



SELF-INSURED HEALTH BENEFIT PLANS 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 aggregate 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 Deloitte Financial Advisory Services LLP to assist with the ACA mandate and to write *Self-Insured Health Benefit Plans* ("2011 Report") and *Self-Insured Health Benefit Plans 2012* ("2012 Report").¹ In March 2011, the Secretary of Labor ("Secretary") submitted to Congress the first such annual report ("2011 Report to Congress"), which included the 2011 Report as its Appendix B. In 2012, the Secretary submitted to Congress the second such annual report ("2012 Report to Congress"), which included the 2012 Report as its Appendix B.²

This report updates the 2012 Report for the Secretary's *2013 Report to Congress*. As required by §1253 of the ACA, the primary data source 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, corporate financial data were also used. This report contains an analysis of such characteristics as plan type, number of participants, funding arrangements, and sponsors' financial health.

The current report analyzes Form 5500 data through statistical year 2010. The method for classifying funding mechanism differs from that in the 2011 and 2012 Reports. An analysis of supplemental data collected by the Employee Benefits Security Administration's (EBSA) Office of the Chief Accountant led to improvements to the algorithm that derives funding mechanism from Form 5500 filings.³ Since this report applies the revised algorithm consistently to both the most recent and prior years of data, historical series in this report may differ from those in earlier reports.

The primary findings include:

- The fraction of self-insured or mixed-funded (funded through a mixture of insurance and self-insurance) Form 5500 filing health plans declined from

¹ Advanced Analytical Consulting Group, Inc. served as a subcontractor to Deloitte Financial Advisory Services LLP.

² See <http://www.dol.gov/ebsa/pdf/ACAReportToCongress032811.pdf> for the Secretary's 2011 Report to Congress and <http://www.dol.gov/ebsa/pdf/deloitte2011-1.pdf> for its Appendix B. See <http://www.dol.gov/ebsa/pdf/ACAReportToCongress041612.pdf> for the Secretary's 2012 Report to Congress and <http://www.dol.gov/ebsa/pdf/ACASelfFundedHealthPlansReport041612.pdf> for its Appendix B.

³ See our 2012 report, *Anomalies in Form 5500 Filings: Lessons from Supplemental Data for Group Health Plan Funding* (<http://www.dol.gov/ebsa/pdf/deloitte2012-6.pdf>), for a detailed analysis of those supplemental data and algorithm improvements.

- 56% in 2001 to 48% in 2010. However, over the same period, the percentage of plan participants covered by self-insured or mixed-funded plans increased from 75% to 83%. This paradox appears to be 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.
- From 2009 to 2010, the percentage of self-insured Form 5500 filing health plans remained at 40%, whereas the percentage of mixed-funded plans decreased slightly from 9% to 8%. The total share of Form 5500 filing health plans with a self-insured component remained at 48%. This percentage has either declined or remained constant across years from 2001 to 2010.
 - Although only 48% of Form 5500 filing health plans had a self-insured component in 2010, the majority of Form 5500 filing health plan participants were in plans with a self-insured component. The total fraction of Form 5500 filing health plan participants in a plan with a self-insured component increased from 82% in 2009 to 83% in 2010. This fraction increased every year in our analysis.
 - As reported in Form 5500 filings, stop-loss coverage among self-insured plans declined from 29% in 2009 to 28% in 2010. This fraction had ranged between 31% and 33% since 2001. Stop-loss coverage among mixed-funded plans was in the 19%-22% range since 2001 and declined to 18% in 2010. As discussed on pages 17 and 23, these percentages may underestimate the prevalence of stop-loss insurance.
 - Most Form 5500 filing plans with fewer than 100 participants were self-insured. 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, 30% of plans with 100-199 participants were mixed-funded or self-insured in 2010, compared with 90% of plans with 5,000 or more participants. The 2009 percentages were similar: 31% and 89%, 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 2010, compared with 45% of plans with 5,000 or more participants. The 2009 percentages were the same.
 - Multiemployer and multiple-employer plans were more likely to self-insure than single-employer plans. In 2010, 86% of multiemployer plans were self-insured or mixed-funded, compared with 58% of multiple-employer plans and 46% of single-employer plans. The 2009 percentages were similar: 85%, 59%, and 47%, respectively.
 - Self-insurance rates varied by industry, with agriculture, mining, construction, and utilities firms having the highest prevalence of self-insurance.
 - The differences in plan funding between plans sponsored by for-profit and not-for-profit organizations were small—1 percentage point or less in any category in 2010. Weighted by participants, however, not-for-profit organizations were much more likely self-insured and much less likely 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 discusses the current report's updated funding mechanism definition. Section 3 discusses the objectives

and contents of the Form 5500. Section 4 describes data sources and the definition of funding mechanism as used in this report. It also discusses data quality and consistency issues, Form 5500 missing-data patterns, and the health plan filings not matched to financial data. Finally, Section 5 presents the results of our data analysis.

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: UPDATED FUNDING MECHANISM DEFINITION

Form 5500 does not require plan sponsors to explicitly specify the health plan's funding mechanism. Ambiguous funding mechanism classifications occur in part because of the design of the Form 5500 and in part because of incomplete or internally inconsistent filings. Seeking clarification on such ambiguities, EBSA's Office of the Chief Accountant collected supplemental data from a subset of Form 5500 health plan filers. Respondents to this supplemental data collection effort were asked both to clarify ambiguities in their Form 5500 filings and to provide the funding mechanism of their group health plan(s). An important lesson from those supplemental data was that the algorithm that attempted to derive funding mechanism from Form 5500 filings for last year's report ("2012 Report Algorithm") identified too many fully insured or mixed-funded plans and too few self-insured plans. The current report's algorithm ("Revised Algorithm") improved the concordance with explicitly stated funding mechanisms in the supplemental data. The most substantial algorithm revisions are discussed below.⁴

The 2012 Report Algorithm classified a plan as self-insured if the plan did not report any *Schedule A – Insurance Information* ("Schedule A") health insurance contracts and at least one of the following three 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 – Financial Information* ("Schedule H") or a *Schedule I – Financial Information – Small Plan* ("Schedule I") (which is required of plans operating as a trust); or (3) the plan filed a *Form 5500 – SF Annual Return/Report of Small Employee Benefit Plan* ("Form 5500-SF"). For the remaining plans, if the number of people covered by a health insurance contract was less than 50% of the number of plan participants, or if the plan attached a Schedule H or I, then the algorithm classified the plan as mixed-funded. All remaining plans were classified as fully insured.

The Revised Algorithm generally follows the same logic as its predecessor. However, based on lessons from the supplemental data mentioned above, it attempts to identify and resolve several types of filing anomalies, potential errors, and internal inconsistencies. Among others, it attempts to identify Schedules A that purport to reflect health insurance policies but that are likely documenting services that relate to self-insured benefits, such as third-party administrator (TPA) contracts. The Revised Algorithm interprets the following type Schedule A filings as self-insurance-related services rather than as evidence of health insurance.

1. The health benefits Schedule A benefit type includes stop-loss insurance. Schedules A are frequently filed with multiple benefit types, such as "AI", where "A" denotes health benefits and "I" stop-loss coverage. The Revised Algorithm interprets this as stop-loss insurance for health benefits, rather than health insurance.
2. The health benefits Schedule A lists fees or commissions paid to a TPA.

⁴ See our 2012 report, *Anomalies in Form 5500 Filings: Lessons from Supplemental Data for Group Health Plan Funding* (<http://www.dol.gov/ebsa/pdf/deloitte2012-6.pdf>), for a detailed discussion of the supplemental data and the revised algorithm.

3. The health benefits Schedule A per-capita premium amount is so low that it is unlikely that the Schedule A represents health insurance. Substantial fractions of 2010 Schedules A that indicate health insurance suggest per-capita premiums of either under \$1,000 or over \$3,000 per year. Relatively few per-capita premiums were between \$1,000 and \$3,000, the least common being around \$1,700 per year. The Revised Algorithm assumes that only Schedules A with per-capita premiums above \$1,700 in fact evidence health insurance.⁵

Building upon the supplemental data findings, the Revised Algorithm classifies fewer fully insured or mixed-funded plans and more self-insured plans (Table 1). The Revised Algorithm classified approximately 7 percentage points fewer fully insured plans, 4 percentage points fewer mixed-funded plans, and approximately 11 percentage points more self-insured plans than the 2012 Report Algorithm.

Table 1. Distributions of Funding Mechanism Using the 2012 Report Algorithm and the Revised Algorithm (2010)

	2012 Report Algorithm		Revised Algorithm	
	Number	Percent	Number	Percent
Fully insured	28,155	58.7%	24,656	51.5%
Mixed	5,811	12.1%	4,005	8.4%
Self-insured	14,006	29.2%	19,190	40.1%
Total	47,972	100.0%	47,851	100.0%

Source: Form 5500 health plan filings.

Separately, the Revised Algorithm classifies more voluntary filers than the 2012 Report Algorithm. Some plans filed a Form 5500 even though they were not required to do so, and these voluntary filers are excluded from the analysis. Generally, a Form 5500 is required for plans with 100 or more participants at the beginning of the reporting period and for plans of any size that operated a trust.⁶ Trusts are identified from the presence of a Schedule H or I. However, some plans attached a blank Schedule H or I. The Revised Algorithm checks fields for assets, liabilities, income, and expenses, and ignores the Schedule H or I if all such key fields are zero or missing. As a result, it improves the identification of voluntary filers and reduces the number of plans included in the analysis by 121 plans, from 47,972 to 47,851 plans (Table 1).

⁵ The thresholds are calculated by year and are \$1,000 in 2001 and 2002; \$1,200 in 2003 and 2004; \$1,400 in 2005; \$1,500 in 2006; \$1,600 in 2007, 2008, and 2009; and \$1,700 in 2010.

⁶ More precisely, the Form 5500 does not need to be filed by welfare benefit plans that covered fewer than 100 participants as of the beginning of the plan year and that were unfunded, fully insured, or a combination of insured and unfunded. An unfunded plan has its benefits paid directly from the general assets of the plan sponsor. A plan is not unfunded if it received employee contributions during the plan year and/or used a trust or separately maintained fund to hold plan assets or act as a conduit for the transfer of plan assets during the year. See 2010 Instructions for Form 5500 (<http://www.dol.gov/ebsa/pdf/2010-5500inst.pdf>).

3. THE FORM 5500

Beginning in 1975, the Department of Labor, the Internal Revenue Service (IRS), and the Pension Benefit Guaranty Corporation (PBGC) jointly developed the Form 5500 Series 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. Employers and administrators who comply with the general instructions for the Form 5500 generally will satisfy the annual reporting requirements for the IRS and DOL.⁷

Legislative and Regulatory Objectives of the Form 5500

The Form 5500, including the required Schedules and/or Attachments, contains information concerning the operation, funding, assets, and investments of pensions and other employee benefit plans. In addition to being a disclosure document for plan participants and beneficiaries, the Form 5500 is a compliance and research tool for the DOL, the IRS, and the PBGC, as well as a source of information for other federal agencies, Congress, and the private sector.⁸

Specifically, the objectives of Form 5500 reporting are to:⁹

- Ensure that disclosures be made to participants and safeguards be provided with respect to the establishment, operation, and administration of employee benefit plans;
- Increase the likelihood that participants and beneficiaries under single-employer defined-benefit pension plans will receive their full benefits;
- Protect the interests of participants in employee benefit plans and those of their beneficiaries; and
- Verify compliance with standards of conduct, responsibilities, and obligations for fiduciaries of employee benefit plans.

Benefit plans must generally file the return by the last day of the seventh month after the plan year ends.¹⁰

Form 5500 Contents

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 the Form 5500. The Form 5500 consists of a main Form 5500 and a number of Schedules, depending on the type of plan. The main Form 5500 collects general information on the plan such as the name of the sponsoring

⁷ http://www.irs.gov/irm/part11/irm_11-003-007.html#d0e309

⁸ Federal Register Vol. 72, November 16, 2007, page 64731.

<http://www.dol.gov/ebsa/regs/fedreg/final/20071116.pdf>

⁹ <http://www.gpo.gov/fdsys/pkg/USCODE-2010-title29/html/USCODE-2010-title29-chap18-subchapl-subtitleA-sec1001.htm>

¹⁰ 2010 Instructions for Form 5500 (<http://www.dol.gov/ebsa/pdf/2010-5500inst.pdf>)

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, 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.

Employee benefits may include pensions, health benefits or life insurance. 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.¹¹

Recent Changes to Form 5500

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). As discussed in last year's report, we found the data integrity of electronic filings to be higher than that of the converted paper filings.

Also beginning with the 2009 plan year, Schedule I, which collects information on trusts of small plans, includes a new line item for administrative fees. In addition, many small plans may now file a newly introduced Form 5500-SF. The filings underlying this report's analysis include 891 Form 5500-SF filings.

¹¹ For the purpose of this report, only health benefits are relevant. However, 83% of 2010 Form 5500 health plan filings reported on both health and other types of benefits (dental, vision, et cetera).

4. DATA SOURCES AND DEFINITION OF SELF-INSURANCE

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. In this section, we discuss the data sources and the matching algorithm. We then discuss the definition of self-insured, as used in this report, and point out some data limitations.

Form 5500 Data

As discussed in the previous section, employers and administrators who comply with the Form 5500 Instructions generally will satisfy the annual reporting requirements for the IRS and DOL. The Form 5500 Instructions exempt certain welfare plans from filing a Form 5500. As noted above, a Form 5500 is required for plans with 100 or more participants at the beginning of the reporting period and for plans of any size that operate a trust. Some plans file a Form 5500 even though they are not required to do so. This report excludes such voluntary filers from the analysis. The analysis also excludes plans that were terminated during the plan year, or that had zero participants at the beginning or the end of the plan year. It also excludes health plans with one participant.¹² It 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 5500.¹³

Consistent with EBSA's *Private Pension Plan Bulletins* and the 2012 Report, this report uses a statistical year definition. The statistical year grouping consists of all Form 5500 employee benefit plan filings with a plan year ending date in the given year. This report primarily includes tables for statistical year 2010.

Table 2 presents the distribution of plan size, as measured by the number of participants at the beginning of the reporting period, for filings in statistical year 2010, i.e., for filings with a reporting period that ended in 2010. As defined throughout this report, participants may include active and retired employees, but excludes dependents.

¹² As the data do not allow for distinction between ERISA-covered and non-ERISA-covered plans with just one participant, we choose to exclude these plans from the analysis.

¹³ The numbers of plans and plan participants in this report may differ from those in a companion report on *Group Health Plans Report: Abstract of 2010 Form 5500 Annual Reports Reflecting Statistical Year Filings*, because that report applies different exclusion criteria and measures plan participants at the end of the reporting period. In particular, the companion report includes plans that had been terminated at the end of the plan year.

Table 2. Distribution of Health Plans and Health Plan Participants, By Plan Participant Counts (2010)

Participants in plan	Plans	Percent	Participants (millions)	Percent
2-99	2,425	5.1%	0.1	0.1%
100-199	16,523	34.5%	2.4	3.4%
200-499	14,909	31.2%	4.6	6.7%
500-999	5,968	12.5%	4.2	6.0%
1,000-1,999	3,533	7.4%	5.0	7.2%
2,000-4,999	2,497	5.2%	7.7	11.2%
5,000+	1,996	4.2%	45.3	65.4%
Total	47,851	100.0%	69.2	100.0%

Source: Form 5500 health plan filings.

Note: Participant counts as of the beginning of the plan year.

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 per Instructions for Form 5500, so we believe our analysis covers the vast majority of large plans in the United States.¹⁴

Small plans accounted for 5% of plans in our analysis. 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 65% of all participants. Overall, the plans in our analysis relate to the health insurance of over 69 million participants.

Our analysis covers statistical years 2001 through 2010. As shown in Table 3, each statistical year includes between 42,000 and 48,000 plans providing health benefits. On average, there were approximately 44,831 plans per year. The number of covered participants ranged from approximately 55 million to 70 million per year. In recent years, the number of plans and the participants they cover have been increasing.¹⁵

¹⁴ It is our understanding that church plans and governmental plans are not covered by Title I of ERISA (2010 Form 5500 Instructions). They are not included in this study.

¹⁵ A notable exception is 2008, when the number of plans appeared to drop by almost 1,800 plans. This may have been due to imperfect capture of filings related to the transition from paper to electronic filings.

Table 3. Health Plans and Participants, by Statistical Year

Statistical year	Plans	Participants (millions)
2001	42,647	55.6
2002	44,194	60.0
2003	44,401	60.9
2004	43,864	60.3
2005	44,018	60.9
2006	45,070	62.0
2007	45,854	67.2
2008	44,072	67.6
2009	46,338	68.1
2010	47,851	69.2

Source: Form 5500 health plan filings.

Note: Participant counts as of the beginning of the plan year.

Table 4 shows the fraction of health plan filings that could be matched to their corresponding filing in the previous year. While generally in the 80%-85% range, this fraction decreased in 2009, perhaps because of data capture errors related to the new electronic filing requirement. In order to gauge consistency in the reporting of the number of participants, the table also shows the distribution of the increase in participant counts of matched pairs of plans. 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. The distributions are fairly stable over time and the interquartile range 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 <i>t</i>	Fraction matched to a plan in <i>t-1</i>	Year-on-year increase		
			25th pct	Median	75th pct
2002	44,194	78.9%	-6.5%	0.8%	10.2%
2003	44,401	82.3%	-7.4%	0.0%	8.5%
2004	43,864	85.3%	-6.3%	0.0%	8.3%
2005	44,018	85.1%	-5.1%	0.8%	9.3%
2006	45,070	84.8%	-4.7%	1.2%	9.8%
2007	45,854	85.2%	-4.3%	1.5%	10.2%
2008	44,072	86.5%	-4.3%	1.7%	10.6%
2009	46,338	79.5%	-5.8%	0.8%	9.2%
2010	47,851	83.6%	-9.2%	-0.7%	6.3%

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 and measured as of the beginning of the plan year.

Matching with Financial Information

Several research questions seek to understand the relationship between a plan sponsor's financial health and the plan's characteristics. To conduct this analysis, 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 2010 match with Capital IQ.

Not-for-Profit Status

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, and we do not use any other Form 990 information in our analysis. 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 welfare plan, we identify the plan sponsor as a not-for-profit organization; otherwise, it is considered for-profit.¹⁶

The match is carried out by EIN and organization name. To reduce the incidence of mismatches due to name spelling variations, we normalize names prior to matching, as discussed below. The analysis sample for statistical year 2010 includes 47,851 filings by organizations with 42,379 unique EINs. Of these, 8,058 (19%) were also found in the Form 990 data and thus identified as not-for-profit. They accounted for 17.6 million participants, or 25% of the total under study.

Financial Metrics

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.¹⁷ Our extract from its database contains information on the 2010 financial performance for about 11,452 companies with public financial information whose primary geographic location is in the United States, including about 6,982 public companies.

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

¹⁶ Some welfare plans of for-profit corporations were themselves not-for-profit entities. For example, the 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 looked for XYZ Corporation among Form 990 filings. For-profit status thus refers to the ultimate plan sponsor, not to the plan itself.

¹⁷ A Form 10-K is an annual financial report filed with the U.S. Securities and Exchange Commission (SEC).

- 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.

The Matching Process

The only common field in Capital IQ and Form 5500 health plan data is the company/sponsor name. In part because of alternate spelling and issues with scanned names on the Form 5500 data, 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 does not. About 86% of 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 disclosure with the SEC. SEC filings, electronically available from the SEC's Electronic Data Gathering, Analysis, and Retrieval (EDGAR) system, often include both companies' CIKs and EINs. 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 5500.¹⁸

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 2010 Form 5500 health plan filings with their sponsor's corresponding 2010 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

¹⁸ Some issues arose in the process. While about 14% of Capital IQ records do not contain a CIK, about 6% contain multiple CIKs. Also, some CIKs were found to be linked to multiple EINs.

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 to December 31, but a fiscal year that ran from April 1 to March 31. Under these circumstances, we would match the Form 5500 health plan filing ending December 31, 2010 with the Capital IQ financial information for fiscal year ending March 31, 2010.

Table 5 shows that we matched 4,445 plans, or about 9% of the plans in the 2010 Form 5500 health plan data.¹⁹ This is the set of companies that appear in our matched analyses to follow. The 4,445 plans cover 28 million participants or 40% of all participants in the Form 5500 health plan data.

Table 5. Form 5500 Health Plan Filings Matched with Financial Information, by Plan Size (2010)

Number of participants	Plans			Participants		
	Number	Percent	Match rate	Number (millions)	Percent	Match rate
2-99	45	1.0%	1.9%	0.002	0.0%	2.9%
100-199	625	14.1%	3.8%	0.1	0.3%	3.8%
200-499	920	20.7%	6.2%	0.3	1.1%	6.4%
500-999	662	14.9%	11.1%	0.5	1.7%	11.4%
1,000-1,999	633	14.2%	17.9%	0.9	3.3%	18.3%
2,000-4,999	692	15.6%	27.7%	2.2	8.0%	28.8%
5,000+	868	19.5%	43.5%	23.9	85.6%	52.7%
Total	4,445	100.0%	9.3%	27.9	100.0%	40.2%

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

Note: Participant counts as of the beginning of the plan year.

Table 6 shows that 43,406 plans were not matched to Capital IQ data. Covering 41 million participants, these plans accounted for 60% of all participants across all matched and non-matched group health plans.

¹⁹ 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.

Table 6. Form 5500 Health Plan Filings Not Matched with Financial Information, by Plan Size (2010)

Number of participants	Plans			Participants		
	Number	Percent	Non-match rate	Number (millions)	Percent	Non-match rate
2-99	2,380	5.5%	98.1%	0.1	0.2%	97.1%
100-199	15,898	36.6%	96.2%	2.3	5.5%	96.2%
200-499	13,989	32.2%	93.8%	4.3	10.5%	93.6%
500-999	5,306	12.2%	88.9%	3.7	8.9%	88.6%
1,000-1,999	2,900	6.7%	82.1%	4.0	9.8%	81.7%
2,000-4,999	1,805	4.2%	72.3%	5.5	13.3%	71.2%
5,000+	1,128	2.6%	56.5%	21.5	51.8%	47.3%
Total	43,406	100.0%	90.7%	41.4	100.0%	59.8%

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

Note: Participant counts as of the beginning of the plan year.

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.²⁰ 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 fields are provided in the Technical Appendix.

In 2010, 19,190 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 TPA. For the other 28,661 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.²¹ This was the case for 2,915 plans. Another 1,090 plans were identified as mixed-funded because

²⁰ 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 in a single Form 5500 filing, the plan would be mixed-funded.

²¹ See our 2012 report, *Strengths and Limitations of Form 5500 Filings for Determining the Funding Mechanism of Employer-Provided Group Health Plans* (<http://www.dol.gov/ebsa/pdf/deloitte2012-5.pdf>), for a discussion of the sensitivity of plans' funding categorizations to the 50% threshold.

they attached a Schedule H or I which reported a trust that had made benefit payments.²² The total number of mixed-funded plans was thus 4,005 (8%). The remaining 24,656 plans (52%) were classified as fully insured. Figure 1 below illustrates the funding mechanism identification process. Also see Table 7 below.

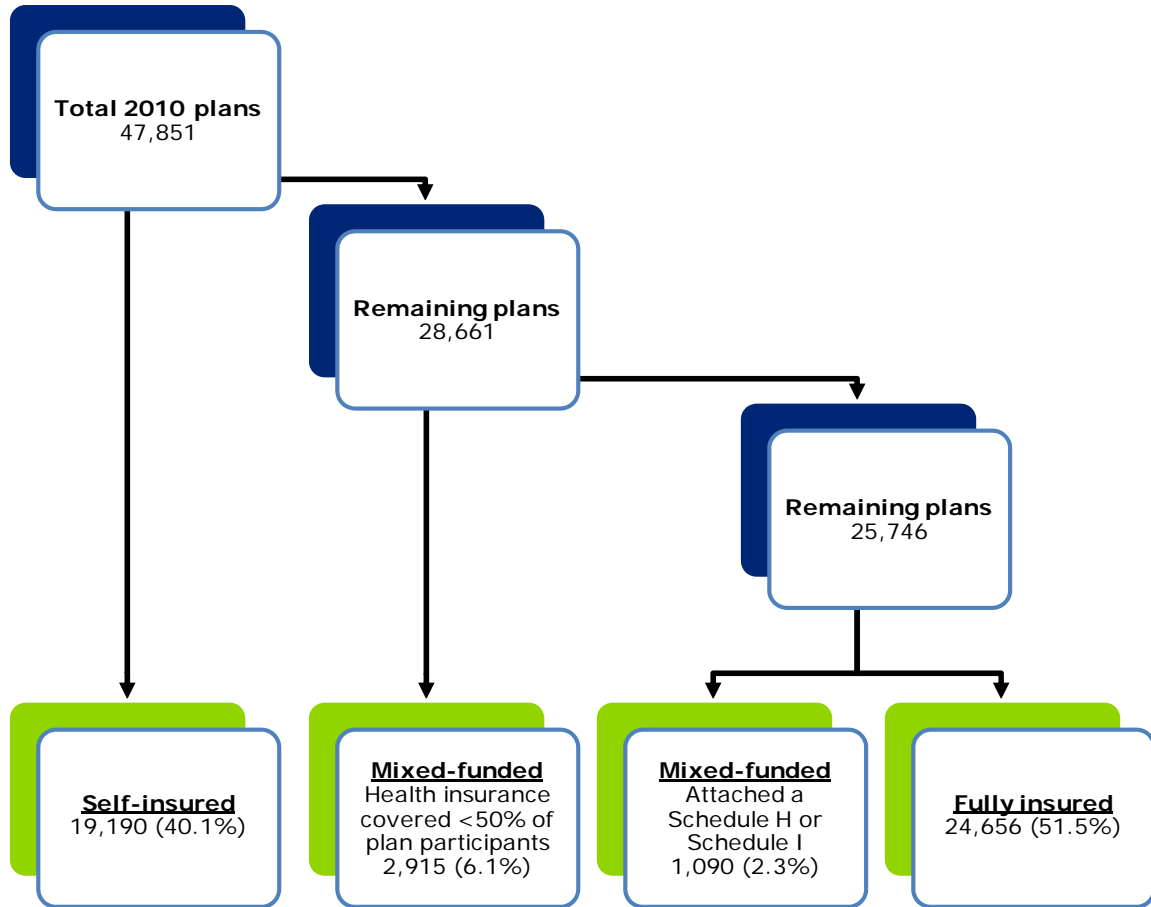


Figure 1. Funding Mechanism Derivation

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:

²² 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 such plans did not also have any self-insured component, they may have been incorrectly classified as mixed-funded.

- As noted in the 2011 and 2012 Reports, 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 statistical year 2010. 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., 2010 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 does 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 would not specify that the insurance covers only a subset of health benefits.
- Some plans may have filed a Schedule A for an Administrative Services Only (ASO) contract even though such contract is not an insurance contract. As described above on page 4, we attempted to identify such Schedules A through potentially reported TPA payments, stop-loss coverage, or low per-capita premium amounts, but the process may not be perfect.
- Among plans that reported a funding or benefit arrangement through insurance, approximately 0.6% (in 2010) did not file a Schedule A with insurance contract details. In such cases, it was assumed that the filer omitted to include a Schedule A with details of a health insurance contract for all plan participants.
- Among plans that reported a funding or benefit arrangement through insurance, approximately 2.4% 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.

The data issues enumerated above were less prevalent in 2010 than in earlier years. All statistical year 2010 filings were submitted electronically, suggesting that the EFAST2 system has improved data quality.

For more details on data anomalies that stood in the way of unambiguous funding mechanism classifications see our 2012 report, *Strengths and Limitations of Form 5500 Filings for Determining the Funding Mechanism of Employer-Provided Group Health Plans*.²³

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. However, 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 5500.²⁴ Also, the stop-loss insurance need not relate to health benefits but could protect other self-insured benefits, such as disability benefits. Thus the true prevalence of stop-loss insurance cannot be gleaned from Form 5500 health plan filings alone.

²³ <http://www.dol.gov/ebsa/pdf/deloitte2012-5.pdf>

²⁴ E.g., page 23 of the 2010 Form 5500 Instructions.

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.

Plan and Participant Funding Mechanisms

For statistical year 2010, Table 7 shows the overall distribution of funding mechanism among health plans that filed a Form 5500. About 40% of plans were self-insured, 52% were fully insured, and 8% were mixed-funded. As shown 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 44% of participants are in self-insured plans, 17% are in fully insured plans, and 39% are in mixed-funded plans.

Table 7. Distribution of Funding Mechanism (2010)

	Plans		Participants	
	Number	Percent	Number (millions)	Percent
Fully insured	24,656	51.5%	12.1	17.4%
Mixed	4,005	8.4%	26.8	38.6%
Self-insured	19,190	40.1%	30.4	43.9%
Total	47,851	100.0%	69.2	100.0%

Source: Form 5500 health plan filings.

Note: Participant counts as of the beginning of the plan year.

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 2012 Annual Survey* ("2012 KFF/HRET Survey").²⁵ This survey, conducted annually from 1999 to 2012, gathered detailed information on employer-provided health benefits, including their funding status.

According to the 2012 KFF/HRET Survey, 59% of covered workers in firms with three or more employees were in partially or completely self-funded plans in 2010.²⁶ Our findings are not directly comparable, because we include only a subset of plans with fewer than 100 participants and because as many as 39% 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 2012 KFF/HRET Survey.

²⁵ *Employer Health Benefits, 2012 Annual Survey*. Publication 8345. Kaiser Family Foundation and Health Research & Educational Trust. <http://ehbs.kff.org/>.

²⁶ The 2012 KFF/HRET survey defines covered workers as "employees receiving coverage from their employer".

Funding Mechanisms by Plan Size

Table 8 shows the distribution of funding mechanism by plan size for health plans in 2010. Most small plans are identified as self-insured, but this may be 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. Ignoring 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 90%, compared with 30% among plans with 100-199 participants. Weighted by plan participants, we find similar patterns. Overall, about 44% of participants are in self-insured plans, 17% are in fully insured plans, and 39% are in mixed-funded plans.

Table 8. Distribution of Funding Mechanism, by Plan Size (2010)

Participants in plan	Plans			Participants		
	Fully insured	Mixed	Self-insured	Fully insured	Mixed	Self-insured
2-99	2.0%	11.8%	86.2%	1.6%	16.0%	82.4%
100-199	69.7%	1.8%	28.5%	69.4%	1.8%	28.8%
200-499	60.0%	3.8%	36.2%	58.7%	4.3%	37.0%
500-999	41.7%	9.3%	49.0%	41.0%	9.7%	49.4%
1,000-1,999	28.7%	18.6%	52.7%	28.2%	19.4%	52.5%
2,000-4,999	17.7%	29.8%	52.5%	17.2%	30.7%	52.1%
5,000+	9.7%	45.3%	45.0%	7.2%	50.2%	42.5%
All	51.5%	8.4%	40.1%	17.4%	38.6%	43.9%

Source: Form 5500 health plan filings.

Note: Participant counts as of the beginning of the plan year.

The finding that larger plans are more likely to adopt mixed-funding or self-insurance is consistent with the 2012 KFF/HRET Survey. That study found that 16% of covered workers at firms with 3-199 employees were covered by self-insured plans in 2010, compared with 93% of covered workers at firms with 5,000 or more employees.

Funding Mechanisms by Year

Table 9 and Table 10 show the funding mechanism distribution for health plans by statistical year from 2001-2010. Table 9 shows the percentage distribution and Table 10 the number of plans and participants. The total number of health plans in each year is between 42,000 and 48,000. The fraction of plans that were self-insured increased from 45% in 2001 to 46% in 2003, and has since declined to 40%. However, the fraction of participants in health plans that self-insured increased by about five percentage points from 2001 to 2010. Similarly, the 2012 KFF/HRET Survey documented a 10 percentage point increase in workers covered by self-funded plans from 2001 to 2010.

Table 9. Distribution of Funding Mechanism, by Statistical Year

Statistical year	Plans			Participants		
	Fully insured	Mixed	Self-insured	Fully insured	Mixed	Self-insured
2001	44.4%	10.4%	45.1%	25.2%	36.2%	38.6%
2002	44.6%	9.9%	45.5%	23.9%	37.8%	38.4%
2003	44.6%	9.3%	46.0%	22.9%	36.8%	40.4%
2004	45.8%	9.3%	45.0%	21.9%	37.4%	40.6%
2005	46.5%	9.1%	44.4%	20.4%	38.3%	41.3%
2006	47.7%	8.9%	43.4%	20.1%	38.4%	41.5%
2007	48.9%	8.7%	42.4%	19.2%	35.9%	44.9%
2008	50.3%	8.8%	40.9%	19.0%	36.1%	44.9%
2009	51.5%	8.6%	39.9%	18.1%	37.6%	44.3%
2010	51.5%	8.4%	40.1%	17.4%	38.6%	43.9%

Source: Form 5500 health plan filings.

Note: Participant counts as of the beginning of the plan year.

Table 10. Plans and Participants by Funding Mechanism, by Statistical Year

Statistical year	Plans			Participants (millions)		
	Fully insured	Mixed	Self-insured	Fully insured	Mixed	Self-insured
2001	18,951	4,442	19,254	14.0	20.1	21.4
2002	19,723	4,376	20,095	14.3	22.6	23.0
2003	19,810	4,146	20,445	13.9	22.4	24.6
2004	20,083	4,061	19,720	13.2	22.6	24.5
2005	20,467	4,022	19,529	12.4	23.3	25.1
2006	21,515	4,009	19,546	12.5	23.8	25.7
2007	22,438	3,976	19,440	12.9	24.1	30.1
2008	22,157	3,876	18,039	12.8	24.4	30.4
2009	23,876	3,973	18,489	12.4	25.6	30.1
2010	24,656	4,005	19,190	12.1	26.8	30.4

Source: Form 5500 health plan filings.

Note: Participant counts as of the beginning of the plan year.

Table 9 poses an apparent paradox: the fraction of plans that were mixed-funded or self-insured decreased between 2001 and 2010, 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 11 shows that from 2001 to 2010 the fraction of mixed-funded or self-insured plans with 100-499 participants decreased from 44% to 35%, whereas the corresponding fraction among plans with 500 or more participants increased from 65% to 70%. Similarly, the 2012 KFF/HRET Survey found the fraction of covered workers in self-funded plans declined from 17% in 2001 to 16% in 2009 among firms with 3-199 workers, while over the same period, that fraction increased from 70% to 93% at firms with 5,000 or more workers. Second, the number of small plans in the data decreased: the number of plans with 2-99 participants reduced from 4,159 (10%) in 2001 to 2,425 (5%) in 2010. 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 11. Distribution of Funding Mechanism, by Plan Size and Statistical Year

Statistical year	Plans with 100-499 Participants			Plans with 500+ Participants		
	Fully insured	Mixed	Self-insured	Fully insured	Mixed	Self-insured
2001	56.2%	4.3%	39.5%	35.3%	19.5%	45.2%
2002	56.5%	4.2%	39.3%	34.3%	19.1%	46.5%
2003	57.0%	3.9%	39.1%	33.6%	19.2%	47.2%
2004	58.1%	3.8%	38.1%	33.3%	19.3%	47.4%
2005	58.8%	3.5%	37.7%	32.7%	19.4%	47.9%
2006	60.5%	3.4%	36.1%	32.5%	19.5%	48.0%
2007	61.8%	3.2%	35.0%	32.6%	19.3%	48.1%
2008	63.3%	3.1%	33.6%	32.6%	19.4%	47.9%
2009	65.0%	2.8%	32.2%	31.5%	20.1%	48.5%
2010	65.1%	2.7%	32.1%	29.6%	20.4%	50.0%

Source: Form 5500 health plan filings.

Funding Mechanisms by Employer Type

Table 12 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 agriculture, mining, construction, and utilities industries tend most likely to be mixed-funded or self-insured, whereas the services and wholesale trade industries are the most likely to be fully insured. Health plan size varies by industry and may contribute to the relationship between funding mechanism and industry.

Table 12. Distribution of Funding Mechanism, by Industry (2010)

	Fully insured	Mixed	Self-insured
Agriculture	32.0%	4.6%	63.4%
Communications and information	52.0%	10.2%	37.9%
Construction	36.5%	13.9%	49.6%
Finance, insurance & real estate	51.5%	10.2%	38.2%
Manufacturing	46.8%	9.9%	43.3%
Mining	31.3%	8.1%	60.7%
Retail trade	53.8%	7.5%	38.7%
Services	58.0%	5.9%	36.1%
Transportation	44.7%	10.7%	44.5%
Utilities	24.1%	19.2%	56.7%
Wholesale trade	54.9%	6.1%	39.0%
Misc. organizations	54.8%	9.0%	36.2%
Industry not reported	50.0%	0.0%	50.0%

Source: Form 5500 health plan filings.

Some industry patterns do not appear consistent with those documented by the *Employer Health Benefits: 2010 Annual Survey* sponsored by the Kaiser Family Foundation and Health Research and Educational Trust ("2010 KFF/HRET study"). The 2010 KFF/HRET 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 2010 KFF/HRET study 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.²⁷ A multiemployer plan is maintained pursuant to one or more collective bargaining agreements, whereas a multiple-employer plan is generally not collectively bargained. Table 13 shows that multiemployer plans are much more likely to choose a form of self-insurance than single-employer or multiple-employer plans. In 2010, 86% of multiemployer plans were self-insured or mixed-funded, compared with 46% of single-employer plans and 58% of multiple-employer plans.

Table 13. Distribution of Funding Mechanism of Multiemployer and Multiple-Employer Health Plans (2010)

	Fully insured	Mixed	Self-insured
Multiemployer plan	13.8%	30.6%	55.6%
Single-employer plan	53.5%	7.1%	39.3%
Multiple-employer plan	42.1%	16.0%	42.0%

Source: Form 5500 health plan filings.

Funding Mechanisms of New Plans

Table 14 shows the funding mechanism of new plans, defined as plans that checked the box for “first return/report filed for the plan” on the Form 5500.²⁸ A comparison of Table 14 to Table 9 indicates that new plans were less likely to be self-insured or mixed-funded than previously existing plans, especially in more recent years. This may explain the trend toward greater fractions of fully insured plans. However, participants in new plans were also generally less likely to be in either 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 23. Table 15 shows the numbers of plans and participants that underlie the percentages in Table 14.

²⁷ 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>.

²⁸ The 2012 Report used a different definition of new plans, namely plans that could not be matched to a plan filing in a prior year, going back to 2001. That definition captured existing plans of sponsors that adopted a new EIN.

Table 14. Distribution of Funding Mechanism of “New” Health Plans, by Statistical Year

Statistical year	Plans			Participants		
	Fully insured	Mixed	Self-insured	Fully insured	Mixed	Self-insured
2001	51.3%	5.3%	43.5%	35.9%	28.9%	35.2%
2002	55.2%	4.3%	40.5%	39.9%	18.3%	41.8%
2003	48.2%	3.6%	48.1%	35.3%	21.1%	43.6%
2004	55.9%	4.9%	39.1%	42.0%	19.8%	38.2%
2005	56.0%	4.4%	39.6%	40.7%	23.2%	36.1%
2006	62.7%	3.8%	33.5%	26.4%	20.5%	53.1%
2007	61.0%	3.2%	35.8%	28.9%	37.1%	34.0%
2008	67.0%	3.2%	29.8%	40.0%	19.4%	40.6%
2009	64.4%	3.1%	32.5%	42.9%	14.6%	42.5%
2010	65.8%	3.3%	30.8%	24.5%	46.2%	29.3%

Source: Form 5500 health plan filings.

Note: Based on plans that checked the "first return/report filed for the plan" box on their Form 5500 filing. The 2012 Report used a different definition. Participant counts as of the beginning of the plan year.

Table 15. Plans and Participants for “New” Health Plans, by Statistical Year

Statistical year	Plans			Participants (millions)		
	Fully insured	Mixed	Self-insured	Fully insured	Mixed	Self-insured
2001	1,218	125	1,033	0.5	0.4	0.5
2002	1,199	94	879	0.5	0.2	0.5
2003	1,186	89	1,184	0.4	0.3	0.5
2004	1,224	108	856	0.5	0.2	0.4
2005	1,284	100	908	0.4	0.2	0.4
2006	1,498	91	802	0.5	0.4	0.9
2007	1,523	79	893	0.4	0.5	0.5
2008	1,524	72	679	0.4	0.2	0.4
2009	1,719	83	866	0.5	0.2	0.5
2010	1,893	96	886	0.5	1.0	0.6

Source: Form 5500 health plan filings.

Note: Based on plans that checked the "first return/report filed for the plan" box on their Form 5500 filing. The 2012 Report used a different definition. Participant counts as of the beginning of the plan year.

Stop-Loss Coverage of Plans

Table 16 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.²⁹ 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 Form 5500. The

²⁹ No Schedule A can be attached to a Form 5500-SF and our analysis assumes that none of the Form 5500-SF (891 of 19,190 self-insured plans, or 5%) filers have stop-loss insurance.

figures in Schedule A may thus understate the prevalence of stop-loss insurance.³⁰ In 2010, approximately 18% of mixed-funded and 28% of self-insured plans reported stop-loss coverage in a Schedule A.³¹ Weighting by the number of participants reduces both fractions to approximately 15%, indicating that smaller plans are more likely to purchase stop-loss insurance than larger plans or may be mistakenly reporting stop-loss insurance purchased for the benefit of the employer. We note that the participant-weighted figures are historically more volatile than unweighted figures.³²

Table 16. Fraction of Health Plans Reporting Stop-Loss Insurance, by Funding Mechanism and Statistical Year

Statistical year	Plans		Participants	
	Mixed	Self-insured	Mixed	Self-insured
2001	19.0%	32.0%	17.5%	19.2%
2002	19.7%	31.9%	15.2%	19.5%
2003	21.3%	31.5%	16.2%	19.3%
2004	21.0%	31.8%	19.7%	19.7%
2005	21.8%	32.4%	14.1%	19.2%
2006	21.6%	32.1%	14.2%	25.9%
2007	21.5%	31.3%	13.7%	22.6%
2008	20.8%	31.8%	12.3%	16.2%
2009	19.0%	28.9%	16.4%	16.6%
2010	17.5%	27.8%	14.6%	14.9%

Source: Form 5500 health plan filings.

Note: Participant counts as of the beginning of the plan year.

³⁰ 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 with trust funding. Separately, our 2012 report, *Anomalies in Form 5500 Filings: Lessons from Supplemental Data for Group Health Plan Funding* (<http://www.dol.gov/ebsa/pdf/deloitte2012-6.pdf>), 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 58% 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>.

³¹ Contrary to the findings in Table 16, the 2012 Report suggested that stop-loss coverage was more prevalent among mixed-funded plans than among self-insured plans. The change is caused by the role that the Revised Algorithm assigns to stop-loss coverage for the inference of funding mechanism. If a Schedule A's benefit type includes both health benefits and stop-loss coverage, the Revised Algorithm does not regard it as evidence of health insurance and is likely to classify the plan as self-insured. See the Technical Note on page 4.

³² 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 17 shows that the number of mixed-funded or self-insured plans that purchased stop-loss coverage has steadily declined from 2002 through 2010. However, the number of participants in mixed-funded and self-insured plans covered by stop-loss coverage generally increased over the same period.

Table 17. Health Plans and Participants Reporting Stop-Loss Insurance, by Funding Mechanism and Statistical Year

Statistical year	Plans		Participants (millions)	
	Mixed	Self-insured	Mixed	Self-insured
2001	844	6,155	3.5	4.1
2002	862	6,402	3.4	4.5
2003	883	6,446	3.6	4.7
2004	853	6,263	4.4	4.8
2005	878	6,326	3.3	4.8
2006	866	6,266	3.4	6.7
2007	855	6,089	3.3	6.8
2008	808	5,739	3.0	4.9
2009	754	5,347	4.2	5.0
2010	701	5,329	3.9	4.5

Source: Form 5500 health plan filings.

Note: Participant counts as of the beginning of the plan year.

Table 18 shows the annual per-participant cost of stop-loss coverage, calculated as the ratio of premiums to “number of persons covered” by the stop-loss policy on Schedule A. 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 18. Per-Participant Annual Premiums for Stop-Loss Insurance

Statistical year	Mixed-funded (\$)			Self-insured (\$)		
	25th pct	Median	75th pct	25th pct	Median	75th pct
2001	61	178	369	113	378	766
2002	65	179	381	127	414	836
2003	82	215	417	141	435	891
2004	103	249	466	142	445	885
2005	106	251	496	164	487	917
2006	113	280	517	181	510	974
2007	93	259	508	181	528	998
2008	102	287	536	194	569	1,067
2009	135	315	577	209	585	1,106
2010	156	331	601	216	575	1,095

Source: Form 5500 health plan filings.

Table 19 shows the rate of stop-loss coverage among self-insured plans by plan size. Plans with fewer than 1,000 participants are more likely to purchase stop-loss coverage as plan size increases, but plans with more than 1,000 participants are less likely to purchase stop-loss coverage as plan size increases.

Table 19. Self-Insured Health Plans' Rate of Stop-Loss Coverage, by Plan Size (2010)

Participants in plan	No stop-loss	Stop-loss coverage	Total self-insured	Stop-loss coverage
2-99	1,843	247	2,090	11.8%
100-199	3,405	1,300	4,705	27.6%
200-499	3,616	1,783	5,399	33.0%
500-999	1,961	965	2,926	33.0%
1,000-1,999	1,289	572	1,861	30.7%
2,000-4,999	989	321	1,310	24.5%
5,000+	758	141	899	15.7%
Total	13,861	5,329	19,190	27.8%

Source: Form 5500 health plan filings.

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 only at very high rates.

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. Table 20 presents the breakdown in funding status for for-profit and not-for-profit firms. The differences in plan funding were small—1 percentage point or less in any category in 2010. Weighted by participants, however, not-for-profit organizations were much more likely self-insured and much less likely mixed-funded than for-profit firms.

Table 20. Distribution of Funding Mechanism, by For-Profit and Not-for-Profit Sponsors (2010)

	Plans			Participants		
	Fully insured	Mixed	Self-insured	Fully insured	Mixed	Self-insured
For-profit	51.3%	8.5%	40.2%	18.9%	44.9%	36.2%
Not-for-profit	52.3%	7.9%	39.8%	13.2%	21.0%	65.9%

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

Note: Participant counts as of the beginning of the plan year.

Focusing on the subset of Form 5500 health plan filers that could be matched to financial information in Capital IQ, Table 21 presents 2010 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 on all these dimensions than companies offering self-insured or mixed-funded health plans. Companies offering mixed-funded health plans tend to be the

largest. These results are generally consistent with the 2012 Report's findings for statistical year 2009.³³

Table 21. Characteristics of Companies Matched to Form 5500 Health Plan Filings, by Funding Mechanism (2010)

		All	Fully insured	Mixed	Self-insured
Revenue (in \$ millions)	25 pct	228	87	1,167	354
	Median	926	254	3,591	1,092
	75 pct	4,141	1,010	10,636	4,248
	# Obs	4,307	1,475	959	1,873
Market capitalization (in \$ millions)	25 pct	288	129	1,154	357
	Median	1,178	443	3,552	1,476
	75 pct	5,108	1,615	13,922	5,019
	# Obs	3,774	1,287	836	1,651
Net income (in \$ millions)	25 pct	0	-7	29	4
	Median	40	8	161	50
	75 pct	237	65	724	246
	# Obs	4,331	1,483	963	1,885
Number of employees	25 pct	763	313	3,350	1,115
	Median	2,986	881	10,524	3,345
	75 pct	13,500	3,325	31,900	12,750
	# Obs	4,089	1,376	927	1,786

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

Table 22 presents three metrics of the financial health of matched companies. The Altman Z-Score is 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.³⁴ Companies offering different types of plans appear to have comparable levels of Z-Scores. Put differently, the risk of insolvency, as measured by a Z-Score, does not appear to be related to the choice of funding mechanism.

The results are mixed for the other two metrics of financial strength. Companies that sponsored fully insured plans had higher median cash from operations, relative to their total debt, but lower median operating income, relative to total debt. Their financial ratios tended to be more dispersed than those of self-insured or mixed-funded firms: generally, the 25th percentiles are lower and the 75th percentiles are higher.³⁵ Again, these findings are generally consistent with the 2012 Report's findings for statistical year 2009.

³³ The 2012 Report's 2009 numbers are not directly comparable to this report's 2010 tables because of the revision to the algorithm that determines funding mechanism based on Form 5500 filings. See the Technical Note on page 4.

³⁴ Altman, E.I. (1968). "Financial Ratios, Discriminant Analysis and the Prediction of Corporate Bankruptcy." *Journal of Finance* 23(4): 589-609.

³⁵ For fully insured plans the 75th percentile of cash from operations over debt appears relatively large because a large proportion of sponsors of fully insured plans had zero debt in 2010. The fraction of sponsors of fully insured plans without debt

Table 22. Financial Health of Companies Matched to Form 5500 Health Plan Filings, by Funding Mechanism (2010)

		All	Fully insured	Mixed	Self-insured
Altman Z-Score	25 pct	1.64	1.30	1.83	1.78
	Median	2.88	2.88	2.90	2.90
	75 pct	4.57	4.90	4.13	4.57
	# Obs	3,285	1,122	766	1,397
Cash from operations over total debt	25 pct	0.10	0.15	0.09	0.08
	Median	0.39	0.81	0.30	0.33
	75 pct	2.20	36.32	0.82	1.26
	# Obs	4,285	1,470	957	1,858
Operating income over total debt	25 pct	0.08	-0.02	0.14	0.10
	Median	0.28	0.20	0.33	0.29
	75 pct	0.89	1.33	0.74	0.87
	# Obs	4,314	1,478	959	1,877

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

Switching Funding Mechanism Over Time

As shown in Table 4 above, roughly 80%-85% of health plan filings could be matched to a corresponding filing in the previous year. Table 23 shows the frequency with which plans switched their funding mechanisms from one year to the next.³⁶ For example, 47% of plans that were observed in both 2009 and 2010 remained mixed-funded or self-insured, 48% remained fully insured, 3% switched from fully insured to mixed-funded or self-insured, and 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 participants level (see Table 9). While the switching rate increased slightly from 2008 to 2009, the overall trend is toward lower switching rates. 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.

was 18% compared with 9% and 7% for sponsors of self-insured or mixed-funded plans, respectively. Sponsors without debt are included in the upper tail of the distribution of cash from operations over debt.

³⁶ Throughout this report, the Revised Algorithm for determining funding mechanism was applied to all years of data.

Table 23. 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
2002	51.9%	41.2%	3.6%	3.3%
2003	52.5%	41.5%	3.2%	2.8%
2004	52.5%	42.0%	2.7%	2.8%
2005	51.4%	43.3%	2.8%	2.5%
2006	51.1%	44.0%	2.6%	2.2%
2007	49.9%	45.2%	2.5%	2.4%
2008	48.6%	46.5%	2.6%	2.3%
2009	47.1%	47.4%	3.0%	2.4%
2010	46.9%	48.4%	2.8%	1.9%

Source: Form 5500 health plan filings.

TECHNICAL APPENDIX

The definitions of funding mechanism rely upon the fields of Form 5500 and its Schedules as outlined in Table 24.

Table 24. 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) <ol style="list-style-type: none"> 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) <ol style="list-style-type: none"> 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
Form 5500, Line 6e	Deceased participants whose beneficiaries are receiving or are entitled to receive benefits
Form 5500, Line 6f	Number of participants as of the end of the plan year
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: <ol style="list-style-type: none"> 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

Source	Description
	6. Investment Company/Mutual Fund 7. Investment Manager/Adviser 8. Labor Union 9. Foreign entity 0. Other
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
Schedule A, Line 9b3	Incurred claims
Schedule A, Line 9b4	Claims charged
Schedule A, Line 10a	Total premiums or subscription charges paid to carrier
Schedule H, Line 2e4	Total benefit payments
Schedule I, Line 2e	Benefits paid (including direct rollovers)

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