysis of small plans' funding mechanisms over the life cycle. Instead, Table 20 presents the number of plans that were new, established, or ceased filing in each year from 2010 to 2019.[37]

[37] As many as 3,761 small plans are considered to have ceased filing in 2019, far more than in previous years. This is due to an apparent filing error by plans that participate in a certain MEWA. Almost all their filings responded affirmatively to Form 5500-SF, line 13b ("Were all the plan assets distributed to participants or beneficiaries, transferred to another plan, or brought under the control of the PBGC?").

Table 20. Number of Small Plans, by Lifecycle Stage and Statistical Year

Statistical year	New	Established	Ceased filing*	Total
2010	755	2,313	1,074	4,142
2011	224	2,184	400	2,808
2012	140	2,164	344	2,648
2013	186	1,972	310	2,468
2014	300	1,925	226	2,451
2015	593	1,981	481	3,055
2016	520	2,133	436	3,089
2017	1,071	2,388	400	3,859
2018	1,807	3,088	523	5,418
2019	4,781	3,135	3,761	11,677

* Includes plans that last filed the previous year; see text.
Source: Form 5500 small health plan filings.

The total number of small plans in Table 20 exceeds the number of small plan filings because plans are considered to have ceased filing in year *t* if they filed a Form 5500 in year *t*-1 without indicating that it would be their final filing, and did not file in year *t*.

Table 21 shows the funding distribution of new small plans in 2019. Of the 4,781 new plans, only 0.3% were fully insured, 1.6% were mixed-funded, and 98.1% were self-insured. The new small plans covered about 54,000 participants of whom 6.3% were in a fully insured plan, 2.6% in a mixed-funded plan, and 91.1% in a self-insured plan.

Table 21. Funding Distribution of New Small Plans (2019)

	Small Plans		Participants	
	Number	Percent	Number	Percent
Fully insured	13	0.3%	3,432	6.3%
Mixed	77	1.6%	1,400	2.6%
Self-insured	4,691	98.1%	49,456	91.1%
Total	4,781	100.0%	54,288	100.0%

Source: Form 5500 small health plan filings.

Stop-Loss Coverage of Small Plans

Table 22 shows the fraction of mixed-funded or self-insured small plans that reported stop-loss coverage. The table is based on the subset of small plans that filed a Form 5500 rather than a Form 5500-SF, because Form 5500-SF does not ask about stop-loss insurance.[38]

Table 22. Fraction of Small Health Plans Reporting Stop-Loss Insurance, by Funding Mechanism and Statistical Year

Statistical	Small Plans		Participants	
year	Mixed	Self-insured	Mixed	Self-insured
2010	45.1%	9.4%	6.9%	5.3%
2011	48.3%	12.6%	2.2%	9.9%
2012	45.6%	19.7%	17.1%	9.8%
2013	47.1%	18.9%	9.3%	14.7%
2014	53.3%	23.4%	27.1%	8.8%
2015	70.1%	29.0%	3.7%	27.0%
2016	45.7%	30.7%	32.9%	33.3%
2017	48.8%	33.0%	52.2%	35.7%
2018	37.1%	34.4%	70.8%	28.0%
2019	32.7%	38.6%	45.3%	42.7%

Source: Form 5500 small health plan filings.
Reflects stop-loss coverage as reported on Form 5500.

Subject to the caveat that stop-loss coverage is underreported on Form 5500 filings (see page 35), 32.7% of small mixed-funded plans and 38.6% of small self-insured plans indicated having purchased stop-loss insurance in 2019. Small mixed-funded plans have generally become less likely over time to report stop-loss coverage, whereas small self-insured plans have become more likely.

Table 22 also reports participant-weighted rates of stop-loss coverage. These rates are volatile, mostly because some small plans cover many participants at the end of the reporting period.

Table 23 shows the annual per-person cost of stop-loss coverage for small plans, calculated in the same way and subject to the same caveats as for large plans (see page 36).[39] The median per-person stop-loss premiums for small plans were substantially higher than those for large plans (Table 13), presumably because the volatility of medical expenses is greater for small plans than for large plans.

[38] In 2019, 260 mixed-funded small plans and 1,307 self-insured small plans filed a Form 5500 rather than a Form 5500-SF. The corresponding numbers in prior years were at least 164 and 972, respectively.

[39] The distributions are calculated over small mixed-funded and self-insured plans that filed a Form 5500 (as opposed to a Form 5500-SF) and reported stop-loss coverage. In 2019, there were 85 and 505 such plans, respectively. In other years, the distributions were calculated based on at least 75 and 152 plans, respectively.

Table 23. Per-Person Annual Premiums for Stop-Loss Insurance (Small Plans)

	Mixed-funded			Self-insured		
Year	25th pct	Median	75th pct	25th pct	Median	75th pct
2010	$1,617	$2,211	$2,886	$164	$797	$1,780
2011	$1,805	$2,507	$3,121	$247	$846	$2,015
2012	$2,239	$2,811	$3,602	$642	$1,335	$2,030
2013	$1,952	$2,745	$3,626	$853	$1,469	$2,192
2014	$1,972	$2,831	$3,715	$1,075	$1,733	$2,439
2015	$1,509	$2,610	$3,715	$900	$1,526	$2,450
2016	$2,556	$3,337	$4,652	$1,108	$2,038	$3,039
2017	$2,328	$3,158	$4,407	$1,198	$2,302	$3,154
2018	$2,441	$3,440	$4,312	$1,394	$2,636	$3,486
2019	$2,509	$3,875	$4,601	$1,622	$2,849	$3,700

Source: Form 5500 small health plan filings.
Reflects stop-loss coverage as reported on Form 5500.

Funding Mechanisms and Financial Metrics

As described above, we matched the Form 5500 health plan data to Form 990 filings to identify whether a health plan sponsor is a for-profit or a not-for-profit entity. Among the sponsors of small plans, 7.7% were found to be not-for-profit entities. These plans covered 16.4% of participants. Table 24 shows the number of small plans and the participants they cover for for-profit and not-for-profit entities.

Table 24. Number of Small Plans and Their Participants, by Funding Mechanism and For-Profit Status (2019)

	Small plans			Participants		
	Fully insured	Mixed-funded	Self-insured	Fully insured	Mixed-funded	Self-insured
For-profit	140	237	8,344	6,404	7,548	118,334
Not-for-profit	27	23	679	5,041	853	20,065
Total	167	260	9,023	11,445	8,401	138,399

Source: Form 5500 large health plan filings, Form 990 filings

As noted on page 10, only 54 sponsors of small plans were matched to Bloomberg data. Almost all appeared to be large companies that sponsored multiple health plans, including a small one. We do not compare financial health of fully insured, mixed-funded, and self-insured small plans because of the low number and unusual nature of small-plan sponsors for which financial information is available.

6. GROUP INSURANCE ARRANGEMENTS

The analysis above excludes GIAs because GIAs are not group health plans. However, they may be of interest for their role in securing employer-sponsored health benefits. A GIA provides benefits to the employees of two or more unaffiliated employers (not in connection with a multiemployer plan or a collectively-bargained multiple-employer plan), fully insures one or more welfare plans of each participating employer, uses a trust or other entity as the holder of the insurance contracts, and uses a trust as the conduit for payment of premiums to the insurance company (2019 Instructions for Form 5500). Therefore, by definition, GIAs are fully insured.

For 2019, 42 arrangements covering about 315,000 participants filed a Form 5500 as a GIA, compared with 56,348 large group health plans that sponsored 78.8 million participants. GIAs tend to be larger than group health plans. For example, 85.7% of GIAs covered 500 or more participants, compared with 28.6% of large group health plans.

GIAs further differ from group health plans in their distribution of industry sectors. Perhaps due to the diversity of their contributing employers, as many as 35.7% of GIAs reported a "Miscellaneous" industry or none at all. Also 35.7% are active in the finance, insurance, and real estate sector, and their participants account for 63.1% of all GIA participants, compared with just 10.3% of large group health plans and 10.8% of participants in such plans.

7. CONCLUSION

The ACA was enacted in 2010 and has brought about far-reaching changes to health care financing and coverage. This report and its counterparts from prior years aim to monitor any changes in employer-sponsored health benefit coverage and its funding mechanism that employers have made in the first few years since the ACA became law. While we identified several time trends, the changes tended to be moderate, generally started prior to 2010, and largely flattened out in recent years.

The number of health plans that filed a Form 5500 and the number of participants that they cover is continuing to grow; i.e., there is no indication that employers are dropping health benefit coverage. We note that most small health benefit plans are exempt from filing a Form 5500, so no conclusions should be drawn based on this report with respect to the number of small employers that offer health benefits or the number of participants they cover.

Among large plans, the overall distribution of funding mechanism is largely unchanged from 2018. At the plan level, self-insurance or mixed-funding was constant at 44.5%. At the participant level, self-insurance or mixed-funding slipped from 81.1% in 2018 to 81.0% in 2019. The data offer little insight into the funding distribution among small plans. However, the number of self-insured or mixed-funded small plans that filed a Form 5500 increased substantially between 2018 and 2019. Most of that increase is due to small plans that appear to participate in a non-plan MEWA.

For large plans, the trend toward less stop-loss coverage (as reported on Form 5500 filings) may be flattening. Among mixed-funded large plans, stop-loss coverage remained unchanged at 17.3% in 2019, while among self-insured large plans it continued a gradual decrease to 22.2% in 2019 from 22.6% in 2018. It is unclear whether these findings reflect trends in overall stop-loss coverage—Form 5500 filings are known to be an incomplete source of information about stop-loss coverage. Insofar reported, stop-loss coverage is much greater for small plans than for large plans. Among mixed-funded small plans, stop-loss coverage continued a decline over time from 37.1% in 2018 to 32.7% in 2019. Among self-insured small plans, coverage continued an upward trend, from 34.4% in 2018 to 38.6% in 2019.

Overall, the Form 5500, despite some known limitations, continues to be a useful data source to better understand the type and range of health benefits that employers provide to American workers. The relatively long history of these data can help frame important policy debates surrounding these benefits. It can be anticipated that future versions of this report will continue to document these important trends.

TECHNICAL APPENDIX

The definitions of funding mechanism rely upon the fields of Form 5500 and its Schedules as outlined in Table 25.

Table 25. Data Fields Used to Determine Plan Funding Type

Source	Description
Form 5500, Line 5; Form 5500-SF, Line 5a	Total number of participants at the beginning of the plan year
Form 5500, Line 6d; Form 5500-SF, Line 5b	Number of participants at the end of the plan year who are active, retired, separated, or retired/separated and entitled to future benefits
Form 5500, Line 9a	The ''funding arrangement'' is the method for the receipt, holding, investment, and transmittal of plan assets prior to the time the plan actually provides benefits. Plan funding arrangement (check all that apply) 1. Insurance 2. Section 412(e)(3) insurance contracts 3. Trust 4. General assets of the sponsor
Form 5500, Line 9b	The ''benefit arrangement'' is the method by which the plan provides benefits to participants. Plan benefit arrangement (check all that apply) 1. Insurance 2. Section 412(e)(3) insurance contracts 3. Trust 4. General assets of the sponsor
Schedule A, Line 1e	Approximate number of persons covered at the end of the plan year
Schedule A, Line 2a	Total amount of commissions paid
Schedule A, Line 2b	Total fees paid
Schedule A, Line 3e	Organization code of agents, brokers, or other persons to whom commissions or fees were paid: 1. Banking, Savings & Loan Association, etc. 2. Trust Company 3. Insurance Agent or Broker 4. Agent or Broker other than insurance 5. Third party administrator 6. Investment Company/Mutual Fund 7. Investment Manager/Adviser 8. Labor Union 9. Foreign entity 0. Other
Schedule A, Line 6b	Premiums paid to carrier

Source	Description
Schedule A, Line 8	Type of benefit and contract types: A. Health (other than dental or vision), I. Stop loss (large deductible), J. HMO contract, K. PPO contract, L. Indemnity contract, M. Other and other codes for dental, vision, life, disability, etc. More than one code may be checked
Schedule A, Line 8m	Description of "Other" benefit and contract type
Schedule A, Line 9a(4)	Total earned premium amount for experience-rated contracts
Schedule A, Line 9b(3)	Incurred claims
Schedule A, Line 9b(4)	Claims charged
Schedule A, Line 9e	Dividends or retroactive rate refunds due
Schedule A, Line 10a	Total premiums or subscription charges paid to carrier for nonexperience-rated contracts
Schedule H, Line 2e	Benefit payment and payments to provide benefits: 2e(1) Directly to participants or beneficiaries, including direct rollovers 2e(2) To insurance carriers for the provision of benefits 2e(3) Other 2e(4) Total benefit payments
Schedule I, Line 2e; Form 5500-SF, Line 8d	Benefits paid (including direct rollovers)

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