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SELF-INSURED HEALTH BENEFIT PLANS 2015
Based on Filings through Statistical Year 2012

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CONTENTS

1. Introduction and Summary 1

2. Technical Note: Methodological Changes from the 2014 Report 3

3. Data Sources 4
Form 5500 Filings of Health Benefit Plans 4
Financial Information from the Form 990 and Capital IQ 8
Matching Form 5500 Filings and Capital IQ Records 9

4. The Definition of Self-Insurance 12

5. Analysis 16
Funding Mechanisms for Plans and Participants 16
Funding Mechanisms by Plan Size 17
Funding Mechanisms by Year 19
Funding Mechanisms by Employer Type 21
Funding Mechanisms of New Plans 22
Funding Mechanism Switching by Existing Plans 24
Stop-Loss Coverage of Plans 25
Funding Mechanisms and Financial Metrics 28

6. Conclusion 32

Technical Appendix 33

Disclaimer 35

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 2015 *Report to Congress*.

As required by the ACA, the primary data source for this document is the information provided 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 2003-2012. The report therefore may reflect any early adjustments to health benefits that businesses made in response to the signing of the ACA in March 2010.

This report updates the *Self-Insured Group Health Plans 2014* report ("2014 Report") with a slightly more inclusive analysis population and a switch from beginning-of-year (BOY) to end-of-year (EOY) plan participant counts. These changes improve consistency with related DOL analyses and result in more current information. 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 2012. The percentage of plan participants covered by such plans was 84%. These figures were virtually unchanged from the prior year. The percentage of self-insured plans remained at 41% and the percentage of mixed-funded plans remained at 8%.
- The share of self-insured or mixed-funded Form 5500 filing health plans declined from 56% in 2003 to 49% in 2012. However, over the same period, the fraction of plan participants covered by self-insured or mixed-funded plans increased from 78% to 84%. This paradox is explained by a trend toward less mixed-funding or self-insurance among relatively small plans and toward more 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 27% in 2012. This fraction had been stable at 30%-31% in 2003-2008. Stop-loss coverage among mixed-funded plans was 21%-22% from 2003 to 2008, but had declined to 16% by 2012. As

[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.

discussed on pages 15 and 25, these percentages may underestimate the prevalence of stop-loss insurance.

- Most Form 5500 filing plans with fewer than 100 participants were self-insured in 2012. 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 2012, compared with 91% of plans with 5,000 or more participants. Last year's percentages were similar: 30% and 91%, respectively.
- Larger plans that filed a Form 5500 were more likely to be mixed-funded than smaller plans. For example, 2% of plans with 100-199 participants were mixed-funded in 2012, compared with 46% of plans with 5,000 or more participants. These fractions are unchanged from last year.
- Multiemployer and multiple-employer plans were more likely to self-insure than single-employer plans. In 2012, 87% 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%, 58%, 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 are those of the authors and 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 2014 REPORT

To provide more current health plan information and for consistency with other EBSA analyses, this report tabulates plan participant counts as measured at the end of the plan year (EOY). In contrast, the 2011-2014 Reports tabulated participants as of the beginning of the plan year (BOY). While the current report's cross-sectional participant tabulations cannot be directly compared to similar tables in the 2011-2014 Reports, historical trends in the current report are consistently based on EOY participants.

Separately, for consistency with related analyses and greater clarity on the population of Form 5500 filers, the current report refines the criteria used to identify the analysis population. Many health plans file a Form 5500 even though the Form 5500 Instructions exempt them from filing requirements. The 2011-2014 Reports applied various criteria to exclude these voluntary filers and the current report refines those criteria. The following changes to exclusion criteria were applied since the production of the 2014 Report:

- The 2014 Report excluded plans with zero, one, or missing BOY participants. It also excluded plans with zero EOY participants. To be consistent with Appendix A of the Secretary's Self-Insured Group Health Plans Report, the current report does not apply those exclusions.
- The 2014 Report excluded plans with fewer than 100 BOY participants except if the plan filed a Form 5500-SF, a Schedule H, or a Schedule I. The current report refines the exception, requiring that at least one of the key financial fields on the Form 5500-SF or Schedule H/I be populated with a non-zero value. For this purpose, key financial fields are total assets (BOY, EOY), total liabilities (BOY, EOY), total income, and total expenses.[2]
- The 2014 Report excluded terminating plans, whereas the current report does not.

These refinements added approximately 1,650 plans (3.4%) with 0.7 million (1.0%) participants to the 2012 analysis filings.

[2] Specifically, the key financial fields are Form 5500-SF Lines 7a, 7b, 8c, and 8h; Schedule H Lines 1f, 1k, 2d, and 2j; and Schedule I Lines 1a, 1b, 2d, and 2j.

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 (2012 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 the Instructions for Form 5500. 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. 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. Separate Forms 5500 must be 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 company, the type of benefits provided (pension, health, disability, life insurance, etc.), the funding and benefit arrangements, and the number of plan participants. Some or all plan benefits may be 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,

[3] For the purpose of this report, only health benefits are relevant. However, 84% of 2012 Form 5500 health plan filings reported on both health and other types of benefits (dental, vision, et cetera).

etc.). If the plan operates 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. This report's analysis includes 1,066 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 1 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 2012, i.e., for filings with a reporting period that ended in 2012. Throughout this report, participants may include active and retired employees, but will exclude dependents. For 2012, the analysis is based on more than 50,000 plans that together covered almost 70 million participants.[4]

Table 1. Distribution of Health Plans and Health Plan Participants, By Plan Participant Counts (2012)

Participants in plan	Plans	Percent	Participants (millions)	Percent
Zero	1,307	2.6%	0.0	0.0%
1-99	3,292	6.6%	0.1	0.2%
100-199	15,680	31.2%	2.3	3.3%
200-499	15,481	30.8%	4.8	6.9%
500-999	6,182	12.3%	4.3	6.2%
1,000-1,999	3,628	7.2%	5.1	7.3%
2,000-4,999	2,608	5.2%	8.1	11.6%
5,000+	2,031	4.0%	45.1	64.6%
Total	50,209	100.0%	69.8	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 operate 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.

[4] 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 namely reflect multiple welfare benefit types, and some participants may opt out of health benefits. For example, a firm may provide long-term disability benefits to 500 employees and health benefits to only 400 employees.

Plans with fewer than 100 participants accounted for 9% of plans in our analysis.[5] Almost two-in-three 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 2003 through 2012. As shown in Figure 1 and its underlying counts in Table 2, each statistical year includes between approximately 46,000 and 50,000 plans providing health benefits. The number of participants ranged from approximately 61 million to 70 million per year. Between 2003 and 2012, the number of plans has generally been increasing.[6] The number of participants in these plans has likewise generally increased.

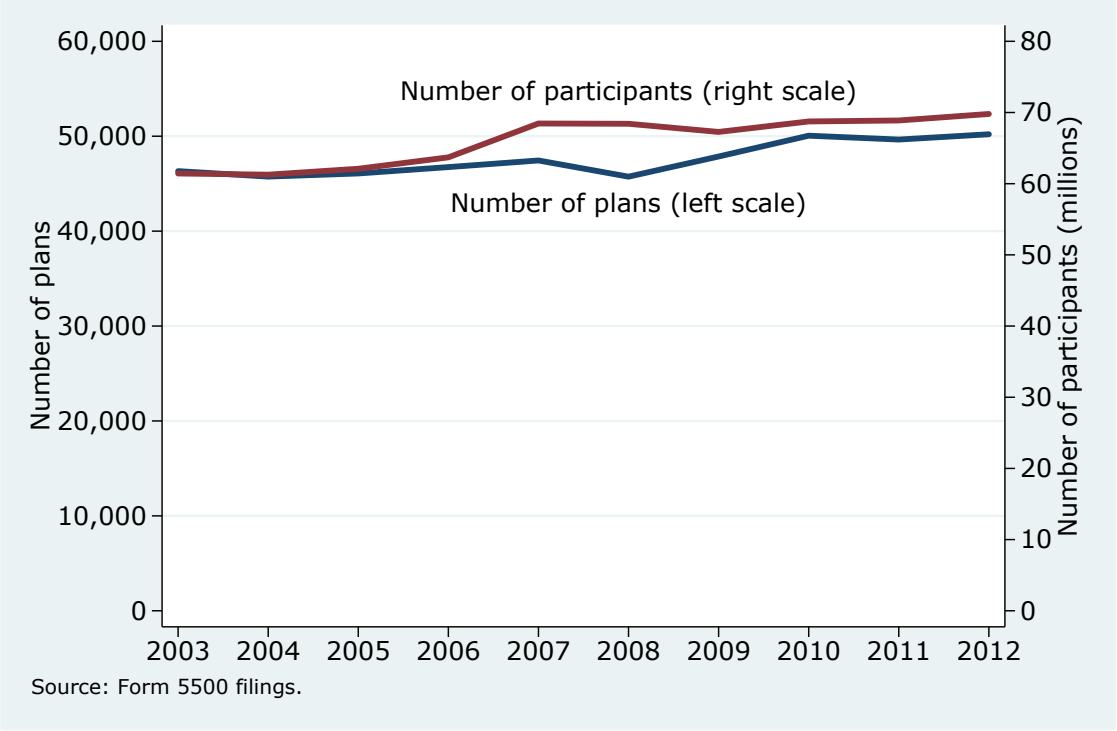

Figure 1. Health Plans and Participants, by Statistical Year

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

[6] 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.

Table 2. Health Plans and Participants, by Statistical Year

Statistical year	Plans	Participants (millions)
2003	46,326	61.4
2004	45,750	61.3
2005	46,080	62.1
2006	46,751	63.7
2007	47,446	68.5
2008	45,740	68.4
2009	47,865	67.3
2010	50,057	68.7
2011	49,651	68.9
2012	50,209	69.8

Source: Form 5500 health plan filings.

Table 3 shows the fraction of health plan filings that could be matched to their corresponding filing in the previous year. While generally in the 82%-87% range, this fraction dropped substantially 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 3 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 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*	Fraction matched to a plan in *t-1*	Year-on-year increase		
			25th pct	Median	75th pct
2003	46,326	81.8%	-9.1%	-0.3%	7.0%
2004	45,750	84.6%	-6.9%	0.0%	8.2%
2005	46,080	84.8%	-6.7%	0.4%	8.5%
2006	46,751	84.2%	-5.9%	0.8%	9.1%
2007	47,446	84.8%	-6.2%	0.8%	9.1%
2008	45,740	86.0%	-7.7%	0.2%	8.2%
2009	47,865	79.2%	-12.0%	-2.1%	5.3%
2010	50,057	82.3%	-8.6%	-0.7%	6.0%
2011	49,651	87.1%	-6.8%	0.0%	7.0%
2012	50,209	87.0%	-5.8%	0.5%	8.1%

Source: Form 5500 health plan filings.
Note: Fractions matched 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 this question, 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 2012 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.[7]

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 2012 includes 50,209 filings of which 9,082 (18%) had sponsors that filed a Form 990 and were thus identified as not-for-profit. They accounted for 14.5 million participants, or 21% 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.[8] Our extract from its database contains information on the 2012 financial

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[7] 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, 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.

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

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 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.[9]

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.

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[9] Some issues arose in the process. While about 11% of Capital IQ records do not contain a CIK, about 7% contain multiple CIKs. Also, some CIKs were found to be linked to multiple EINs. These were incorporated in the analysis.

Corporate fiscal years need not correspond to health plan reporting periods. In an effort to accurately match 2012 Form 5500 health plan filings with their sponsor's corresponding 2012 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, 2012 to December 31, 2012, but a fiscal year that ran from April 1, 2012 to March 31, 2013. Under these circumstances, we would match the Form 5500 health plan filing ending December 31, 2012 with the Capital IQ financial information for fiscal year ending March 31, 2013.

Table 4 shows that we matched 4,320 plans, or about 9% of the plans in the 2012 Form 5500 health plan data.[10] This is the set of companies that appear in our matched analyses to follow. The 4,320 plans cover 26 million participants or 37% of all participants in the Form 5500 health plan data.

Table 4. Form 5500 Health Plan Filings Matched with Financial Information, by Plan Size (2012)

	Plans			Participants		
Number of participants	Number	Percent	Match rate	Number (millions)	Percent	Match rate
Zero	99	2.3%	7.6%	0.0	0.0%	
1-99	74	1.7%	2.2%	0.0	0.0%	3.1%
100-199	487	11.3%	3.1%	0.1	0.3%	3.1%
200-499	822	19.0%	5.3%	0.3	1.0%	5.6%
500-999	684	15.8%	11.1%	0.5	1.9%	11.5%
1,000-1,999	609	14.1%	16.8%	0.9	3.4%	17.3%
2,000-4,999	702	16.3%	26.9%	2.3	8.7%	27.9%
5,000+	843	19.5%	41.5%	22.0	84.7%	48.9%
Total	4,320	100.0%	8.6%	26.0	100.0%	37.2%

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

[10] 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.

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 5 shows that 45,889 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 5. Form 5500 Health Plan Filings Not Matched with Financial Information, by Plan Size (2012)

	Plans			Participants		
Number of participants	Number	Percent	Non-match rate	Number (millions)	Percent	Non-match rate
Zero	1,208	2.6%	92.4%	0.0	0.0%	
1-99	3,218	7.0%	97.8%	0.1	0.3%	96.9%
100-199	15,193	33.1%	96.9%	2.2	5.0%	96.9%
200-499	14,659	31.9%	94.7%	4.5	10.4%	94.4%
500-999	5,498	12.0%	88.9%	3.8	8.7%	88.5%
1,000-1,999	3,019	6.6%	83.2%	4.2	9.6%	82.7%
2,000-4,999	1,906	4.2%	73.1%	5.8	13.3%	72.1%
5,000+	1,188	2.6%	58.5%	23.0	52.6%	51.1%
Total	45,889	100.0%	91.4%	43.8	100.0%	62.8%

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 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 2012, 20,551 plans (41%) 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 29,658 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.[11] This was the case for 3,018 plans. Another 965 plans were identified as mixed-funded because they attached a Schedule H or I which reported a trust that had made benefit payments.[12] The total number of mixed-funded plans was thus 3,983 (8%). The remaining 25,675 plans (51%) were classified as fully insured. Figure 2 below illustrates the process through which funding mechanism was identified.

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[11] 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.

[12] 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.

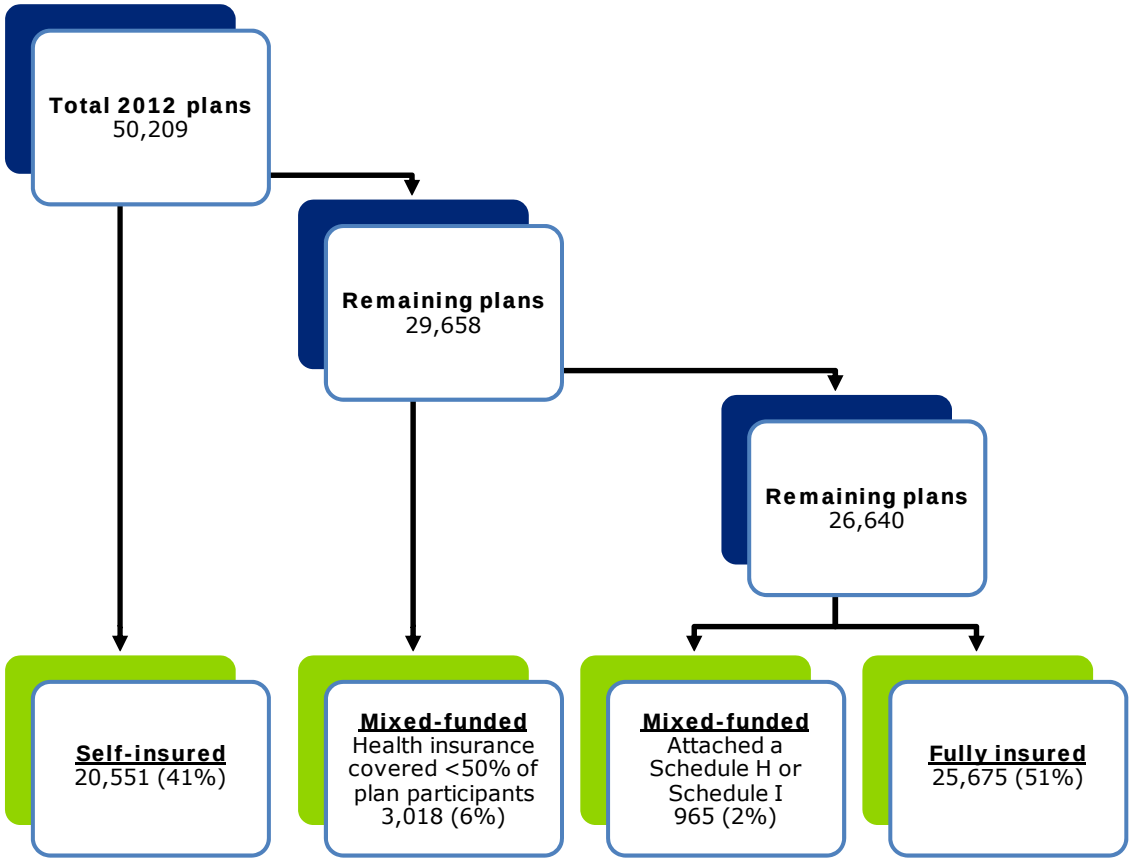


Figure 2. Funding Mechanism Derivation

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 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 identical 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 2012. 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., 2012 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 1.9% 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.*[13]

[13] 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, 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.[14] While stop-loss coverage mitigates financial risks, the plan is still considered self-insured (or mixed-funded).

[14] As also explained in the Analysis section, if the beneficiary of stop-loss insurance is the 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 2012, Figure 3 shows the overall distribution of funding mechanism among the 50,209 health plans that filed a Form 5500. About 41% 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 46% of the 69.8 million participants are in self-insured plans, 16% are in fully insured plans, and 37% are in mixed-funded plans.

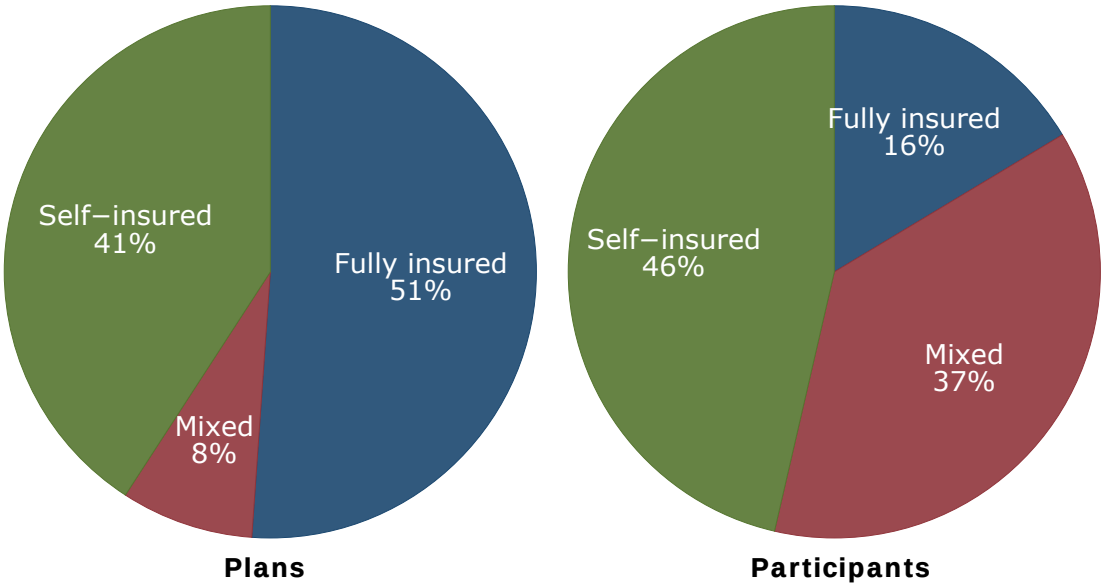


Figure 3. Distribution of Funding Mechanism (2012)

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").[15] This survey, conducted annually from 1999 to 2014, gathered detailed information on employer-provided health benefits, including their funding status.

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

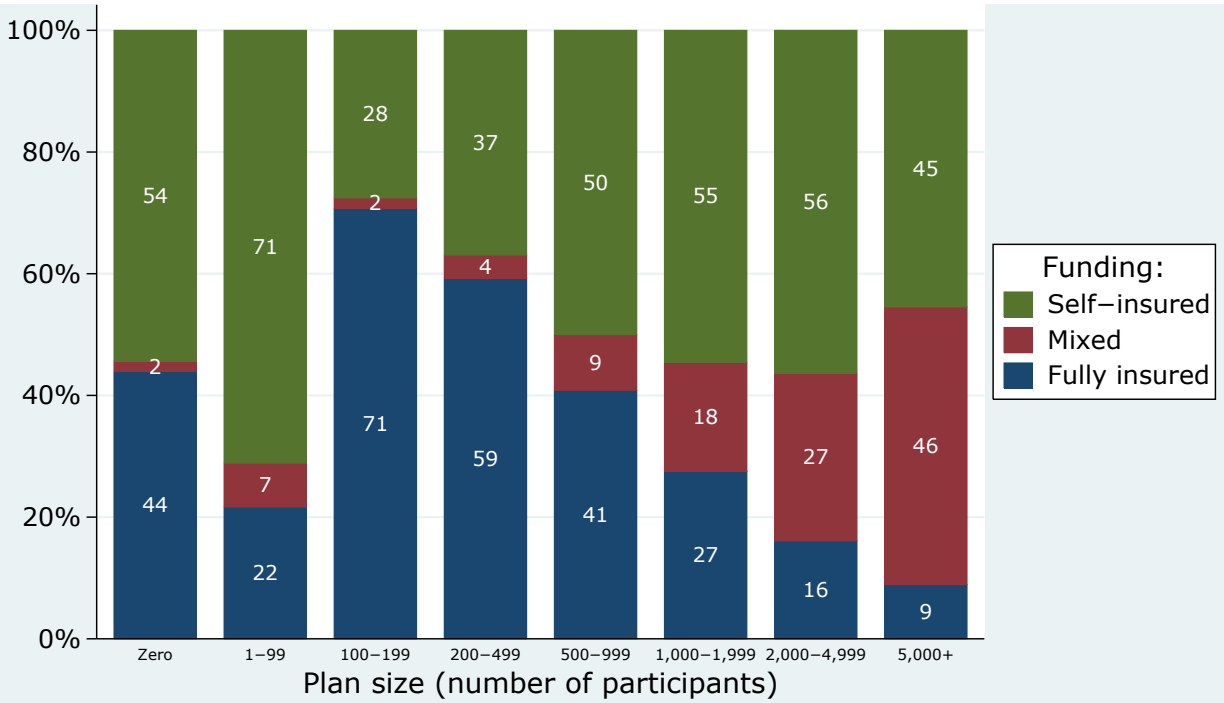
According to the KFF/HRET Survey, 60% of covered workers in firms with three or more employees were in partially or completely self-funded plans in 2012.[16] Our findings are not directly comparable, because our analysis covers only a subset of plans with fewer than 100 participants and because as many as 37% 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 2012. Most small plans are identified as self-insured, 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.[17] 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 fraction of plans with 5,000 or more participants that bear at least a portion of the financial risks of their health benefits is 91%, compared with 29% among plans with 100-199 participants.

[16] The KFF/HRET survey defines covered workers as "employees receiving coverage from their employer".

[17] 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.



Source: Form 5500 filings.

Figure 4. Distribution of Funding Mechanism, by Plan Size (2012)

Table 6 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 6. Distribution of Funding Mechanism, by Plan Size (2012)

Participants	Plans			Participants		
in plan	Fully insured	Mixed	Self-insured	Fully insured	Mixed	Self-insured
Zero	43.9%	1.7%	54.4%			
1-99	21.7%	7.2%	71.1%	38.0%	7.2%	54.9%
100-199	70.7%	1.7%	27.5%	70.5%	1.8%	27.7%
200-499	59.3%	3.8%	36.9%	57.9%	4.2%	37.9%
500-999	40.8%	9.2%	50.0%	40.0%	9.5%	50.5%
1,000-1,999	27.5%	17.9%	54.6%	26.7%	18.5%	54.8%
2,000-4,999	16.1%	27.5%	56.4%	15.6%	28.7%	55.7%
5,000+	8.9%	45.6%	45.4%	6.0%	49.0%	45.0%
All	51.1%	7.9%	40.9%	16.5%	37.2%	46.3%

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 15% of covered workers at firms with 3-199 employees were covered by self-insured plans in 2012, compared with 93% 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 2003-2012. The fraction of plans that were self-insured or mixed-funded generally declined from 56% in 2003 to 49% in 2012. While the general trend among plans over the past decade has been away from self-insurance, the fraction of participants in health plans that self-insured or were mixed-funded increased by about 6 percentage points from 78% in 2003 to 84% in 2012. Similarly, the KFF/HRET Survey documented an 8 percentage point increase in workers covered by self-insured plans from 2003 to 2012.

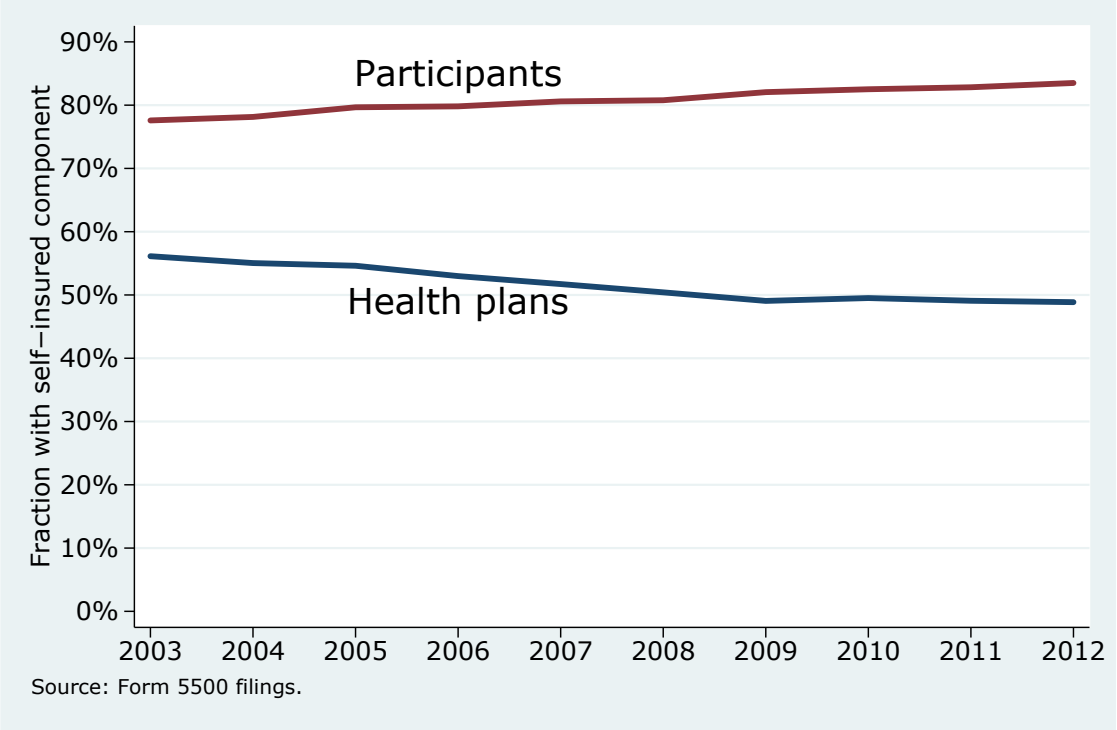


Figure 5. Distribution of Funding Mechanism, by Statistical Year

Table 7 provides additional details on the percentages underlying Figure 5, with separate series for the mixed-funded and self-insured categories. Table 8 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 7. Distribution of Funding Mechanism, by Statistical Year

Statistical	Plans			Participants		
year	Fully insured	Mixed	Self-insured	Fully insured	Mixed	Self-insured
2003	43.9%	9.2%	47.0%	22.4%	37.4%	40.2%
2004	45.0%	9.1%	46.0%	21.9%	37.6%	40.6%
2005	45.4%	8.9%	45.7%	20.3%	38.2%	41.4%
2006	47.0%	8.7%	44.3%	20.2%	38.1%	41.8%
2007	48.3%	8.5%	43.2%	19.4%	35.7%	44.9%
2008	49.6%	8.6%	41.8%	19.2%	36.3%	44.5%
2009	50.9%	8.5%	40.6%	17.9%	38.1%	43.9%
2010	50.5%	8.1%	41.4%	17.5%	38.0%	44.5%
2011	50.9%	8.2%	40.9%	17.2%	37.6%	45.2%
2012	51.1%	7.9%	40.9%	16.5%	37.2%	46.3%

Source: Form 5500 health plan filings.

Table 8. Plans and Participants by Funding Mechanism, by Statistical Year

Statistical	Plans			Participants (millions)		
year	Fully insured	Mixed	Self-insured	Fully insured	Mixed	Self-insured
2003	20,324	4,245	21,757	13.8	23.0	24.7
2004	20,567	4,149	21,034	13.4	23.0	24.9
2005	20,910	4,107	21,063	12.6	23.7	25.7
2006	21,979	4,081	20,691	12.9	24.2	26.6
2007	22,904	4,044	20,498	13.3	24.4	30.7
2008	22,680	3,951	19,109	13.2	24.8	30.4
2009	24,380	4,065	19,420	12.1	25.6	29.6
2010	25,271	4,063	20,723	12.0	26.1	30.6
2011	25,279	4,052	20,320	11.8	25.9	31.2
2012	25,675	3,983	20,551	11.5	26.0	32.3

Source: Form 5500 health plan filings.

As also noted in past reports, Figure 5 poses a paradox: the fraction of plans that were mixed-funded or self-insured generally decreased between 2003 and 2012, but the fraction of participants in such plans increased. 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 9 shows that from 2003 to 2012 the fraction of mixed-funded or self-insured plans with 100-499 participants decreased from 43% to 35%, whereas the corresponding fraction among plans with 500 or more participants increased from 67% to 71%. The trend toward full insurance among plans with 100-499 participants may have flattened out in recent years (Table 9). Second, the number of small plans in the data decreased: the number of plans with 0-99 participants reduced from 6,892 (15%) in 2003 to 4,599 (9%) in 2012. 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.

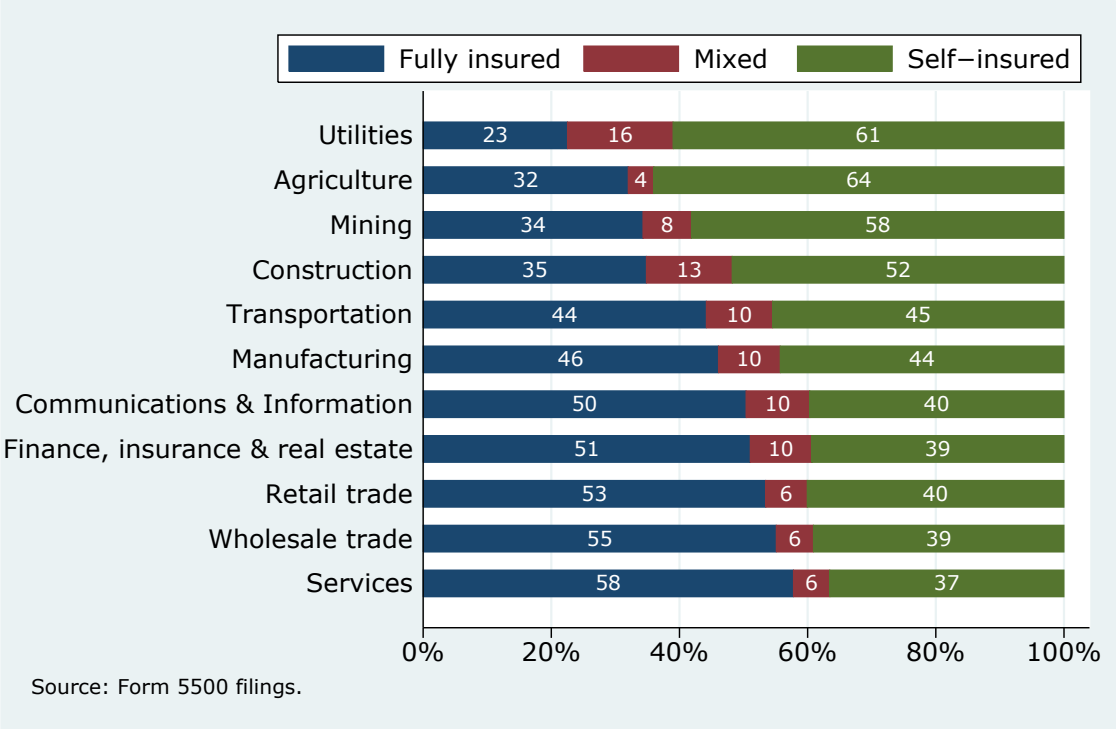
Table 9. Distribution of Funding Mechanism, by Plan Size and Statistical Year

Statistical	Plans with 100-499 Participants			Plans with 500+ Participants		
year	Fully insured	Mixed	Self-insured	Fully insured	Mixed	Self-insured
2003	56.7%	4.0%	39.3%	33.3%	19.3%	47.4%
2004	57.7%	3.8%	38.5%	33.9%	19.0%	47.1%
2005	58.5%	3.6%	38.0%	33.3%	19.3%	47.4%
2006	60.3%	3.4%	36.3%	33.4%	19.1%	47.6%
2007	61.7%	3.2%	35.0%	33.3%	19.0%	47.7%
2008	63.1%	3.2%	33.7%	33.0%	19.3%	47.7%
2009	64.3%	3.0%	32.8%	31.5%	20.3%	48.3%
2010	64.8%	2.8%	32.4%	29.9%	20.3%	49.8%
2011	64.7%	2.8%	32.5%	28.9%	20.5%	50.6%
2012	65.0%	2.8%	32.2%	28.5%	19.8%	51.7%

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 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.



Source: Form 5500 filings.

Figure 6. Distribution of Funding Mechanism, by Industry (2012)

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.[18] 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 2012, 87% of multiemployer plans were self-insured or mixed-funded, compared with 57% of multiple-employer plans and 47% of single-employer plans.

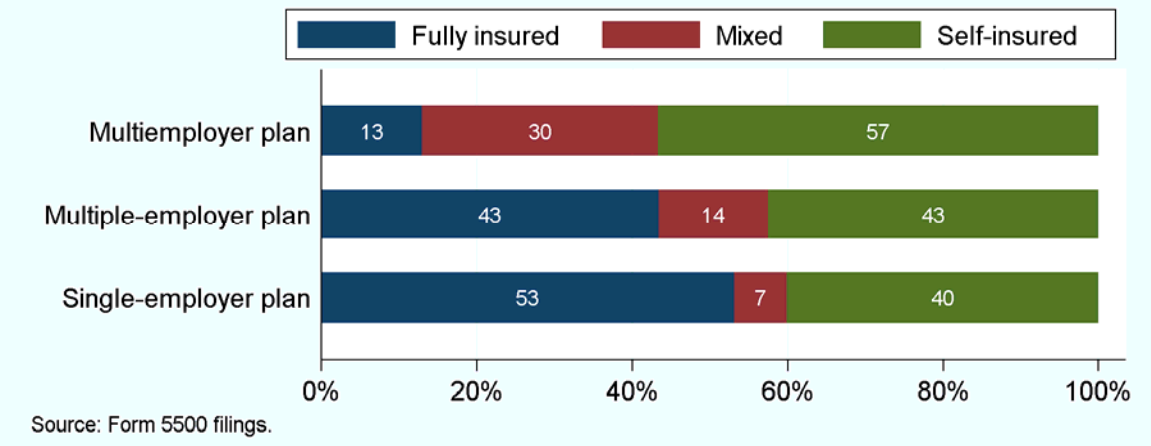


Figure 7. Distribution of Funding Mechanism of Single-Employer, Multiple-Employer and Multiemployer Health Plans (2012)

Funding Mechanisms of New Plans

Figure 8 shows fraction of new plans and their participants that are self-insured or mixed-funded from 2003 to 2012. New plans are defined as plans that checked the box for "first return/report filed for the plan" on the Form 5500. For comparison, the thinner lines indicate corresponding fractions among all plans that filed a Form 5500 and their participants. New plans were less likely to be self-insured or mixed-funded than previously existing plans, especially in more recent years. This may explain in part the trend toward less self-insurance among plans. In 2012, that trend was predominantly driven by new plans with fewer than 2,000 participants (not shown). However, participants in new plans were also generally less likely to be in self-insured or mixed-funded plans than existing plans, which goes contrary to the finding that participants are increasingly in self-insured or mixed-funded plans. A potential explanation is that existing plans changed their funding mechanism; see Table 12.

[18] 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.

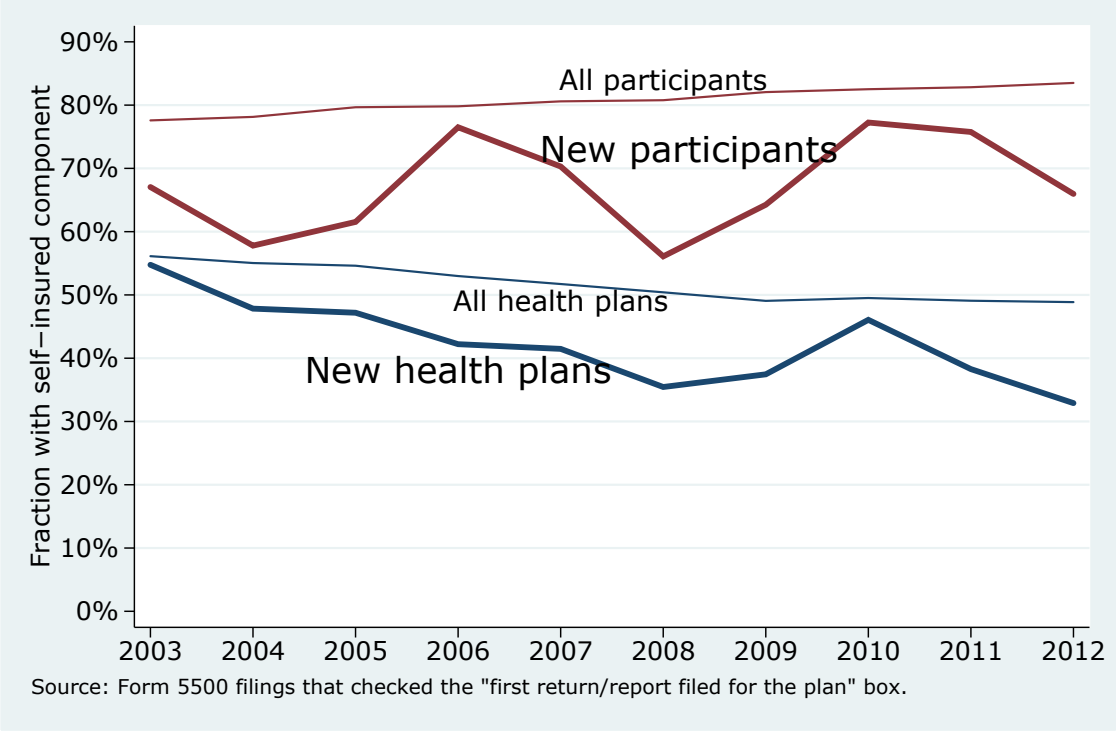


Figure 8. Distribution of Funding Mechanism of "New" Health Plans, by Statistical Year

Table 10 provides additional details on the percentages underlying Figure 8, with separate series for the mixed-funded and self-insured categories. Table 11 further shows the corresponding plan and participant counts.

Table 10. Distribution of Funding Mechanism of "New" Health Plans, by Statistical Year

Statistical	Plans			Participants		
year	Fully insured	Mixed	Self-insured	Fully insured	Mixed	Self-insured
2003	45.2%	4.3%	50.5%	32.9%	23.5%	43.5%
2004	52.2%	5.0%	42.9%	42.2%	20.2%	37.6%
2005	52.8%	4.8%	42.4%	38.5%	23.3%	38.2%
2006	57.8%	4.0%	38.2%	23.5%	19.7%	56.8%
2007	58.5%	3.6%	37.9%	29.7%	35.5%	34.8%
2008	64.5%	3.8%	31.6%	43.9%	18.6%	37.5%
2009	62.5%	3.5%	33.9%	35.7%	18.9%	45.3%
2010	53.9%	2.9%	43.1%	22.7%	43.7%	33.6%
2011	61.7%	4.6%	33.6%	24.2%	44.9%	30.8%
2012	67.1%	3.3%	29.6%	34.0%	26.0%	40.0%

Source: Form 5500 health plan filings that checked the "first return/report filed for the plan" box.

Table 11. Plans and Participants for "New" Health Plans, by Statistical Year

Statistical	Plans			Participants (millions)		
year	Fully insured	Mixed	Self-insured	Fully insured	Mixed	Self-insured
2003	1,197	114	1,335	0.4	0.3	0.6
2004	1,242	118	1,021	0.5	0.2	0.4
2005	1,306	119	1,048	0.5	0.3	0.5
2006	1,519	106	1,004	0.5	0.4	1.2
2007	1,548	94	1,003	0.5	0.5	0.5
2008	1,542	91	756	0.6	0.2	0.5
2009	1,740	98	944	0.6	0.3	0.7
2010	1,911	104	1,528	0.5	1.0	0.8
2011	1,917	144	1,045	0.6	1.0	0.7
2012	2,035	99	899	0.5	0.4	0.6

Source: Form 5500 health plan filings that checked the "first return/report filed for the plan" box.

Funding Mechanism Switching by Existing Plans

As shown in Table 3 above, roughly 79%-87% of health plan filings could be matched to a corresponding filing in the previous year. Figure 9 shows the frequency with which plans switched their funding mechanisms from one year to the next. For example, just over 2% of plans that were observed in both 2011 and 2012 switched from fully insured to mixed-funded or self-insured, and just under 2% switched to fully insured. Generally, more plans switch toward mixed-funding or self-insurance than away from it, which may help explain why such funding has become increasingly common at the participant level (see Figure 5). The net switching rate toward mixed-funding or self-insurance has been almost 1 percentage point since 2010, which was greater than in prior years. Plans with 200-4,999 participants tended to switch to mixed funding or self-insurance at above average rates, whereas those with 1,000-1,999 participants tended to switch toward full insurance at above-average rates (not shown). While the switching rates increased slightly in 2009, the overall trend is toward more stability and less switching. In other words, while some migration to alternative funding mechanisms remains, plans appear to now adhere to a particular funding mechanism for longer durations than they did in the early years of our analysis period.

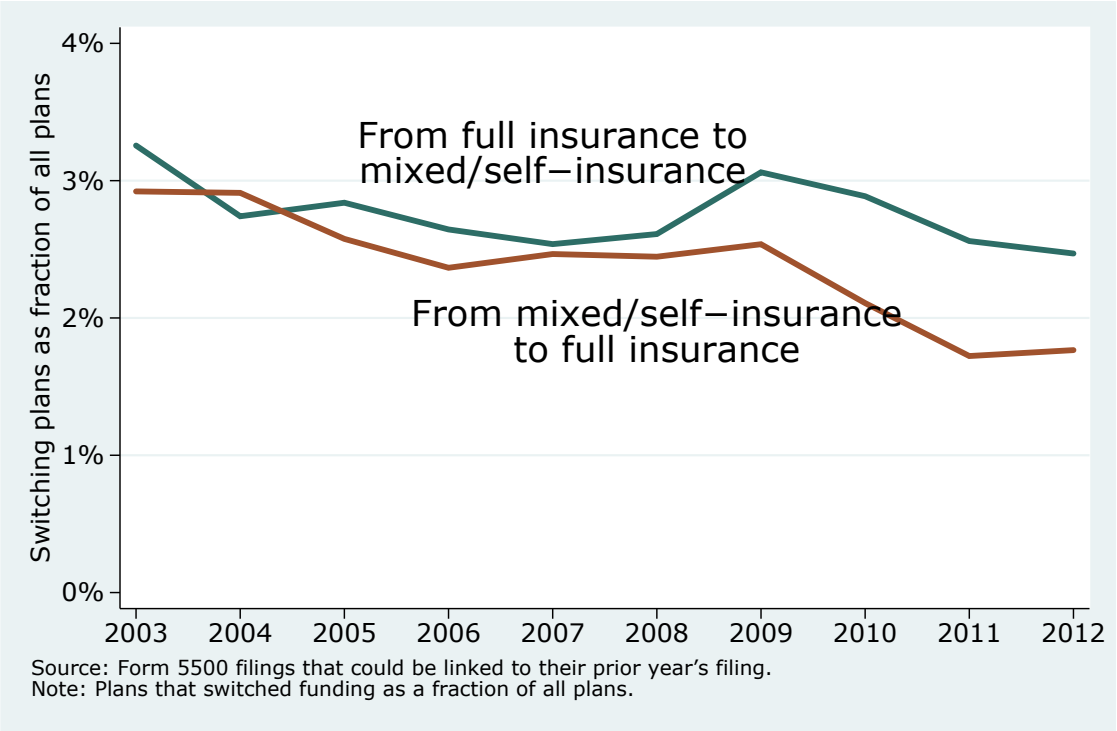


Figure 9. Incidence of Year-on-Year Switching in Funding Mechanism, by Statistical Year

Table 12 shows the fractions underlying Figure 9, along with the fractions of existing plans that did not switch funding mechanism.

Table 12. Incidence of Year-on-Year Switching in Funding Mechanism, by Statistical Year

Statistical year	Remain mixed or self-insured	Remain fully insured	Switch to mixed or self-insured	Switch to fully insured
2003	53.0%	40.8%	3.3%	2.9%
2004	52.9%	41.4%	2.7%	2.9%
2005	52.4%	42.2%	2.8%	2.6%
2006	51.6%	43.4%	2.6%	2.4%
2007	50.3%	44.7%	2.5%	2.5%
2008	49.1%	45.8%	2.6%	2.4%
2009	47.5%	46.9%	3.1%	2.5%
2010	47.1%	47.9%	2.9%	2.1%
2011	47.5%	48.2%	2.6%	1.7%
2012	47.8%	48.0%	2.5%	1.8%

Source: Form 5500 health plan filings.

Stop-Loss Coverage of Plans

Table 13 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.[19] However, if the employer 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 13) may thus understate the prevalence of stop-loss insurance.[20,21] In 2012, approximately 16% of mixed-funded and 27% of 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 13% of mixed-funded and 14% of self-insured plans reported stop-loss coverage for 2012, indicating that smaller plans are more likely to purchase stop-loss insurance than larger plans or are more likely to mistakenly report stop-loss insurance purchased for the benefit of the employer. We note that the participant-weighted figures are historically more volatile than unweighted figures.[22]

Table 13. Fraction of Health Plans Reporting Stop-Loss Insurance, by Funding Mechanism and Statistical Year

Statistical	Plans		Participants	
year	Mixed	Self-insured	Mixed	Self-insured
2003	21.0%	30.5%	15.2%	19.4%
2004	20.8%	30.7%	20.5%	19.9%
2005	21.6%	30.9%	14.2%	19.2%
2006	21.4%	31.2%	14.6%	25.9%
2007	21.4%	30.5%	14.1%	22.4%
2008	20.6%	30.8%	12.7%	16.5%
2009	18.8%	28.3%	16.4%	16.1%
2010	17.4%	26.3%	15.0%	15.0%
2011	16.7%	26.5%	14.0%	14.8%
2012	16.2%	26.5%	13.4%	14.2%

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

[19] No Schedule A can be attached to a Form 5500-SF and our analysis assumes that none of the Form 5500-SF (1,058 of 20,551 self-insured plans, or 5%) filers have stop-loss insurance.
[20] 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 for the benefit of the plan sponsor. Those stop-loss coverage levels are consistent with those in the 2012 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 2012. See http://ehbs.kff.org.
[21] Conversely, reported stop-loss insurance does not necessarily relate to health benefits but could protect other self-insured benefits, such as disability benefits.
[22] 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.

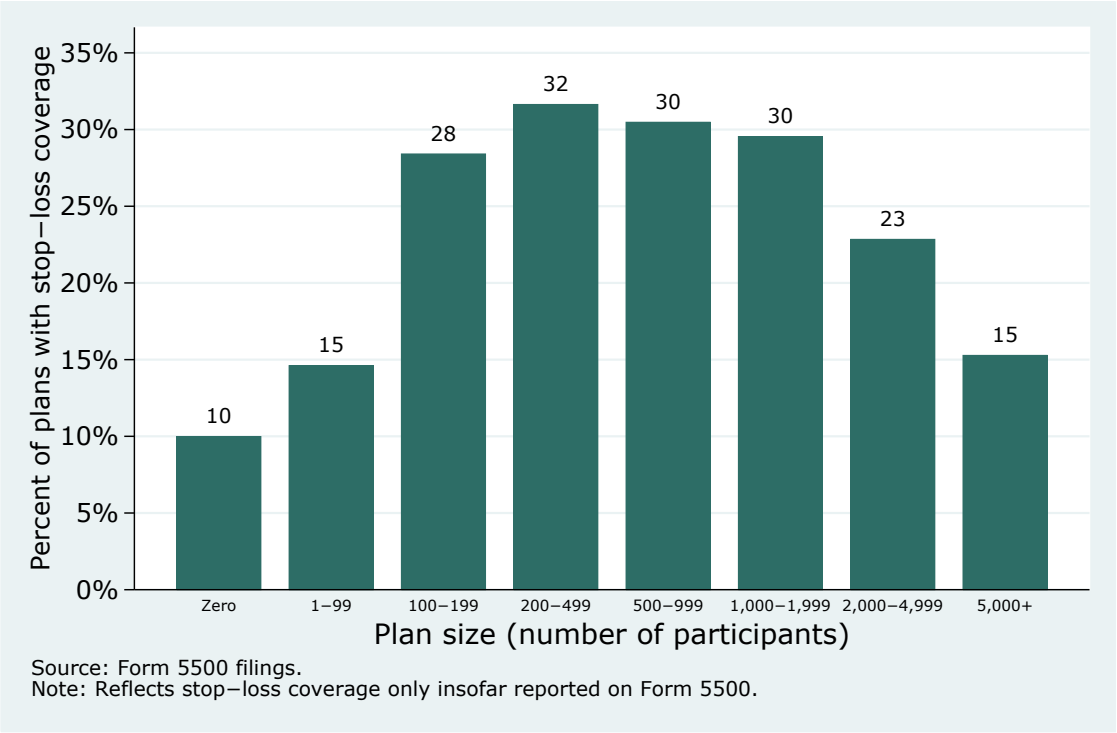
Table 14 shows the annual per-person cost of stop-loss coverage, calculated as the ratio of premiums to "number of persons covered" by the stop-loss policy on Schedule A. The numbers are not adjusted for inflation. These results should also be interpreted with caution because the Form 5500 filing contains no information on attachment points or other stop-loss policy features that may reflect the amount of coverage provided by the policies.

Table 14. Per-Person Annual Premiums for Stop-Loss Insurance

Statistical	Mixed-funded ($)			Self-insured ($)		
year	25th pct	Median	75th pct	25th pct	Median	75th pct
2003	82	216	424	138	433	890
2004	102	248	466	137	439	882
2005	106	251	494	160	482	910
2006	113	281	518	179	510	980
2007	94	261	506	177	521	994
2008	102	286	535	189	566	1,065
2009	134	314	577	203	583	1,109
2010	152	330	601	212	573	1,097
2011	155	336	641	231	606	1,156
2012	153	340	642	259	640	1,233

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

Figure 10 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.



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

Figure 10. Self-Insured Health Plans' Rate of Stop-Loss Coverage, by Plan Size (2012)

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 18% of plans were found to be sponsored by a not-for-profit entity. Figure 11 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 self-insured and much less likely mixed-funded than for-profit firms.

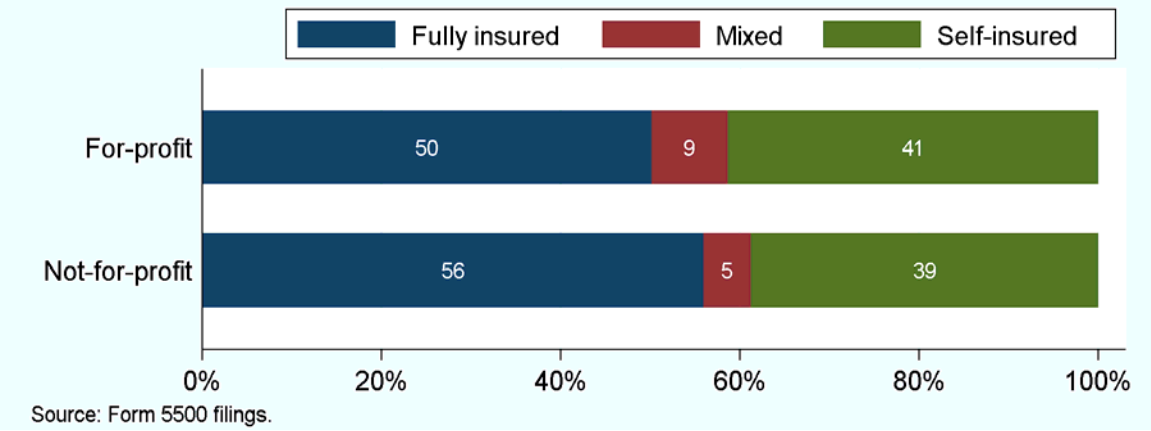


Figure 11. Distribution of Funding Mechanism, by For-Profit and Not-for-Profit Sponsors (2012)

Focusing on the subset of Form 5500 health plan filers that could be matched to financial information in Capital IQ, Table 15 presents 2012 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 along these dimensions than companies offering self-insured or mixed-funded health plans. Companies offering mixed-funded health plans tend to be the largest.

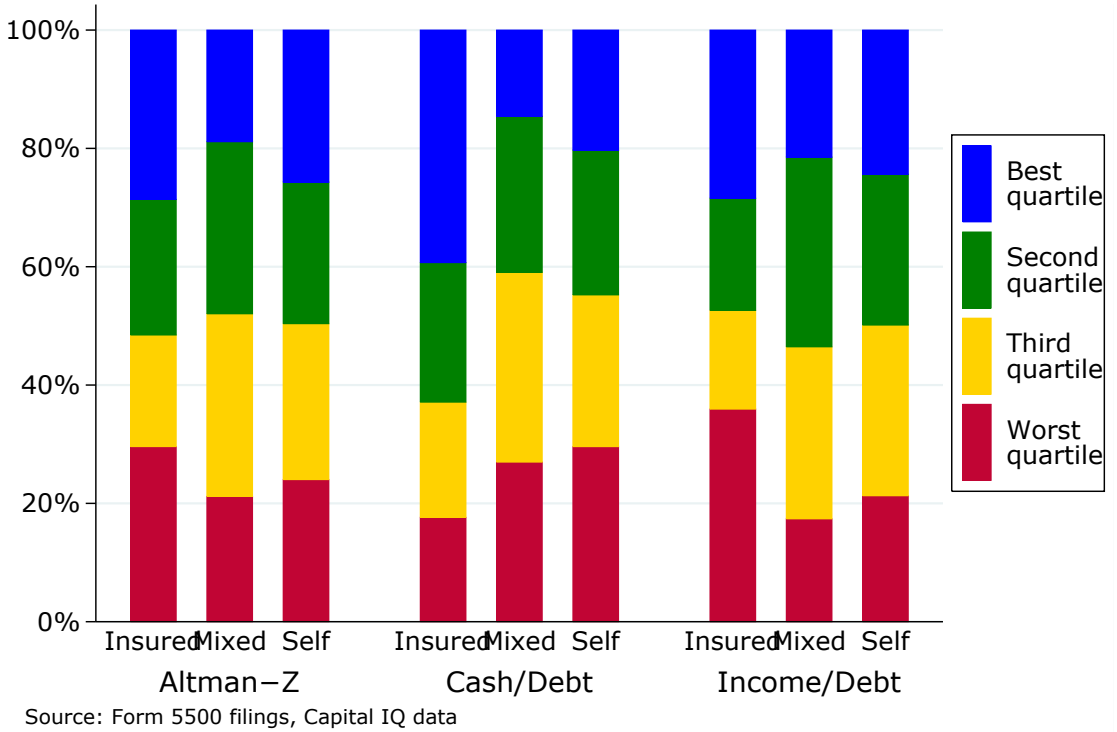
Table 15. Characteristics of Companies Matched to Form 5500 Health Plan Filings, by Funding Mechanism (2012)

		All	Fully insured	Mixed	Self-insured
Revenue (in $ millions)	25 pct	295	107	1,286	443
	Median	1,174	315	3,791	1,342
	75 pct	5,031	1,312	11,839	4,985
	# Obs	4,297	1,364	1,001	1,932
Market capitalization (in $ millions)	25 pct	359	143	1,267	466
	Median	1,460	526	4,044	1,579
	75 pct	6,137	1,942	15,959	6,068
	# Obs	3,651	1,178	839	1,634
Net income (in $ millions)	25 pct	2	-10	28	6
	Median	51	11	183	62
	75 pct	275	85	794	282
	# Obs	4,297	1,364	1,001	1,932
Number of employees	25 pct	632	246	2,950	926
	Median	2,816	798	9,800	3,200
	75 pct	13,055	3,221	32,200	12,400
	# Obs	4,296	1,364	1,001	1,931

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

Figure 12 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 12 what fraction 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.[23] The 25th percentile of Altman Z-Scores of plan sponsors in our analysis was 1.69, 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, 30% of fully insured sponsors were in the bottom quartile, compared with 21% of mixed-funded and 24% of self-insured sponsors; see the red bars in Figure 12. Based on how frequently their Altman Z-Scores are in the bottom quartile, mixed-funded and self-insured companies thus appear to be in better financial health than fully insured companies.[24]



Source: Form 5500 filings, Capital IQ data

Figure 12. Financial Health of Companies Matched to Form 5500 Health Plan Filings, by Funding Mechanism (2012)

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

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

[24] 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.

consistent evidence that mixed-funded or self-insured sponsors are in better or worse financial health than fully insured sponsors. While the presentation of the results differs from that in prior years' reports, these findings are generally consistent with those in prior reports.

Table 16 shows the fractions and sample sizes corresponding to Figure 12.

Table 16. Financial Health of Companies Matched to Form 5500 Health Plan Filings, by Funding Mechanism (2012)

		All	Fully insured	Mixed	Self-insured
Altman Z-Score	Best quartile	25.0%	28.6%	18.9%	25.7%
	Third quartile	24.9%	22.9%	29.1%	23.9%
	Second quartile	25.0%	18.9%	30.9%	26.4%
	Worst quartile	25.1%	29.6%	21.2%	24.0%
	# Obs	3,184	1,034	784	1,366
Cash from operations over total debt	Best quartile	25.0%	39.3%	14.6%	20.3%
	Third quartile	24.6%	23.6%	26.4%	24.5%
	Second quartile	25.2%	19.5%	32.1%	25.6%
	Worst quartile	25.2%	17.6%	27.0%	29.6%
	# Obs	4,292	1,361	1,001	1,930
Operating income over total debt	Best quartile	25.0%	28.4%	21.5%	24.4%
	Third quartile	24.9%	19.0%	32.1%	25.5%
	Second quartile	25.0%	16.7%	29.1%	28.8%
	Worst quartile	25.0%	35.9%	17.4%	21.3%
	# Obs	4,293	1,361	1,001	1,931

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

6. CONCLUSION

This document reports on the funding mechanism of health plans that filed a Form 5500 for plan years ending in 2012. The findings are similar to those of last year's report. The historical trends toward less self-insurance at the plan level but more self-insurance at the participant level continued but appear to be stabilizing. The trend toward less stop-loss coverage (insofar reported on Form 5500 filings) similarly continued but slowed for mixed-funded plans and may have bottomed out for self-insured plans. Differences by various characteristics of the plan or its sponsor are similar to those in last year's report.

TECHNICAL APPENDIX

The definitions of funding mechanism rely upon the fields of Form 5500 and its Schedules as outlined in Table 17.

Table 17. 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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