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SELF-INSURED HEALTH BENEFIT PLANS 2016
Based on Filings through Statistical Year 2013

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1. INTRODUCTION AND SUMMARY

The 2010 Patient Protection and Affordable Care Act (ACA) (§1253) mandated 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 (including information on assets, liabilities, contributions, investments, and expenses). The U.S. Department of Labor (DOL) engaged Advanced Analytical Consulting Group, Inc. (AACG) to assist with the ACA mandate.[1] This document is intended to serve as an appendix to the Secretary's 2016 *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.

The current report analyzes Form 5500 filings for plan years that ended in 2004-2013. The report therefore may reflect any early adjustments to health benefits that businesses made in response to the enactment of the ACA in March 2010.

This report applies more refined analysis inclusion criteria than last year's *Self-Insured Group Health Plans 2015* report ("2015 Report"). The analysis inclusion criteria were revised to more accurately capture the health plan population. All historical figures cited in this report are based on the refined inclusion criteria and may therefore differ from those in prior years' reports. Refer to Section 2 for details.

The primary findings include:

- Just under one-half of Form 5500 filing health plans (49%) were self-insured or mixed-funded (funded through a mixture of insurance and self-insurance) in 2013, and those plans covered 83% of plan participants. These figures were virtually unchanged from the prior year. The percentage of self-insured plans decreased slightly to 40% and the percentage of mixed-funded plans remained at 8%. (Their rounded sum is 49%.)
- The share of self-insured or mixed-funded Form 5500 filing health plans declined from 55% in 2004 to 49% in 2013. However, over the same period, the percentage of plan participants covered by those plans increased from 78% to 83%. This paradox is explained by a trend toward full insurance among relatively small plans and toward mixed-funding or self-insurance among relatively large plans.
- As reported in Form 5500 filings, stop-loss coverage among self-insured plans declined from 31% in 2008 to 26% in 2013. This rate had been stable at 30%-31% in 2004-2008. Stop-loss coverage among mixed-funded plans was 21%-22% from 2004 to 2008, but had declined to 16% by 2013 and may be

[1] Deloitte Financial Advisory Services LLP (Deloitte) served as a subcontractor to AACG. Conversely, AACG had served as a subcontractor to Deloitte in preparing the 2011, 2012, 2013, and 2014 iterations of this report.

stabilizing. As discussed on pages 15 and 31, these percentages likely underestimate the overall prevalence of stop-loss insurance.

- Most Form 5500 filing plans with fewer than 100 participants were self-insured in 2013. This is most likely due to Form 5500 filing requirements rather than being representative of all small plans.
- Among Form 5500 filing plans with 100 or more participants, the prevalence of self-insurance generally increased with plan size. For example, 29% of plans with 100-199 participants were mixed-funded or self-insured in 2013, compared with 91% of plans with 5,000 or more participants. Last year's percentages were the same.
- Mixed funding is primarily found among very large plans that filed a Form 5500. For example, 2% of plans with 100-199 participants were mixed-funded in 2013, compared with 46% of plans with 5,000 or more participants. These percentages are unchanged from last year.
- Multiemployer and multiple-employer plans were more likely to self-insure than single-employer plans. In 2013, 88% of multiemployer plans were self-insured or mixed-funded, compared with 57% of multiple-employer plans and 47% of single-employer plans. Last year's percentages were similar: 87%, 57%, and 47%, respectively.
- Self-insurance rates varied by industry, with utilities, agriculture, mining, and construction firms having the highest prevalence of self-insurance.
- One-half (50%) of plans sponsored by for-profit organizations were self-insured or mixed-funded, compared with 44% of plans sponsored by not-for-profit organizations. Weighted by participants, not-for-profit organizations were much more likely to be self-insured and much less likely to be mixed-funded than for-profit firms.
- The financial health of fully insured plan sponsors appears to be similar or better at the median than that of mixed-funded or self-insured sponsors, but the dispersion is generally greater among fully insured sponsors than among sponsors that self-insure at least some of their health benefits.

The remainder of this report contains the following. Section 2 provides details on methodological changes since last year's report. Section 3 describes the 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 4 defines funding mechanism as used in this report. Section 5 presents the results of our data analysis and Section 6 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. TECHNICAL NOTE: METHODOLOGICAL CHANGES FROM THE 2015 REPORT

To achieve greater clarity on the population of Form 5500 filers, the current report refines the criteria used to identify the analysis population. Some health plans file multiple Forms 5500 during a given year. For example, health plans could file subsequent filings to amend a previous filing or to adjust the plan's annual reporting period (e.g., using a "short plan year" filing to convert from a fiscal year to a calendar year reporting period), among others. In prior years' reports, we attempted to exclude original filings that were subsequently amended, but some other plans that submitted multiple filings in a year may have been double counted. In contrast, this year's analysis selected a single filing for plans with multiple annual filings. Table 1 lists the criteria used for selecting a single filing.

Table 1. Inclusion Criteria for Plans with Multiple Filings in a Calendar Year

Repeated annual filing type	Include filing with
Two health plan filings with the same Employer Identification Number (EIN), Plan Number (PN), and calendar year of the end date of the reporting period, but different end dates, and:	
• Same plan name and first filing's end date one day prior to the second filing's begin date	Most recent end date
• Same plan name, first filing's end date not one day prior to second filing's begin date, first filing's end-of-year participation equal to the second filing's beginning-of-year participation, and same plan effective date	Most recent end date
• Different plan names, first filing's end date one day prior to second filing's begin date, first filing's end-of-year participation equal to second filing's beginning-of-year participation, and same plan effective date	Most recent end date
• Different plan names, first filing's end date not one day prior to the second filing's begin date, first filing's end-of-year participation equal to the second filing's beginning-of-year participation, same plan effective date, and same welfare benefit code(s)	Most recent end date
More than two health plan filings with the same EIN, PN, and calendar year of end date, but different end dates	Most recent end date
Multiple health filings with the same EIN, PN and reporting end date	Largest, sequential filing ID

These refinements removed approximately 838 plans (1.6%) with 0.7 million (1.0%) participants from the 2013 analysis.

We applied these restrictions to historical data, so that time series reported in this document are internally consistent. However, since prior years' reports did not apply these exclusions, some historical figures in this report may differ from those in prior reports.

3. DATA SOURCES

The quantitative analysis in this report is based on three data sources: Form 5500 health plan filings, annual financial reports, and *Form 990, Return of Organization Exempt From Income Tax* ("Form 990") filings. This section discusses the data sources and the algorithm to match the three sources.

Form 5500 Filings of Health Benefit Plans

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. The Form 5500, including required Schedules and Attachments, collects information concerning the operation, funding, assets, and investments of pensions and other employee benefit plans. It is generally due by the last day of the seventh month after the plan year ends (2013 Instructions for Form 5500).

ERISA requires any administrator or sponsor of an employee benefit plan subject to ERISA to annually report details on such plans unless exempt from filing pursuant to regulations issued by the DOL. Welfare plans with fewer than 100 participants ("small plans") are generally exempt, except if they operate a trust. Most small welfare plans do not need to file a Form 5500 and are not covered by the analysis in this report.[2] Also, non-ERISA plans, such as governmental plans and church plans, do not need to file a Form 5500 and are not covered by the analysis in this report.

Benefits other than pensions are collectively referred to as welfare benefits. Generally, separate Forms 5500 are filed 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.[3]

Prior to plan year 2009, Forms 5500 were generally filed on paper, and it is our understanding that paper filings were scanned and converted into an electronic database using a combination of optical barcodes and optical character recognition. Starting with the 2009 plan year, filers are required to file electronically using the ERISA Filing Acceptance System (EFAST2). We found the data integrity of electronic filings to be higher than that of the converted paper filings.

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 funding and benefit arrangements, the effective date of the plan, and the number of plan participants. If some or all plan benefits are provided through external insurance

[2] The DOL has previously estimated that about 98% of health plans do not file a Form 5500 as a result of the regulatory exemptions.
[3] For the purpose of this report, only health benefits are relevant. However, 85% of 2013 Form 5500 health plan filings reported on both health and other types of benefits (dental, vision, et cetera).

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 plans with 100 or more participants, whereas smaller plans may file the shorter Schedule I. Starting with the 2009 plan year, certain small plans may file a Form 5500-SF (Short Form) with less detailed information.[4] This report's analysis includes 1,077 Form 5500-SF filings.

Some plans file a Form 5500 even though they are not required to do so. As noted in Section 2, this report excludes such voluntary filers from the analysis. The analysis includes single-employer, multiemployer, and multiple-employer plans, but excludes filings by Direct Filing Entities (DFEs). Apart from these exclusions, our analysis covers the universe (not a sample) of health plans that filed a Form 5500.

Table 2 presents the distribution of plan size, as measured by the number of participants at the end of the reporting period, for filings in statistical year 2013, i.e., for filings with a reporting period that ended in 2013. Throughout this report, participants may include active and retired employees, but will exclude dependents. For 2013, the analysis is based on more than 50,000 plans that together covered almost 70 million participants.[5]

[4] 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 books and 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, and not be a multiemployer plan (2013 Instructions for Form 5500-SF).

[5] The number of participants is based on the number reported in Form 5500 filings and may overestimate the number of plan participants who receive 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 multiple benefit option welfare plan, 500 employees may choose long-term disability benefits while only 400 employees choose health benefits. The number of plan participants reported on the Form 5500 would be 500.

Table 2. Distribution of Health Plans and Health Plan Participants, By Plan Participant Counts (2013)

Participants in plan	Plans	Percent	Participants (millions)	Percent
Zero	1,451	2.9%	0.0	0.0%
1-99	3,179	6.3%	0.1	0.2%
100-199	15,697	31.2%	2.3	3.3%
200-499	15,607	31.1%	4.9	7.0%
500-999	6,068	12.1%	4.2	6.1%
1,000-1,999	3,627	7.2%	5.1	7.3%
2,000-4,999	2,591	5.2%	8.0	11.5%
5,000+	2,018	4.0%	44.9	64.6%
Total	50,238	100.0%	69.6	100.0%

Source: Form 5500 health plan filings.

As previously noted, health plans with fewer than 100 participants (small plans) are generally not required to file a Form 5500 unless they hold assets in a trust. Small plans in our analysis are thus a select subset of all small plans. In contrast, plans with 100 or more participants (large plans) are generally required to file a Form 5500 unless otherwise exempt from filing, so we believe our analysis covers the vast majority of large ERISA-covered plans in the United States.

Plans with fewer than 100 participants accounted for 9% of plans in our analysis.[6] Almost two-thirds of plans had between 100 and 499 participants. Most participants, however, were in the largest plans. Plans with 5,000 or more participants make up 4% of all plans in our sample, but they account for almost 65% of all participants.

Our analysis covers statistical years 2004 through 2013. As shown in Figure 1 and its underlying counts in Table 3, each statistical year includes between approximately 45,000 and 50,000 plans providing health benefits. The number of participants ranged from approximately 61 million to 70 million per year. Between 2004 and 2013, the number of plans has generally been increasing.[7] The number of participants in these plans has likewise generally increased.

[6] The filing exemption for plans with fewer than 100 participants that do not hold assets in a trust is based on BOY participants, whereas Table 2 is based on EOY participants. Some plans with zero or 1-99 participants in Table 2 may be plans with more than 100 participants at the beginning of the year and fewer than 100 at the end of the year.

[7] A notable exception is 2008, when the number of plans appeared to drop by about 1,700 plans. This may have been due to imperfect capture of filings related to the transition from paper to electronic filings.

Figure 1. Health Plans and Participants, by Statistical Year

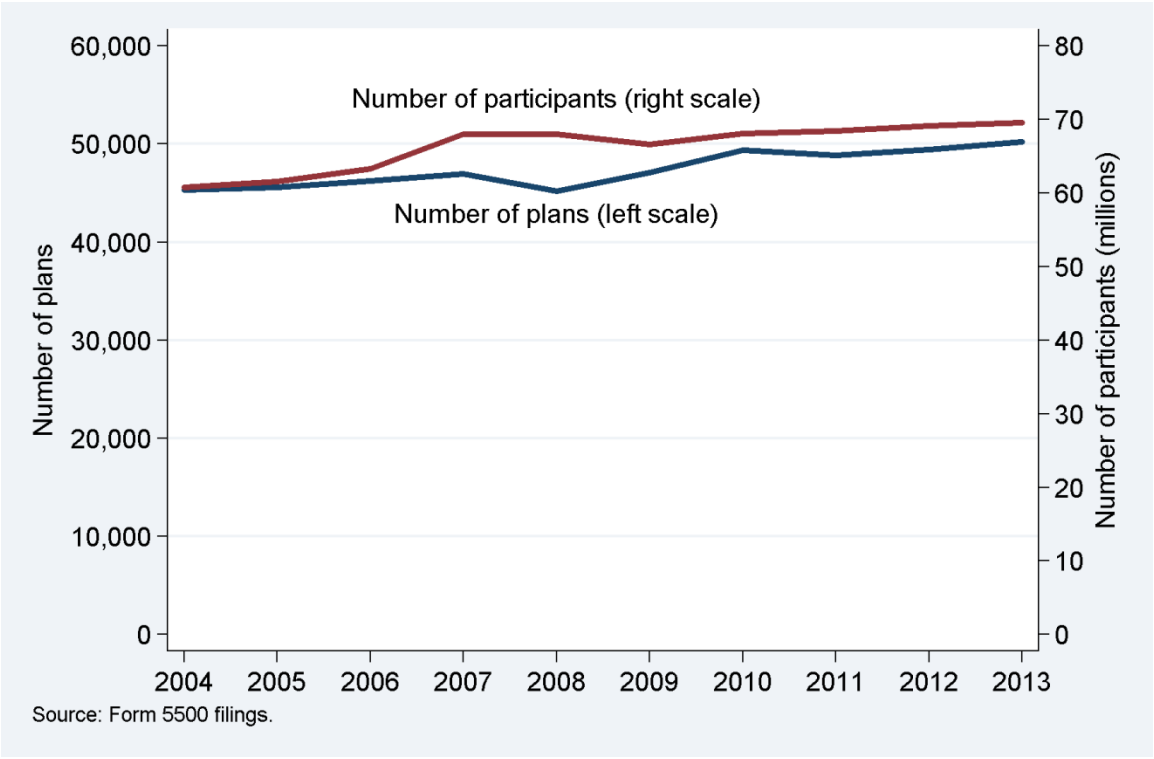

Table 3. Health Plans and Participants, by Statistical Year

Statistical year	Plans	Participants (millions)
2004	45,316	60.8
2005	45,568	61.5
2006	46,215	63.3
2007	46,936	68.0
2008	45,184	68.0
2009	47,116	66.6
2010	49,349	68.1
2011	48,866	68.4
2012	49,414	69.1
2013	50,238	69.6

Source: Form 5500 health plan filings.

Table 4 shows the percentage of health plan filings that could be matched to their corresponding filing in the previous year. While generally in the 83%-88% range, this match rate was substantially lower in 2009, perhaps because of data capture errors related to the then-new electronic filing requirement. In order to gauge consistency in the reporting of the number of participants, the table also illustrates to what extent participant counts of matched pairs of plans change from one year to the next. Table 4 shows that, 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. Except in 2009, 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 4. 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
2004	45,316	84.7%	-6.9%	0.0%	8.2%
2005	45,568	84.9%	-6.7%	0.3%	8.5%
2006	46,215	84.3%	-6.0%	0.8%	9.1%
2007	46,936	84.8%	-6.3%	0.8%	9.1%
2008	45,184	86.1%	-7.7%	0.1%	8.2%
2009	47,116	79.7%	-12.0%	-2.1%	5.3%
2010	49,349	83.0%	-8.6%	-0.7%	6.1%
2011	48,866	87.8%	-6.9%	0.0%	7.0%
2012	49,414	87.8%	-5.8%	0.5%	8.1%
2013	50,238	87.5%	-5.9%	0.5%	8.1%

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

Financial Information from the Form 990 and Capital IQ

Several research questions seek to understand the relationship between a plan sponsor's financial health and the plan's characteristics. To address these questions, we matched Form 5500 health plan filings with two sources of financial information: Form 990 and Capital IQ corporate financial data. We obtained plan sponsors' not-for-profit status from the Form 990 and their financial information from Capital IQ. This section describes our approach and the number of Form 5500 filers for which we achieved a statistical year 2013 match with Capital IQ.

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. We identify not-for-profit plan sponsors by the existence of a Form 990 filing from the plan sponsor. Tax-exempt organizations file a Form 990 annually with the IRS unless exempt from filing. 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 Corporation Employee Benefits Plan, a not-for-profit entity for which a Form 990 was located. 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 for-profit status. To this end, we excluded Form 990 filings by Voluntary Employees' Beneficiary Associations (VEBAs), Teachers Retirement Fund Associations,

The match is carried out by EIN and organization name. To reduce mismatches due to name spelling variations, we normalize names prior to matching, as discussed below. The analysis sample for statistical year 2013 includes 50,238 filings of which 8,898 (18%) had sponsors that filed a Form 990 and were thus identified as not-for-profit. They accounted for 13.8 million participants, or 20% of the total under study.

Financial Metrics from Capital IQ

Our financial metrics information comes from Capital IQ, a provider of financial and other data for companies in the United States and elsewhere. Capital IQ culls Form 10-K filings and other sources to collect data on companies with public financial statements, which generally includes companies with publicly-traded stock or bonds.[9] Our extract from its database contains information on the 2013 financial performance for about 10,000 companies with public financial information whose primary geographic location is in the United States.

We extracted fields that capture company characteristics, financial strength, financial health, and financial size. In particular:

- Market capitalization: total value of outstanding common stock as of the end of the company's financial reporting period;
- Revenue: total revenue net of sales returns and allowances;
- Operating income: revenue minus cost of revenues and total operating expenses;
- Net income: operating income net of interest expense, unusual items, tax expense and minority interest;
- Cash from operations: total of net income, depreciation and amortization and certain "other" items;
- Total debt: short-term borrowings, long-term debt, and long-term capital leases;
- Altman Z-Score: an index commonly used for predicting the probability that a firm will go into bankruptcy within two years. The lower the score, the greater the probability of insolvency; and
- Number of employees.

Matching Form 5500 Filings and Capital IQ Records

The only common field in Form 5500 health plan filings and the Capital IQ data available to us is the company/sponsor name. In part because of spelling variations, the match rate on name alone is low.

To obtain a better match rate, we used both EINs and company names. Form 5500 health plan data contain EINs, but the Capital IQ file available to us does not. Most

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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 ultimate plan sponsor, not to the plan itself.

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

Capital IQ records, however, report the company's Central Index Key (CIK), a number used by the U.S. Securities and Exchange Commission to identify corporations and individuals who have filed a disclosure with the SEC. 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. So the CIK can be used to link Capital IQ records to EINs from the SEC, and then the EIN can link the Capital IQ-SEC record to Form 5500 filings.[10]

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 (e.g., ABC Incorporated Employee Benefit Trust is equivalent to ABC Inc.).

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

Corporate fiscal years need not correspond to health plan reporting periods. In an effort to accurately match 2013 Form 5500 health plan filings with their sponsor's corresponding 2013 financial information, we required that the end date of the fiscal year captured in Capital IQ and the end date of the Form 5500 plan year differed by no more than 183 days. If and only if the closest fiscal and plan years differed by no more than 183 days, we considered this a match.

For example, a health plan sponsor could have a plan year from January 1, 2013 to December 31, 2013, but a fiscal year that ran from April 1, 2013 to March 31, 2014. Under these circumstances, we would match the Form 5500 health plan filing ending December 31, 2013 with the Capital IQ financial information for fiscal year ending March 31, 2014.

Table 5 shows that we matched 4,256 plans, or about 8% of the plans in the 2013 Form 5500 health plan data.[11] This is the set of companies that appear in our matched analyses to follow. The 4,256 plans covered 26 million participants or approximately 37% of all participants in the Form 5500 health plan data.

[10] Some issues arose in the process. While about 15% of Capital IQ records do not contain a CIK, 7% contain multiple CIKs. Also, some CIKs were found to be linked to multiple EINs. These were incorporated in the analysis.

[11] While this is a small number, many companies that filed a Form 5500 are not represented in Capital IQ data because they may have no requirement to issue publicly available financial statements. Sponsors may be privately held or not-for-profit and without publicly issued bonds, or the plan may be a multiemployer or multiple-employer plan.

Table 5. Form 5500 Health Plan Filings Matched with Financial Information, by Plan Size (2013)

Number of participants	Plans			Participants		
	Number	Percent	Match rate	Number (millions)	Percent	Match rate
Zero	108	2.5%	7.4%	0.0	0.0%	
1-99	95	2.2%	3.0%	0.0	0.0%	3.7%
100-199	475	11.2%	3.0%	0.1	0.3%	3.0%
200-499	799	18.8%	5.1%	0.3	1.0%	5.4%
500-999	638	15.0%	10.5%	0.5	1.8%	10.9%
1,000-1,999	597	14.0%	16.5%	0.9	3.4%	16.9%
2,000-4,999	697	16.4%	26.9%	2.2	8.7%	27.9%
5,000+	847	19.9%	42.0%	21.8	84.8%	48.4%
Total	4,256	100.0%	8.5%	25.7	100.0%	36.9%

Source: Form 5500 health plan filings and Capital IQ data.

The match rate increases with plan size, presumably because large plans are sponsored by large companies and larger companies are more likely to disclose financial information than smaller companies. The match rate among plans with 5,000 or more participants is 42%, i.e., more than one-half was not matched. These include hospitals and universities without public financials, but also plans sponsored by US operations of large international firms with public financials. We restricted Capital IQ records to companies whose primary geographic location is in the United States, because the financial health of a foreign parent company does not necessarily correspond to that of its US subsidiary. Mismatches also arose from differences between corporate names in Capital IQ (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 could also increase 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.

Table 6 shows that 45,982 plans were not matched to Capital IQ data. Covering 44 million participants, these plans accounted for 63% of all participants across all matched and non-matched group health plans.

Table 6. Form 5500 Health Plan Filings Not Matched with Financial Information, by Plan Size (2013)

Number of participants	Plans			Participants		
	Number	Percent	Non-match rate	Number (millions)	Percent	Non-match rate
Zero	1,343	2.9%	92.6%	0.0	0.0%	
1-99	3,084	6.7%	97.0%	0.1	0.3%	96.3%
100-199	15,222	33.1%	97.0%	2.2	5.0%	97.0%
200-499	14,808	32.2%	94.9%	4.6	10.5%	94.6%
500-999	5,430	11.8%	89.5%	3.8	8.6%	89.1%
1,000-1,999	3,030	6.6%	83.5%	4.2	9.7%	83.1%
2,000-4,999	1,894	4.1%	73.1%	5.8	13.2%	72.1%
5,000+	1,171	2.5%	58.0%	23.2	52.8%	51.6%
Total	45,982	100.0%	91.5%	43.9	100.0%	63.1%

Source: Form 5500 health plan filings and Capital IQ data.

4. THE DEFINITION OF SELF-INSURANCE

As noted above, the Form 5500 does not require plan sponsors to explicitly specify the health plan's funding mechanism. This section describes how we determine funding mechanisms for the purposes of this report.

The Definition of Funding Mechanism is Driven by Available Data

As defined in this report, funding mechanism is based on information in Form 5500 health plan filings. Plans are categorized as either 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. Given these limitations, the classification in this report should not be interpreted as an official or legal definition. The definition of funding mechanism is driven by available data. The actual data fields are provided in the Technical Appendix.

In 2013, 20,281 plans (40%) were identified as self-insured because they did not report any health insurance contracts and at least one of the following conditions held: (1) the plan indicated that its funding or benefit arrangement was, at least in part, through a trust or from general assets; (2) the plan attached a Schedule H or I; (3) the plan filed a Form 5500-SF; or (4) the plan reported stop-loss coverage or payments to a third-party administrator (TPA). For the other 29,957 plans, we compared the number of people covered through health insurance contracts to the number of plan participants. If the number of people covered by a health insurance contract was less than 50% of the number of plan participants, we classified the plan as mixed funded.[12] This was the case for 3,121 plans. Another 991 plans were identified as mixed-funded because they attached a Schedule H or I which reported a trust that had made benefit payments.[13] The total number of mixed-funded plans was thus 4,112 (8%). The remaining 25,845 plans (51%) were classified as fully insured. Figure 2 below illustrates the process through which funding mechanism was identified.

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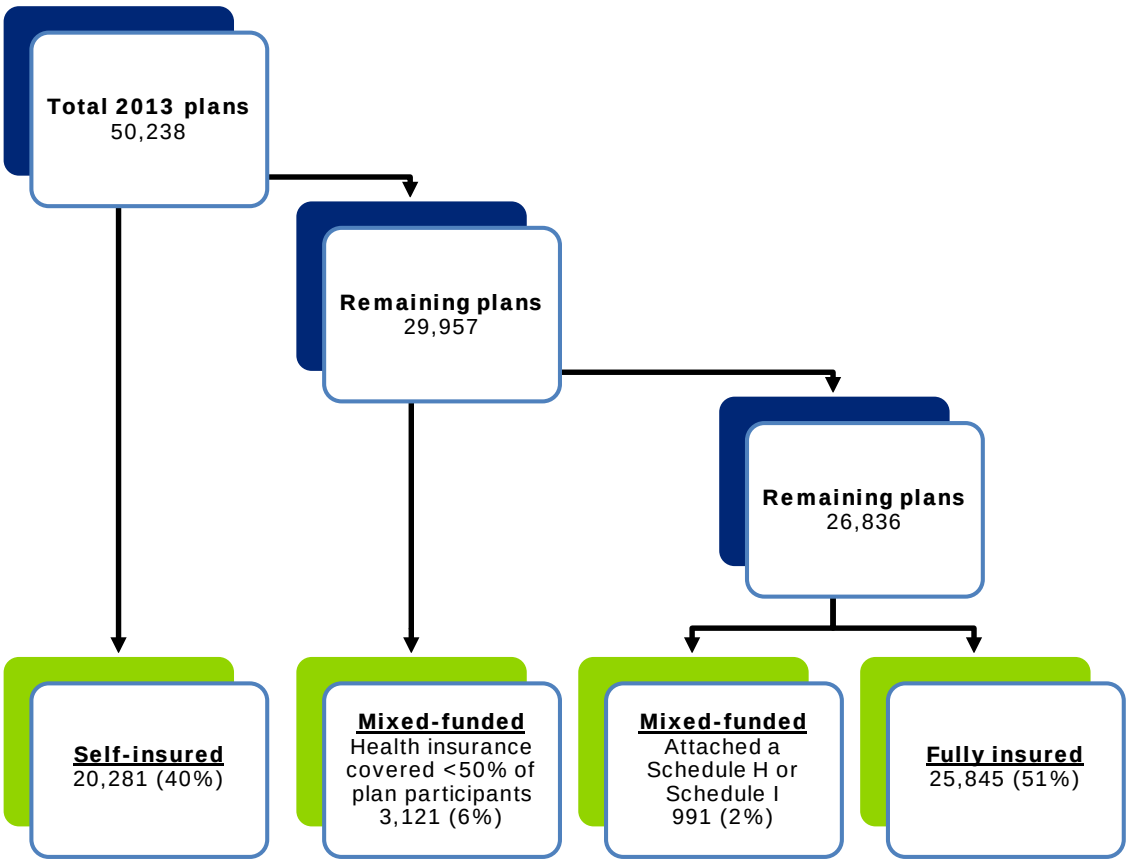
[12] See our report, *Strengths and Limitations of Form 5500 Filings for Determining the Funding Mechanism of Employer-Provided Group Health Plans* at http://www.dol.gov/ebsa/pdf/deloitte2012-5.pdf for a discussion of the sensitivity of plans' funding categorizations to the 50% threshold.

[13] Our approach requires that the trust paid benefits to plan participants or made payments to provide benefits (Line 2e(4) on Schedule H or Line 2e on Schedule I). Some plans may use a trust or a voluntary employees' beneficiary association (VEBA) as a vehicle to pass insurance premiums through to an insurance company. Insofar as such plans did not also have any self-insured component, they may have been incorrectly classified as mixed-funded.

Figure 2. Funding Mechanism Derivation



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 or inconsistent. Some of the issues affecting the funding mechanism definition are as follows:

- According to subject matter specialists, an employer may set up a subsidiary that acts as an in-house insurance company and sells health insurance to employees. These "captive" insurance companies are subject to state regulations regarding insurance companies. Plan sponsors purchasing insurance from a captive insurance company would file Schedule A, which does not require disclosing the use of a captive insurance company. In the classification, such plans would thus be considered fully insured, even though the employer group to which they belong is incurring 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, 8% of Form 5500 filing health plans contained both externally insured and self-insured health components in 2013. 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 (partially self-insured and partially insured). The issue arises because Form 5500 and its instructions allow a single Form 5500 to be filed with information on multiple types of welfare benefits and multiple types of health benefit options. As a result, it is not always possible to attribute responses to the health benefit component(s) of the filer's welfare plan. 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 are classified as mixed-funded if fewer than 50% of plan participants are covered by health insurance contracts. The two metrics may not be strictly comparable. First, the number of "persons covered" by insurance contracts, as reported on Schedule A, may be interpreted as inclusive of dependents, whereas the Form 5500 explicitly requires excluding dependents from "participants" (e.g., 2013 Instructions for Form 5500). Second, on plans that provide multiple types of benefits, not all reported participants may in fact be participants in the health benefits component of the plan.
- The classification may not recognize mixed funding due to carve-out services. 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 "group health" because there isn't a separate category from "group health" for "mental health" benefits on Schedule A, as there is for "dental" and "vision."
- Some plans may have filed a Schedule A for an Administrative Services Only (ASO) contract even though such contract is not an insurance contract. We attempted to identify such Schedules A through potentially reported TPA payments, stop-loss coverage, or low per-person premium amounts, but the process may not be perfect.
- Among plans that reported a funding or benefit arrangement through insurance, approximately 0.8% did not file a Schedule A with insurance contract details. In such cases, it was assumed that the plan was fully insured.
- Among plans that reported a funding or benefit arrangement through insurance, approximately 1.8% filed one or more Schedules A without the type of benefit that the insurance contract covered. In such cases, unless they had also filed another Schedule A for health insurance, 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 our report on *Strengths and Limitations of Form 5500 Filings for Determining the Funding Mechanism of Employer-Provided Group Health Plans.*[14]

[14] Available at http://www.dol.gov/ebsa/pdf/deloitte2012-5.pdf.

Stop-Loss Insurance

While self-insured plans bear the financial risks of health benefits and claims, some self-insured plans purchase insurance against particularly large losses. As discussed in the Analysis section below, roughly one in four self-insured plans report such catastrophic or stop-loss insurance on their Form 5500 health plan filings.[15] While stop-loss coverage mitigates financial risks, the plan is still considered self-insured (or mixed-funded).

[15] As also explained in the Analysis section, if the beneficiary of stop-loss insurance is the employer/sponsor rather than the plan and it was not purchased with plan assets, it need not be reported on Form 5500. The true prevalence of stop-loss insurance, therefore, cannot be gleaned from Form 5500 health plan filings alone.

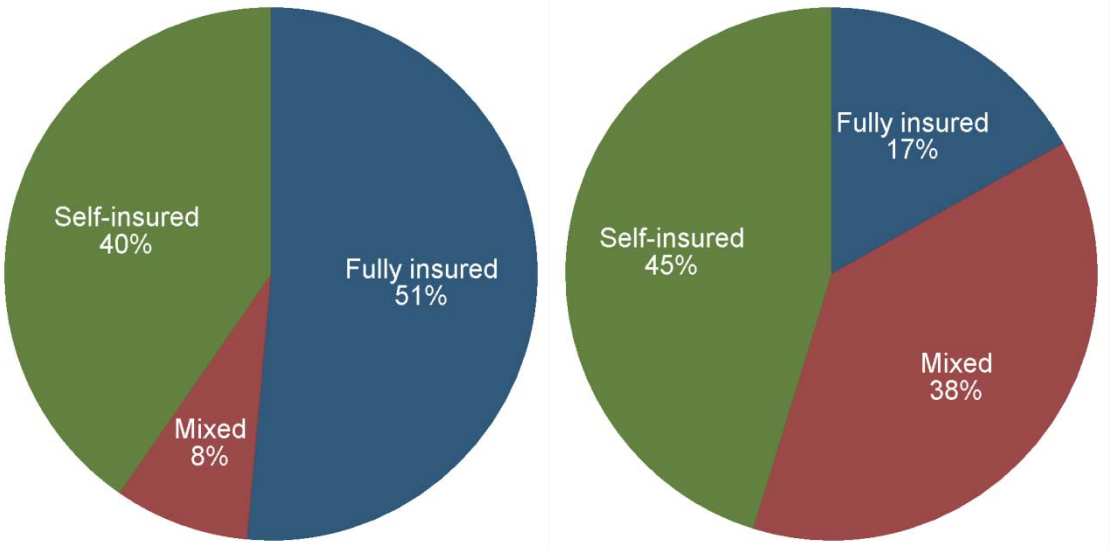
5. ANALYSIS

This section documents the findings of our analyses. We first present the Form 5500 distribution of funding mechanism by plan and plan sponsor characteristics. We then turn to Form 5500 filing health plans for which external financial information was available and present summary statistics by funding mechanism for the companies that sponsor these plans. Finally, we follow plan filings over time and document the rate at which plans have switched funding mechanisms.

Funding Mechanisms for Plans and Participants

For statistical year 2013, Figure 3 shows the overall distribution of funding mechanism among the 50,238 health plans that filed a Form 5500. About 40% of plans were self-insured, 51% were fully insured, and 8% were mixed-funded. As shown further below, smaller plans tend to be fully insured and many very large plans are mixed-funded, so the funding distribution across participants is quite different than it is across plans. About 45% of the 69.6 million participants are in self-insured plans, 17% are in fully insured plans, and 38% are in mixed-funded plans.

Figure 3. Distribution of Funding Mechanism (2013)



To put our analysis in context, consider recent trends in self-insurance according to the Kaiser Family Foundation and Health Research & Educational Trust's *Employer Health Benefits 2014 Annual Survey* ("KFF/HRET Survey").[16] This survey, conducted annually from 1999 to 2014, gathered detailed information on employer-provided health benefits, including their funding status.

[16] *Employer Health Benefits, 2014 Annual Survey.* Publication 8465. Kaiser Family Foundation and Health Research & Educational Trust. http://ehbs.kff.org/.

According to the KFF/HRET Survey, 61% of covered workers in firms with three or more employees were in partially or completely self-funded plans in 2013.[17] Our findings are not directly comparable, because our analysis covers only a subset of plans with fewer than 100 participants and because as many as 38% of plan participants are in mixed-funded plans. Given the limitations of Form 5500 health plan filings, our results are broadly consistent with those found in the KFF/HRET Survey.

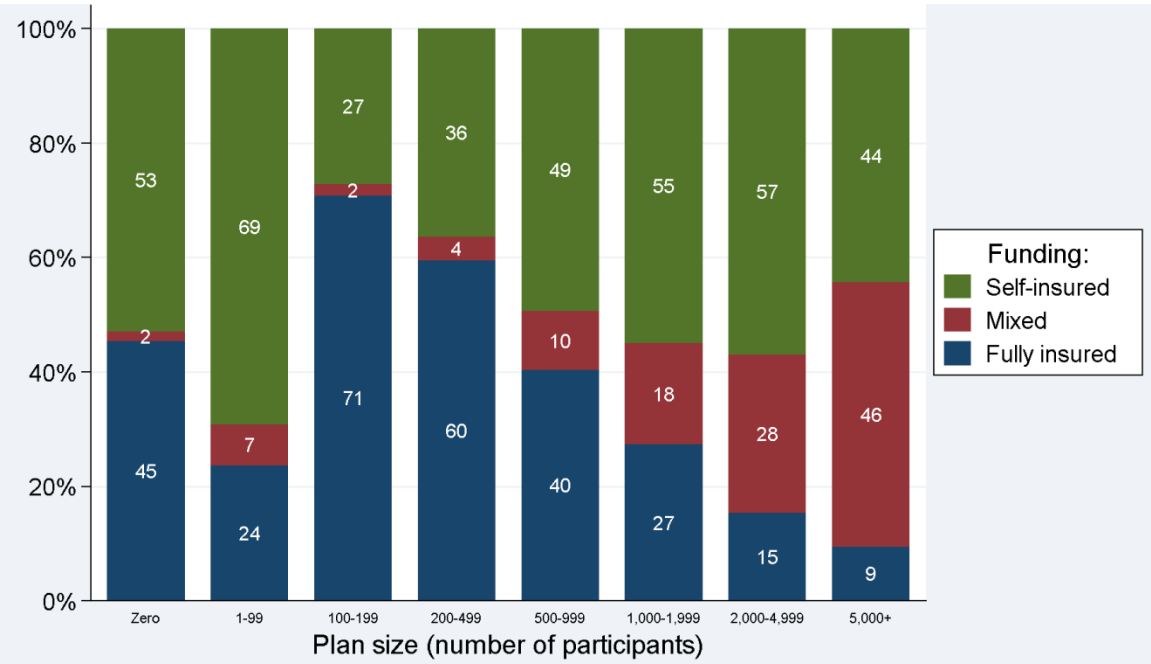
Funding Mechanisms by Plan Size

Figure 4 shows the distribution of funding mechanism by plan size for health plans in 2013. Most small plans are identified as self-insured in our study, but this is presumably due to the select nature of small plans in our analysis. Recall that plans with fewer than 100 participants are included 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.[18] Plans with fewer than 100 participants that are fully insured or pay benefits from the general assets of the employer are not required to file a Form 5500 and, therefore, are not included in this analysis. Apart from plans with fewer than 100 participants, the likelihood that a plan is self-insured generally increases with plan size. 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 bear at least a portion of the financial risks of their health benefits is 90%, compared with 29% among plans with 100-199 participants.

[17] The KFF/HRET survey defines covered workers as “employees receiving coverage from their employer”.

[18] The analysis inclusion is based on participants at the beginning of the plan year, whereas Figure 4 distinguishes plans based on their number of participants at the end of the year. Some plans with fewer than 100 participants at the beginning of the year may therefore be included in categories with 100 or more participants at the end of the year, and vice versa.

Figure 4. Distribution of Funding Mechanism, by Plan Size (2013)



Source: Form 5500 filings.

Table 7 shows the numbers underlying Figure 4. It also shows the participant-weighted distribution of funding mechanism by plan size, which is similar to the plan-weighted distribution.

Table 7. Distribution of Funding Mechanism, by Plan Size (2013)

Participants	Plans			Participants		
in plan	Fully insured	Mixed	Self-insured	Fully insured	Mixed	Self-insured
Zero	45.4%	1.7%	52.9%			
1-99	23.7%	7.2%	69.2%	41.2%	7.2%	51.6%
100-199	70.8%	2.0%	27.2%	70.6%	2.0%	27.4%
200-499	59.5%	4.1%	36.4%	58.1%	4.5%	37.4%
500-999	40.4%	10.2%	49.4%	39.4%	10.7%	49.9%
1,000-1,999	27.3%	17.7%	55.0%	26.6%	18.4%	55.1%
2,000-4,999	15.3%	27.7%	56.9%	14.9%	28.7%	56.4%
5,000+	9.5%	46.2%	44.3%	6.7%	49.9%	43.4%
All	51.4%	8.2%	40.4%	16.9%	37.9%	45.2%

Source: Form 5500 health plan filings.

The finding that larger plans are more likely to adopt mixed-funding or self-insurance is consistent with the KFF/HRET Survey. That study found that 16% of covered workers at firms with 3-199 employees were covered by self-insured plans in 2013, compared with 94% of covered workers at firms with 5,000 or more employees.

Funding Mechanisms by Year

Figure 5 shows the funding mechanism distribution for health plans by statistical year from 2004-2013. The percentage of plans that were self-insured or mixed-funded generally declined from 55% in 2004 to 49% in 2013. While the general trend among plans over the past decade has been away from self-insurance, the share of participants in health plans that self-insured or were mixed-funded increased by about 5 percentage points from 78% in 2004 to 83% in 2013. Similarly, the KFF/HRET Survey documented a 7 percentage point increase in workers covered by self-insured plans from 2004 to 2013. However, in a departure from an upward trend in the percentage of participants in self-insured or mixed-funded plans, 2013 saw a slight downturn in that percentage.

Figure 5. Distribution of Funding Mechanism, by Statistical Year

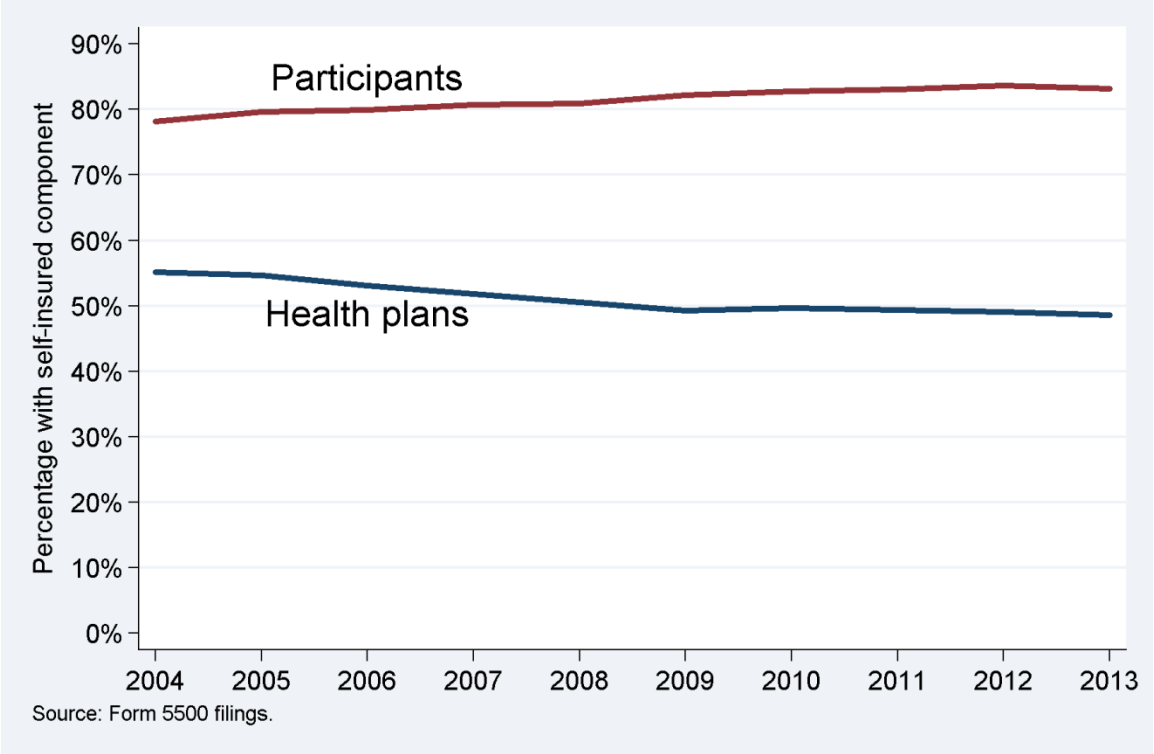


Table 8 provides additional details on the percentages underlying Figure 5, with separate series for the mixed-funded and self-insured categories. Table 9 further shows the corresponding plan and participant counts. The total number of health plans in each year was between approximately 46,000 and 50,000 and the number of participants was between approximately 61 million and 70 million.

Table 8. Distribution of Funding Mechanism, by Statistical Year

Statistical	Plans			Participants		
year	Fully insured	Mixed	Self-insured	Fully insured	Mixed	Self-insured
2004	44.9%	9.1%	46.0%	21.8%	37.5%	40.7%
2005	45.3%	8.9%	45.8%	20.3%	38.2%	41.4%
2006	46.9%	8.8%	44.3%	20.1%	38.1%	41.8%
2007	48.2%	8.6%	43.3%	19.3%	35.8%	44.9%
2008	49.5%	8.7%	41.9%	19.1%	36.3%	44.6%
2009	50.8%	8.5%	40.7%	17.8%	38.3%	43.9%
2010	50.3%	8.2%	41.6%	17.3%	38.1%	44.6%
2011	50.6%	8.2%	41.1%	17.0%	37.7%	45.3%
2012	51.0%	8.0%	41.1%	16.3%	37.4%	46.2%
2013	51.4%	8.2%	40.4%	16.9%	37.9%	45.2%

Source: Form 5500 health plan filings.

Table 9. Plans and Participants by Funding Mechanism, by Statistical Year

Statistical	Plans			Participants (millions)		
year	Fully insured	Mixed	Self-insured	Fully insured	Mixed	Self-insured
2004	20,337	4,116	20,863	13.3	22.8	24.7
2005	20,638	4,063	20,867	12.5	23.5	25.5
2006	21,668	4,056	20,491	12.7	24.1	26.5
2007	22,616	4,017	20,303	13.1	24.3	30.6
2008	22,347	3,916	18,921	13.0	24.7	30.3
2009	23,916	4,019	19,181	11.9	25.5	29.2
2010	24,811	4,027	20,511	11.8	25.9	30.4
2011	24,750	4,017	20,099	11.6	25.8	31.0
2012	25,178	3,946	20,290	11.3	25.9	32.0
2013	25,845	4,112	20,281	11.7	26.4	31.5

Source: Form 5500 health plan filings.

As also noted in past reports, Figure 5 poses a paradox: the share of plans that were mixed-funded or self-insured generally decreased between 2004 and 2013, but the share of participants in such plans increased (except in 2013). The paradox may be explained as follows. First, self-insurance has become less prevalent among relatively small plans and more prevalent among relatively large plans. Table 10 shows that from 2004 to 2013 the percentage of mixed-funded or self-insured plans with 100-499 participants decreased from 42% to 35%, whereas the corresponding percentage among plans with 500 or more participants increased from 66% to 72%. The trend toward full insurance among plans with 100-499 participants may have flattened out in recent years (Table 10). Second, the number of small plans in the data decreased: the number of plans with 0-99 participants reduced from 6,225 (14%) in 2004 to 4,630 (9%) in 2013. The analysis includes small plans only if they operated a trust, which tends to be associated with self-insurance. The trend toward fewer filings by small plans is thus consistent with a trend toward less mixed-funding or self-insurance among small plans. The combined result is that fewer plans are mixed-funded or self-insured, but those plans cover increasingly more participants.

Table 10. Distribution of Funding Mechanism, by Plan Size and Statistical Year

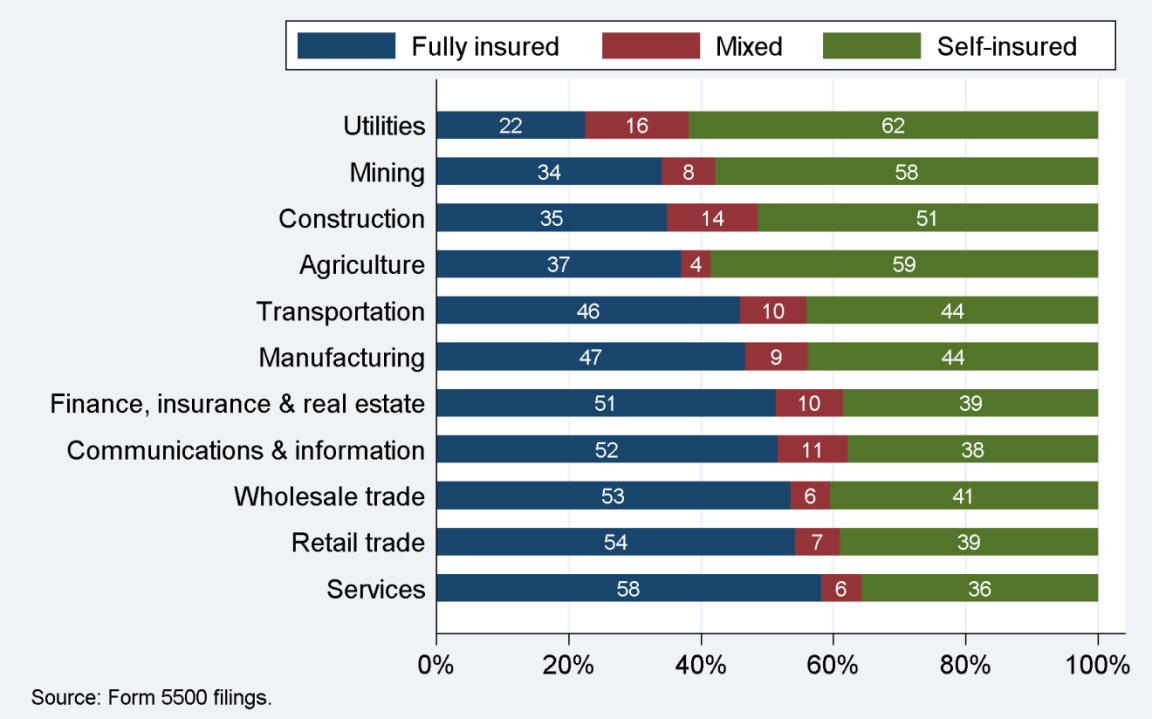
Statistical	Plans with 100-499 Participants			Plans with 500+ Participants		
year	Fully insured	Mixed	Self-insured	Fully insured	Mixed	Self-insured
2004	57.7%	3.8%	38.5%	33.8%	19.0%	47.2%
2005	58.4%	3.6%	38.0%	33.2%	19.3%	47.5%
2006	60.2%	3.5%	36.3%	33.2%	19.2%	47.6%
2007	61.7%	3.2%	35.1%	33.3%	19.1%	47.7%
2008	63.0%	3.2%	33.8%	32.8%	19.4%	47.8%
2009	64.2%	3.0%	32.9%	31.3%	20.4%	48.4%
2010	64.6%	2.9%	32.5%	29.7%	20.3%	50.0%
2011	64.6%	2.8%	32.6%	28.6%	20.6%	50.8%
2012	64.9%	2.8%	32.3%	28.4%	19.9%	51.7%
2013	65.2%	3.0%	31.8%	28.2%	20.4%	51.5%

Source: Form 5500 health plan filings.

Funding Mechanisms by Employer Type

Figure 6 shows the funding mechanism distribution by industry, as identified by the business code provided on Form 5500 filings. We present the percentage breakdown of plans by the funding mechanism for a classification of major industry groups. Plans in the utilities, agriculture, mining, and construction industries are the most likely to be mixed-funded or self-insured, whereas the services and wholesale trade industries are the most likely to be fully insured. Variations across industries in health plan sizes may contribute to the relationship between funding mechanism and industry.

Figure 6. Distribution of Funding Mechanism, by Industry (2013)

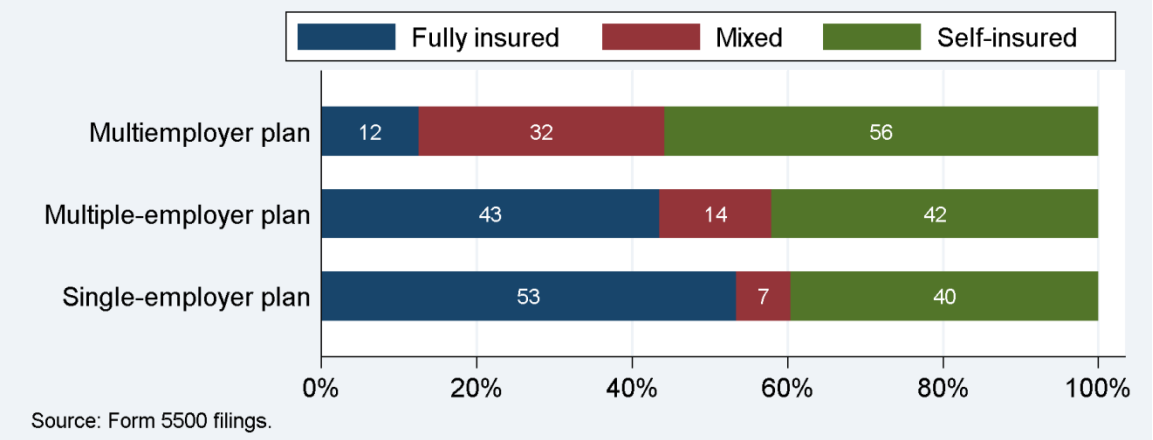


Source: Form 5500 filings.

Some industry patterns do not appear consistent with those documented by the KFF/HRET Survey. That study found that the agriculture/mining/construction industry had *lower* self-funding rates than other industries. The difference may be due to small plans, which were included in the KFF/HRET Survey but mostly excluded from our analysis.

Plans may be sponsored by a single employer or by multiple employers. Plans sponsored by a single employer file as a single-employer plan, whereas plans sponsored by multiple employers may file as either a multiemployer plan or a multiple-employer plan.[19] A multiemployer plan is maintained pursuant to one or more collective bargaining agreements, whereas a multiple-employer plan is generally not collectively bargained. Figure 7 shows that multiemployer plans are much more likely to choose a form of self-insurance than single-employer or multiple-employer plans. In 2013, 88% of multiemployer plans were self-insured or mixed-funded, compared with 57% of multiple-employer plans and 47% of single-employer plans.

Figure 7. Distribution of Funding Mechanism of Single-Employer, Multiple-Employer and Multiemployer Health Plans (2013)



Funding Mechanisms over the Life Cycle of Plans

We noted earlier that plans have tended to move toward full insurance over the past decade, whereas the fraction of participants in fully insured plans has generally been declining (Figure 5). Underlying this paradox is a divergence of smaller and larger plans: smaller plans have tended to move toward full insurance whereas larger plans have tended to move toward self-insurance (Table 10). In an attempt to gain a fuller understanding of these trends, we now turn to funding mechanisms over the life cycle of plans.

We would like to distinguish plans at the beginning of their life, at the end of their life, and during the years in between. For example, a central question for plans is whether the shift toward full insurance was caused by new plans (many fully

[19] The Form 5500 instructions refer to the formal definitions of each of these plan types. Also see http://www.bls.gov/ncs/ebs/sp/healthterms.pdf.

insured?), terminating plans (few fully insured?), established plans (net switch toward full insurance?), or a combination of factors. Unfortunately, Form 5500 filings contain incomplete information about the beginning and end of plans' lives:

- *New*: We identify the beginning of a plan's life cycle based on the Form 5500's "first return/report" check box.[20]
- *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.[21] Second, a plan may stop filing a Form 5500 without prior indication. Doing so does not necessarily imply that the plan terminated; it may have shrunk and become exempt or it may be non-compliant. 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."[22]
- *Established*: This category captures the middle of a plan's life cycle. Plans that were neither "new" nor "ceased filing" are labeled "established" plans.

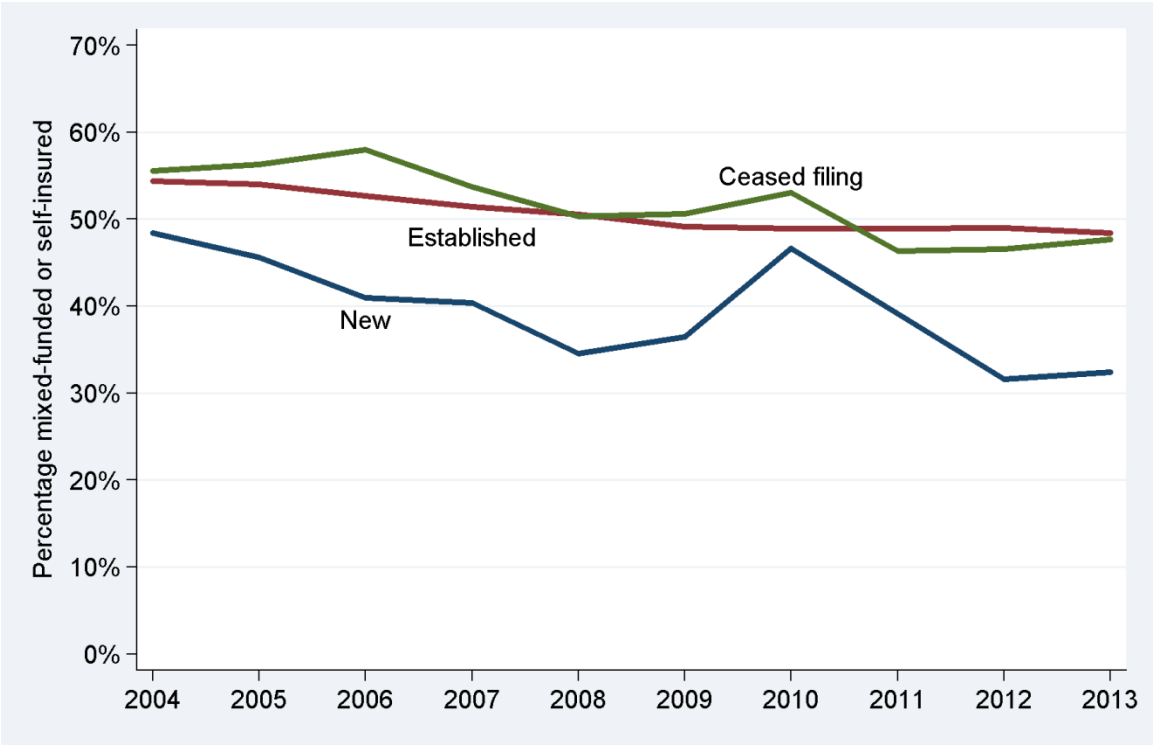
We will discuss plan-level and participant-level trends separately. Starting with plan-level developments, Figure 8 shows the mixed-funded or self-insured share of new plans, established plans, and plans that ceased filing. (Since most plans are established, the overall share is very close to the share among established plans.) New plans were more often fully insured than other plans, which helps explain the migration toward full insurance. Conversely, plans that ceased filing were more often mixed-funded or self-insured (less often fully insured) than other plans, which is also consistent with the trend toward full insurance for plans.

[20] Some plans never checked that 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.

[21] 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. Also see Figure 11 below.

[22] In terms of timing, if a plan indicated on its 2010 filing that it was terminating, we consider it as having ceased filing in 2010. If a plan submitted filings through 2010 but not in any later year, we consider it as having ceased filing in 2011.

Figure 8. Percentage Mixed-Funded or Self-Insured among New Plans, Established Plans, and Plans That Ceased Filing, by Statistical Year



Switch Rates

This section discusses funding mechanism switch rates among new and established plans.

Figure 9 shows the switch rate for new plans over time, i.e., funding mechanism changes between plans' first and second filings. Mixed-funded or self-insured plans were more likely to switch to full insurance than fully insured plans were to switch to a form of self-insurance. For example, 8.0% of plans that started in 2012 as mixed-funded or self-insured had switched to full insurance by 2013, compared with 4.9% of fully insured plans that had switched to mixed funding or self-insurance. (The overall switch rate among new plans is a weighted average of the rates shown in the figure.) Possibly because of relatively small numbers of mixed- or self-insured new plans, the switch rates are volatile.

Figure 9. Rates of Funding Switching among New Plans, by Statistical Year

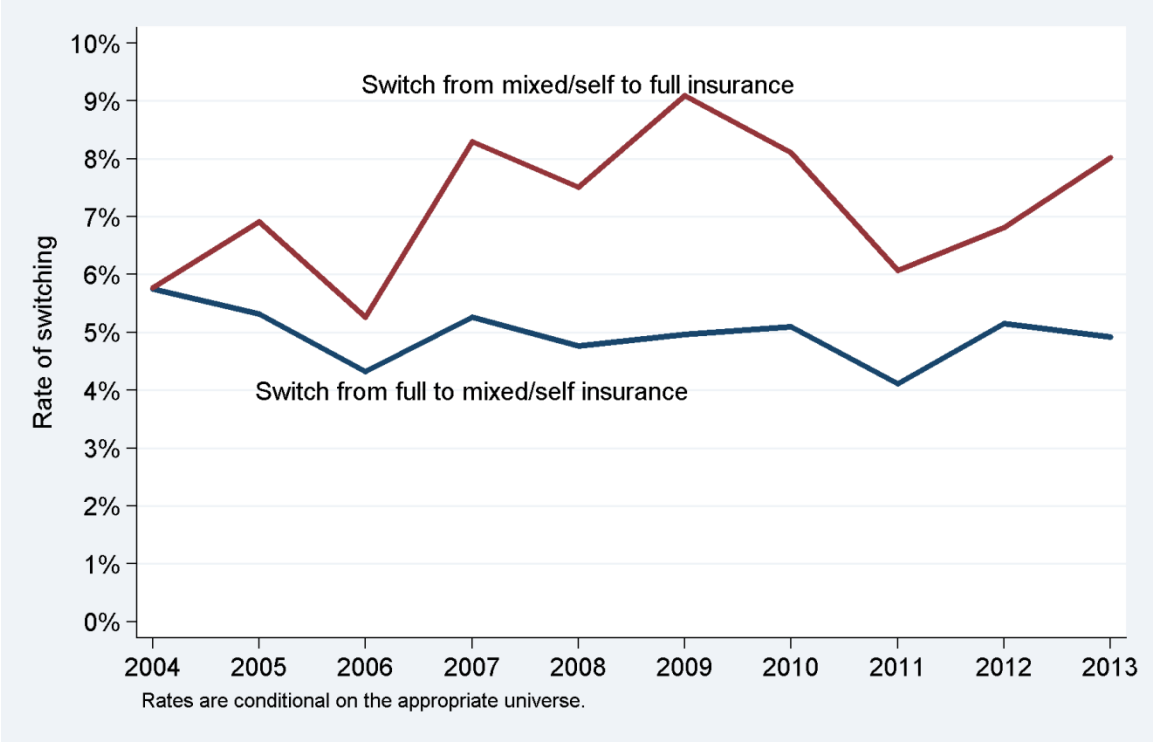
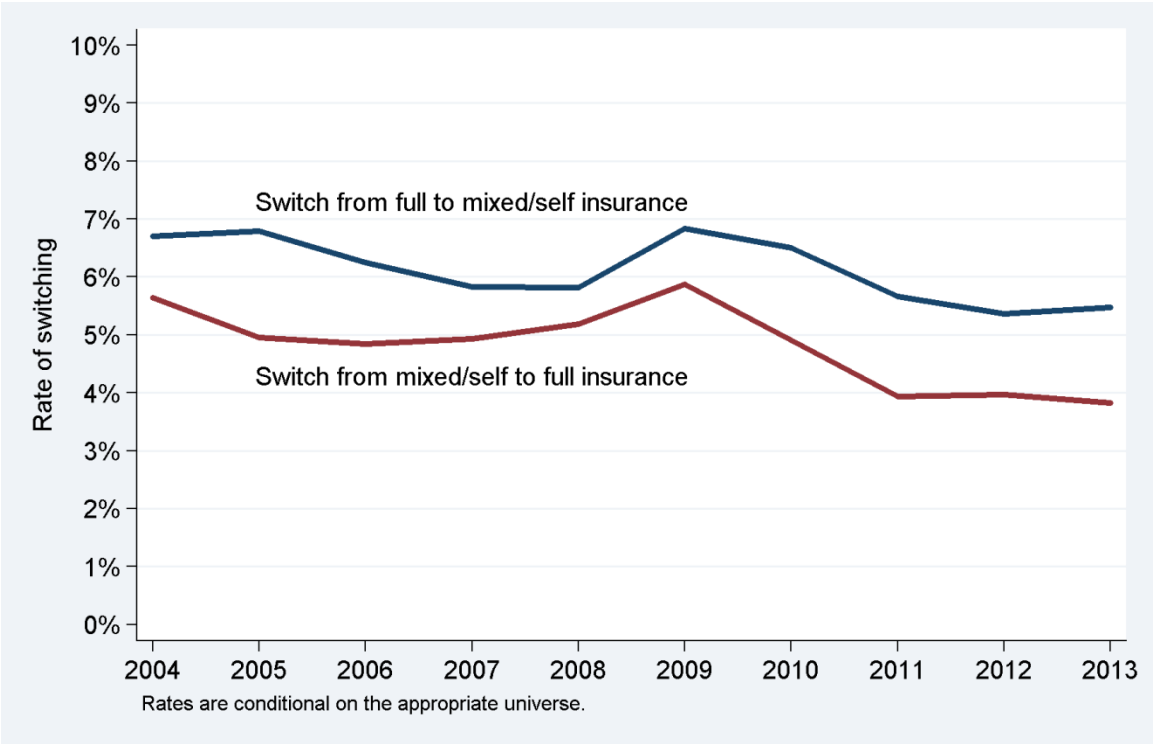


Figure 10 shows the switch rate for established plans over time. Compared with switch rates of new plans, the patterns are reversed with lower rates of switching to full insurance than to a form of self-insurance. For example, 3.8% of established plans that in 2012 were mixed-funded or self-insured had switched to full insurance by 2013, compared with 5.5% of fully insured plans that had switched to mixed funding or self-insurance.[23]

Figure 10. Rates of Funding Switching among Established Plans



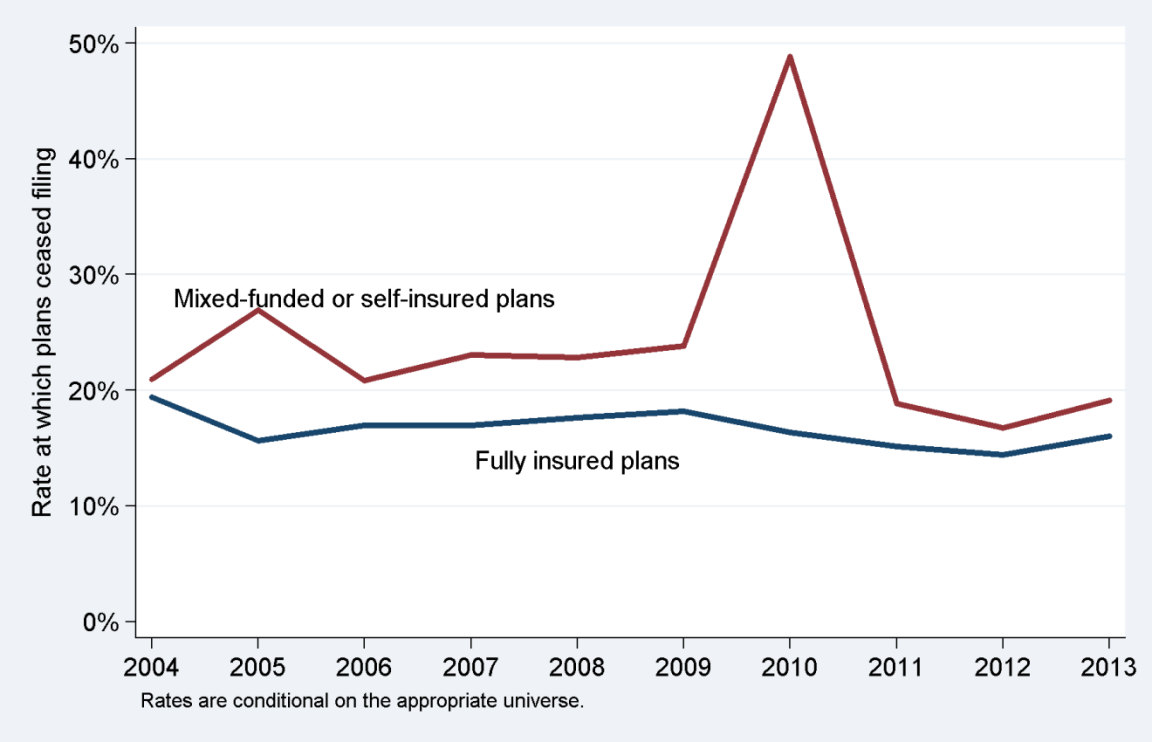
The switch rate patterns in the above two figures do not necessarily reflect flows of plans because of differences in the numbers of plans that are fully insured or mixed-funded/self-insured. Figure 9 above indicates that the switch rate among new plans toward full insurance was higher than away from full insurance. However, the majority of new plans were fully insured (Figure 8), so that the flows of plans approximately balanced out. The magnitude of the flows was small; on net, only one to two dozen new plans switched per year. Among established plans, the flows were larger and generally more plans switched toward self-insurance than away from it. In other words, switch patterns go counter to the overall trend in which an increasingly large fraction of health plans has become fully insured.

[23] Some plans appear to switch funding mechanisms more often than is plausible. In some cases, the issue is that two plans—one insured, one self-insured—are reported with the same EIN and PN. In other cases, incomplete or ambiguous information on Form 5500 filings may result in conflicting categorizations from one year to the next. The switching rates in Figure 10 may thus overstate true switching rates, but the net effect on plan flows should be approximately zero.

Rates at Which Plans Ceased Filing

Figure 11 shows the rates at which new 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 2004 to 2013, mixed-funded or self-insured new plans were more likely to cease filing than their fully insured counterparts.[24] (The overall rate at which new plans ceased filing is a weighted average of the rates shown in the figure.) In terms of absolute numbers, more mixed-funded or self-insured plans terminated over the first half of the period. Over the second half of the period, since most new plans were fully insured, more fully insured new plans terminated than mixed-funded or self-insured new plans.

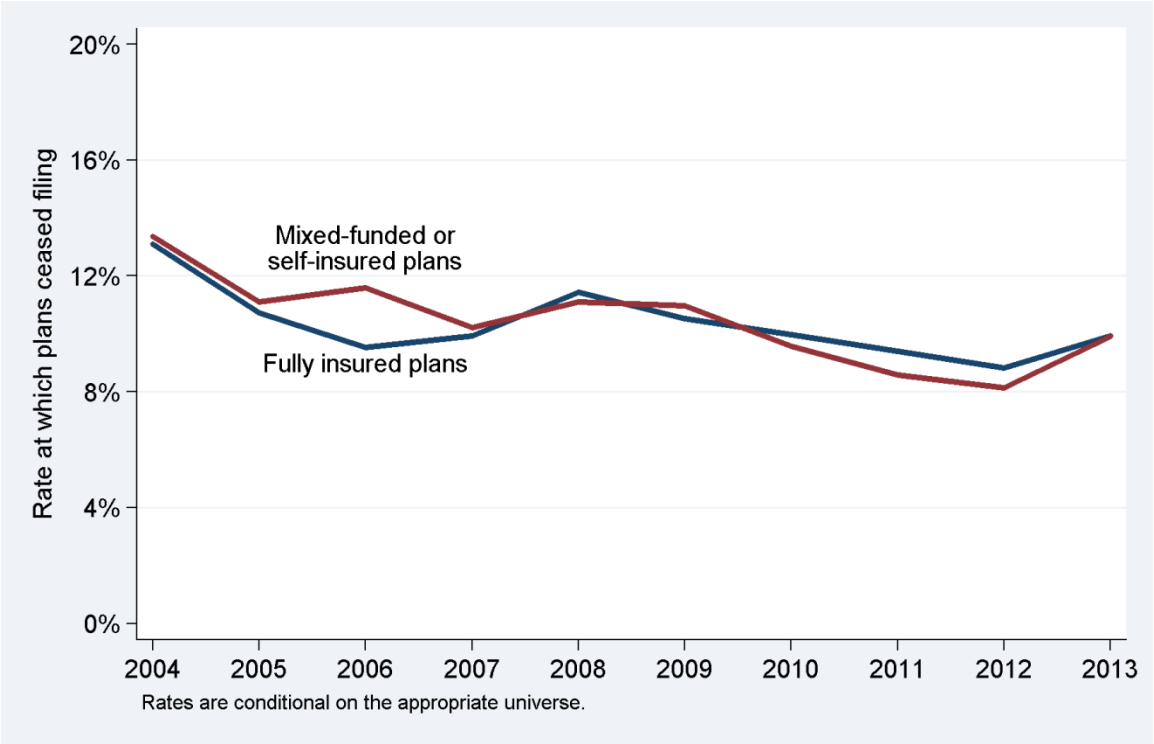
Figure 11. Rates at Which New Plans Ceased Filing



[24] The spike in 2010 appears to be an anomaly due to a single administrator who submitted more than 800 Form 5500 filings for small, self-insured plans in 2010 and checked both the first and final return/report boxes.

Similarly, Figure 12 shows that rates at which established fully insured plans ceased filing were generally close to those of mixed-funded or self-insured plans. Until 2009, since the majority of established plans were mixed-funded or self-insured, the net effect was to increase the fraction of fully insured plans. In 2010-2013, fully insured plans ceased filing in larger numbers than mixed-funded or self-insured plans.

Figure 12. Rates at Which Established Plans Ceased Filing



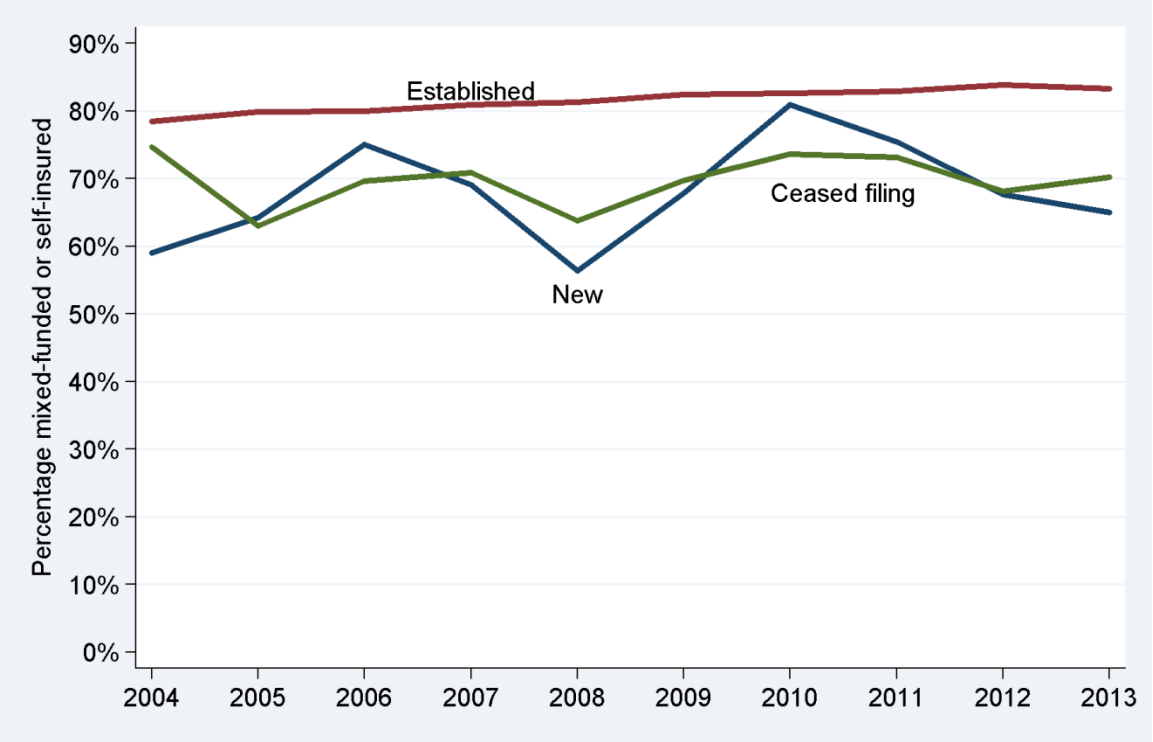
In conclusion, the increasing share of plans that are fully insured is mostly caused by new plans and, up to 2009, was amplified by patterns in the number of plans that ceased filing. The majority of new plans were fully insured. The net effect of changes in funding mechanism over the life cycle went in the opposite direction, with more plans switching toward mixed/self-insurance than toward full insurance. Up to 2009, more mixed-funded or self-insured plans ceased filing than fully insured plans did, but that pattern reversed starting in 2010. Indeed the trend toward a greater fraction fully insured plans slowed starting in 2010 (see Figure 5 and Table 8).

Small and Large Plans Behaved Differently

The discussion above generally ignored plan size. However, while the overall fraction of plans that are fully insured has risen over time, the fraction of participants covered by those fully insured plans has moved in the opposite direction (Figure 5 and Table 8). Indeed small and large plans followed different patterns, as demonstrated in this section.

Figure 13 shows the percentage of participants who were covered by a mixed-funded or self-insured plan, by plan life cycle stage, from 2004 to 2013. It is the participant-weighted counterpart of Figure 8. Mirroring the pattern among plans, participants in new plans were generally less likely to be in mixed-funded or self-insured plans than those in established plans. However unlike in Figure 8, participants in plans that ceased filing were also less likely to be in mixed-funded or self-insured plans than those in established plans, pointing at funding mechanism switching as the main cause of the decline of self-insurance among participants.

Figure 13. Participant-Weighted Percentage Mixed-Funded or Self-Insured among New Plans, Established Plans, and Plans That Ceased Filing, by Statistical Year



Before turning to switching patterns, consider that most participants are covered by large plans (Table 2 and Table 11).[25] We restrict the analysis to 2009-2013. Only 2% of new plans covered 5,000 or more participants, but those plans accounted for 55% of participants in all new plans. Among established plans, 65% 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.

[25] Table 11 shows that 1.6% of new plans in 2009-2013 had 5,000 or more participants. 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, many plans that ceased filing may have been replaced with other plans and secured continuing health benefit coverage for their participants.

Table 11. Distribution of Health Plans and Plan Participants, By Plan Participant Counts (2009-2013)

Participants	New Plans		Established Plans		Plans That Ceased Filing	
in plan (EOY)	Plans	Participants	Plans	Participants	Plans	Participants
Zero	2.5%	0.0%	0.3%	0.0%	25.2%	0.0%
1-99	15.0%	0.9%	9.6%	0.3%	26.6%	2.6%
100-199	48.9%	10.7%	30.4%	3.1%	21.3%	5.9%
200-499	21.0%	10.1%	30.6%	6.7%	15.7%	9.5%
500-999	5.9%	6.5%	12.3%	6.1%	5.5%	7.5%
1,000-1,999	3.1%	6.9%	7.3%	7.3%	2.7%	7.5%
2,000-4,999	2.1%	10.4%	5.2%	11.5%	1.8%	10.9%
5,000+	1.6%	54.6%	4.1%	65.0%	1.3%	56.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Form 5500 health plan filings.

Table 12 shows the annual rate of funding mechanism switching among new and established plans. Overall, 5% of plans that started as fully insured switched to mixed-funded or self-insured during their second reporting period, but large plans were much more likely to make that switch than small plans. For example, more than 28% of fully insured new plans with 2,000 or more participants changed funding mechanism, compared with less than 8% of plans with fewer than 1,000 participants. Conversely, small plans that started life as mixed-funded or self-insured were more likely to switch to fully insured than their larger counterparts. A similar pattern existed among established plans. Since most participants are in large plans, the implication is that, on net, participants in both new and established plans migrated to mixed-funded or self-insured plans.

Table 12. Annual Rates of Funding Switching among New and Established Plans, by Plan Size (2009-2013)

	New Plans		Established Plans	
EOY plan participants	Switch to mixed or self-insured	Switch to fully insured	Switch to mixed or self-insured	Switch to fully insured
Zero	7.2%	4.3%	10.3%	7.9%
1-99	4.8%	3.9%	5.5%	3.1%
100-199	3.2%	10.8%	3.7%	7.6%
200-499	5.7%	10.9%	5.4%	5.9%
500-999	7.3%	5.8%	8.9%	3.9%
1,000-1,999	15.3%	7.9%	13.4%	3.0%
2,000-4,999	28.0%	3.1%	18.3%	2.1%
5,000+	28.6%	1.2%	23.6%	1.3%
All	4.9%	7.5%	6.1%	4.7%

Source: Form 5500 health plan filings.

Note: Rates are conditional on the appropriate universe.

Rates at which plans ceased filing also varied by plan size (Table 13), with small plans much more likely to stop filing in 2009-2013 than large plans.[26] Among plans with 5,000 or more participants, fully insured plans ceased filing at a higher rate than mixed-funded or self-insured plans. On net, filing cessations affected participants in mixed-funded or self-insured plans less than those in fully insured plans (Figure 13).

Table 13. Annual Rates at Which New and Established Plans Ceased Filing, by Plan Size (2009-2013)

	New Plans		Established Plans	
BOY plan participants	Mixed or self-insured	Fully insured	Mixed or self-insured	Fully insured
Zero	85.3%	83.0%	49.5%	44.7%
1-99	51.9%	35.6%	19.8%	23.1%
100-199	19.7%	15.4%	11.3%	10.7%
200-499	13.1%	10.2%	7.4%	7.5%
500-999	14.0%	12.6%	6.7%	7.4%
1,000-1,999	8.4%	12.1%	5.4%	6.6%
2,000-4,999	4.0%	6.5%	5.0%	6.9%
5,000+	5.1%	12.9%	4.6%	5.9%
All	28.1%	16.0%	9.4%	9.7%

Source: Form 5500 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 emphasizing this trend, large fully insured plans were more likely to cease filing than large mixed-funded or self-insured plans.

Stop-Loss Coverage of Plans

Table 14 examines the presence of stop-loss insurance. These figures must be interpreted with caution. 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.[27] 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. The figures in Schedule A (and Table 14) thus likely understate the prevalence of stop-loss insurance.[28,29] In 2013, approximately 16% of mixed-funded and 26% of

[26] Given the focus on the end of the life cycle, Table 13 categorizes plans by the number of participants at the beginning (rather than the end) of the reporting period.

[27] No Schedule A can be attached to a Form 5500-SF and our analysis assumes that none of the Form 5500-SF (1,068 of 20,281 self-insured plans, or 5%) filers have stop-loss insurance.

[28] We found little persistent difference in Form 5500-reported stop-loss coverage among plans that were funded through a trust compared to coverage among plans without trust funding. Separately 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

self-insured plans reported stop-loss coverage in a Schedule A, down from 2005 rates of 22% and 31%, respectively. Weighting by the number of participants, approximately 14% of mixed-funded and 14% of self-insured plans reported stop-loss coverage for 2013, indicating that smaller plans are more likely to mistakenly report stop-loss insurance purchased for the benefit of the employer or more likely to purchase stop-loss insurance than larger plans. We note that the participant-weighted figures are historically more volatile than unweighted figures.[30]

Table 14. Percentage of Health Plans Reporting Stop-Loss Insurance, by Funding Mechanism and Statistical Year

Statistical	Plans		Participants	
year	Mixed	Self-insured	Mixed	Self-insured
2004	20.8%	30.6%	20.7%	19.8%
2005	21.7%	30.8%	14.2%	19.0%
2006	21.4%	31.1%	14.5%	25.8%
2007	21.3%	30.5%	13.9%	22.4%
2008	20.6%	30.7%	12.7%	16.4%
2009	18.8%	28.2%	16.4%	16.0%
2010	17.5%	26.4%	15.0%	15.1%
2011	16.7%	26.5%	14.0%	14.7%
2012	16.2%	26.6%	13.5%	14.3%
2013	16.1%	26.0%	13.6%	14.1%

Source: Form 5500 health plan filings.
Note: Reflects stop-loss coverage only insofar reported on Form 5500.

Table 15 shows the annual per-person cost 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.

for the benefit of the plan sponsor. Those stop-loss coverage levels are consistent with those in the 2013 KFF/HRET study, which found that 59% of participants in self-funded plans at firms with 200 or more workers were in a plan that had purchased stop-loss insurance in 2013. See http://ehbs.kff.org.

[29] Conversely, reported stop-loss insurance does not necessarily relate to health benefits but could protect other self-insured benefits, such as disability benefits.

[30] A single, very large, self-insured plan with 1.8 million participants reported purchasing stop-loss insurance in 2006 and 2007, but not in other years. As a result, the fraction of participants in self-insured plans with stop-loss insurance was elevated in those years.

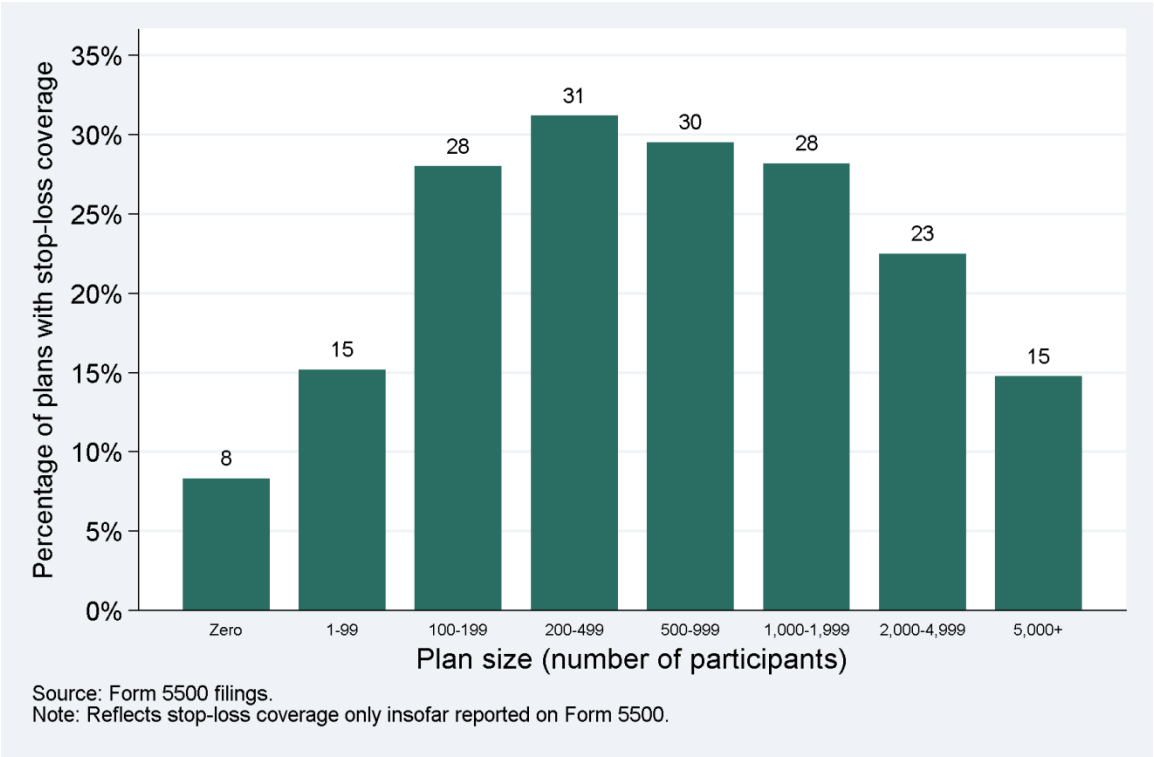
Table 15. Per-Person Annual Premiums for Stop-Loss Insurance

Statistical year	Mixed-funded ($)			Self-insured ($)		
	25th pct	Median	75th pct	25th pct	Median	75th pct
2004	102	247	466	135	439	882
2005	104	251	495	160	482	913
2006	115	281	517	178	510	980
2007	93	260	505	175	522	997
2008	102	287	535	189	564	1,067
2009	137	314	577	202	580	1,105
2010	150	331	605	210	571	1,095
2011	155	335	641	230	604	1,155
2012	153	338	641	259	640	1,233
2013	170	409	767	272	684	1,314

Source: Form 5500 health plan filings.
Note: Reflects stop-loss coverage only insofar reported on Form 5500.

Figure 14 shows the rate of stop-loss coverage among self-insured plans by plan size. Stop-loss coverage increases with plan size up to 200-499 participants and decreases with plan size among larger plans.

Figure 14. Self-Insured Health Plans' Rate of Stop-Loss Coverage, by Plan Size (2013)



Source: Form 5500 filings.
Note: Reflects stop-loss coverage only insofar reported on Form 5500.

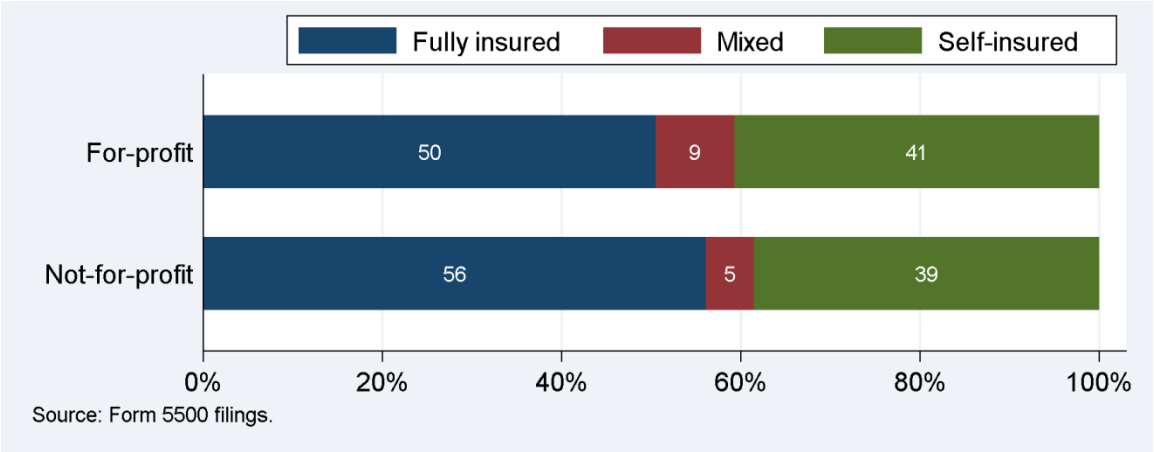
Lower stop-loss coverage for smaller plans is not consistent with the notion that smaller plans face greater financial risks and should thus be more likely to purchase stop-loss coverage. Part of the explanation may relate to the fact that stop-loss coverage with the sponsor (rather than the plan) as 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 small plans may also reflect market realities: insurance companies may not offer stop-loss insurance to small employers, or offer it only at very high rates. The KFF/HRET Survey also showed lower stop-loss coverage rates among small and large plans than among mid-sized plans.

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. Approximately 20% of plans were found to be sponsored by a not-for-profit entity. Figure 15 presents the breakdown in funding status for for-profit and not-for-profit firms. One-half (50%) of plans sponsored by for-profit organizations were self-insured or mixed-funded, compared with 44% of plans sponsored by not-for-profit organizations. Weighted by participants, not-for-profit organizations were much more likely to have self-insured plans and much less likely to have mixed-funded plans than for-profit firms (not shown in figure).

Figure 15. Distribution of Funding Mechanism, by For-Profit and Not-for-Profit Sponsors (2013)



Focusing on the subset of Form 5500 health plan filers that could be matched to financial information in Capital IQ, Table 16 presents 2013 information on company size as measured by revenue, market capitalization, net income, and number of employees. 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 16. Characteristics of Companies Matched to Form 5500 Health Plan Filings, by Funding Mechanism (2013)

		All	Fully insured	Mixed	Self-insured
Revenue (in $ millions)	25 pct	300	108	1,368	476
	Median	1,241	300	3,865	1,388
	75 pct	5,146	1,345	12,104	5,295
	# Obs	4,220	1,334	1,002	1,884
Market capitalization (in $ millions)	25 pct	476	207	1,943	640
	Median	2,049	755	5,781	2,266
	75 pct	8,229	2,693	21,521	8,091
	# Obs	3,550	1,129	842	1,579
Net income (in $ millions)	25 pct	4	-7	35	11
	Median	65	12	216	86
	75 pct	355	114	958	359
	# Obs	4,235	1,338	1,004	1,893
Number of employees	25 pct	914	317	4,130	1,290
	Median	3,630	904	12,200	4,119
	75 pct	14,508	3,978	34,700	14,000
	# Obs	3,931	1,238	945	1,748

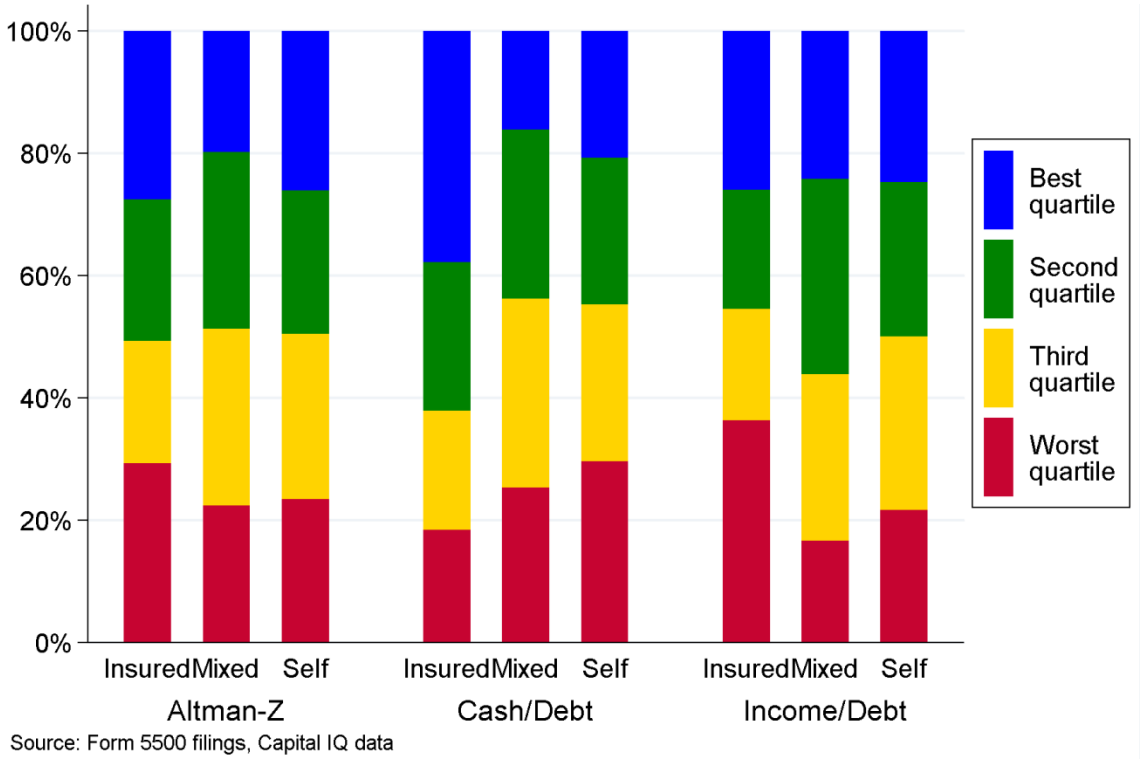
Source: Form 5500 health plan filings and Capital IQ data.

Figure 16 presents three metrics of the financial health of matched companies: the Altman Z-Score, the ratio of cash flow over total debt, and the ratio of operating income over total debt. For all three, higher values suggest better financial health. We grouped all matched plans into quartiles and show in Figure 16 what share of fully insured, mixed-funded, or self-insured plans fall into each quartile. For example, consider the Altman Z-Score, an index summarizing five financial measures that are used to predict bankruptcy risk. A company with a Z-Score greater than 2.99 is considered to be in a "safe" zone, one with a score between 1.80 and 2.99 in a "grey" zone and a company with score less than 1.80 to be in a "distress" zone.[31] The 25th percentile of Altman Z-Scores of plan sponsors in our analysis was 1.75, i.e., companies in the bottom quartile were considered to be in the "distress" zone. If financial health were unrelated to funding mechanisms, all bars would be equal-sized. Instead, 29% of fully insured sponsors were in the bottom quartile, compared with 22% of mixed-funded and 24% of self-insured sponsors; see the red bars in Figure 16. Based on how frequently their Altman Z-Scores are in the bottom quartile,

[31] Altman, E.I. (1968). "Financial Ratios, Discriminant Analysis and the Prediction of Corporate Bankruptcy." *Journal of Finance* 23(4): 589-609.

mixed-funded and self-insured companies thus appear to be in better financial health than fully insured companies.[32]

Figure 16. Financial Health of Companies Matched to Form 5500 Health Plan Filings, by Funding Mechanism (2013)



Source: Form 5500 filings, Capital IQ data

The results are mixed for the other two metrics of financial strength. The ratio of operating income over total debt again suggests that mixed-funded and self-insured sponsors are in better financial health than fully insured sponsors, but the ratio of cash flow to total debt points to the opposite conclusion. 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) than mixed-funded or self-insured plans.

[32] Fully insured sponsors are overrepresented not only in the bottom quartile, but also in the top quartile. The discussion focuses on the bottom quartile because that relates more directly to the risks that large medical claims pose to the continuity of the plan sponsor.

Table 17 shows the percentages and sample sizes corresponding to Figure 16.

Table 17. Financial Health of Companies Matched to Form 5500 Health Plan Filings, by Funding Mechanism (2013)

		All	Fully insured	Mixed	Self-insured
Altman Z-Score	Best quartile	25.0%	27.6%	19.8%	26.1%
	Third quartile	24.7%	23.1%	28.9%	23.4%
	Second quartile	25.3%	20.0%	28.9%	27.1%
	Worst quartile	25.1%	29.4%	22.4%	23.5%
	# Obs	3,070	980	782	1,308
Cash from operations over total debt	Best quartile	25.0%	37.7%	16.1%	20.7%
	Third quartile	25.0%	24.4%	27.6%	24.0%
	Second quartile	24.9%	19.4%	30.9%	25.6%
	Worst quartile	25.1%	18.5%	25.4%	29.7%
	# Obs	4,213	1,333	1,000	1,880
Operating income over total debt	Best quartile	25.0%	26.0%	24.2%	24.7%
	Third quartile	25.0%	19.4%	31.9%	25.3%
	Second quartile	24.9%	18.2%	27.3%	28.3%
	Worst quartile	25.1%	36.4%	16.6%	21.7%
	# Obs	4,232	1,337	1,004	1,891

Source: Form 5500 health plan filings and Capital IQ data.

6. 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 offer an opportunity 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 and generally started prior to 2010.

First, 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 that no conclusions should be drawn based on this report with respect to small employers.

Second, since at least 2004, plans with fewer than 500 participants have tended to move toward full insurance, whereas larger plans migrated toward self-insurance or mixed-funding. These patterns continued into 2013, though the fraction of participants in self-insured or mixed-funded plans did not increase from 2012 to 2013, as it had from 2004 through 2012. It is too early to tell whether the observed divergence between smaller and larger plans is leveling out.

Third, the trend toward less stop-loss coverage (insofar reported on Form 5500 filings) similarly continued but slowed for mixed-funded plans. It is unclear whether these findings reflect trends in overall stop-loss coverage—Form 5500 filings are known to capture only a subset of stop-loss coverage.

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 18.

Table 18. Data Fields Used to Determine Plan Funding Type

Source	Description
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
Form 5500, Line 5	Total number of participants at the beginning of the plan year
Form 5500, Line 6d	Number of participants at the end of the plan year who are active, retired, separated, or retired/separated and entitled to future benefits
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

Source	Description
Schedule A, Line 8	Type of benefit and contract types. A. Health (other than dental or vision), J. HMO contract, K. PPO contract, L. Indemnity contract, M. Other and other codes for stop-loss, dental, vision, life, disability, etc. More than one may be checked.
Schedule A, Line 8m	Description of “Other” benefit and contract type.
Schedule A, Line 6b	Premiums paid to carrier
Schedule A, Line 9a4	Total earned premium amount for experience-rated contracts
Schedule A, Line 9b3	Incurred claims
Schedule A, Line 9b4	Claims charged
Schedule A, Line 10a	Total premiums or subscription charges paid to carrier for nonexperience-rated contracts
Schedule H, Line 2e4	Total benefit payments
Schedule I, Line 2e	Benefits paid (including direct rollovers)

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