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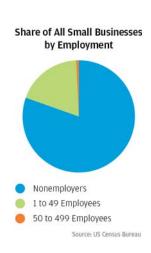
# Paying a Premium:

### Dynamics of the Small Business Owner Health Insurance Market

#### **Executive Summary**

Nonemployer small business owners who pay for their own health insurance epitomize two poorly understood features of the US economy: the small business sector and the individual health market. Nonemployer businesses are a large segment of the small business sector, and small business owners are especially likely to purchase health insurance on the individual market—4.4 million self-employed business owners purchased health insurance on this market in 2014. The economic experiences of these small business owners can inform both the well-being of the small business sector and the condition of a substantial share of the individual health insurance market.

This brief focuses on the experiences of these small business owners purchasing health insurance for themselves or their families. We constructed a sample of over 30,000 firms who hold business banking deposit accounts with Chase to produce a monthly view of health insurance premium payments and other operating expenses from January 2014 to April 2017.



#### Our findings are four-fold:

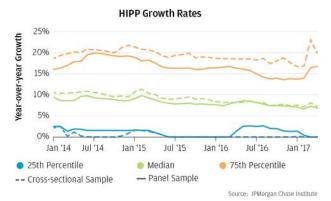
**Finding 1:** In 2017, the typical nonemployer small business spent about \$500 per month on health insurance premiums.

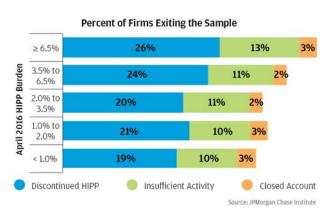
**Finding 2:** Nonemployer small business owner health insurance payments have grown substantially since 2014, although the rate has slowed.

**Finding 3:** Nonemployer small businesses with higher health insurance premium payment (HIPP) burden levels were more likely to stop purchasing health insurance on the individual market.

**Finding 4:** Nonemployer small business health insurance premium payment levels and burden varied widely by metropolitan area and industry.

The health insurance premium payments of nonemployer small business owners are large, growing quickly, and pose an increasing economic burden on small businesses. Policy makers should consider the impact of health insurance market reforms on these sometimes financially fragile small businesses and their owners.





## Introduction

Nonemployer small business owners who pay for their own health insurance epitomize two poorly understood features of the US economy: the small business sector and the individual health market. While the issues faced by small employers who offer health insurance benefits to their employees have drawn significant attention, the purchase of health insurance by owners of nonemployer businesses on behalf of their own families is a critical component of the health policy landscape as well.

Nonemployer businesses are a large segment of the small business sector (Farrell and Wheat, 2017). Of the 29.6 million small businesses in the US in 2014, 23.8 million were nonemployers.¹ The owners of these businesses were particularly likely to purchase health insurance on the individual market—4.4 million self-employed business owners purchased health insurance on this market in 2014. While some received employer-sponsored health insurance through a spouse, partner, or another family member, 31 percent of the self-employed purchased health insurance on the individual market in 2014, as compared to 14 percent of the overall adult population.² Moreover, the self-employed comprise a substantial fraction of all households purchasing health insurance on the individual market—in

In 2014, 4.4 million small business owners purchased health insurance for themselves or their families on the individual market.

2014, 16 percent of individual market participants were self-employed. Accordingly, the economic experiences of small business owners in this market can inform both the well-being of the small business sector and the condition of a substantial share of the individual health insurance market.

To that end, this brief focuses on small business owners who purchase health insurance through the individual market *for themselves* or their families. Our findings provide insight into the decisions of small business owners as participants in the individual health insurance market and a unique perspective on the magnitude of health insurance premiums relative to other operating expenses small business owners face.

We constructed a sample of over 30,000 de-identified firms who hold business banking deposit accounts with Chase, meet our criteria for small, nonemployer, core operating businesses in metropolitan areas, and had regular electronic health insurance premium payments (HIPP). We then used 117 million anonymized transactions from these businesses to produce a monthly view of HIPP and other operating expenses from January 2014 to April 2017.

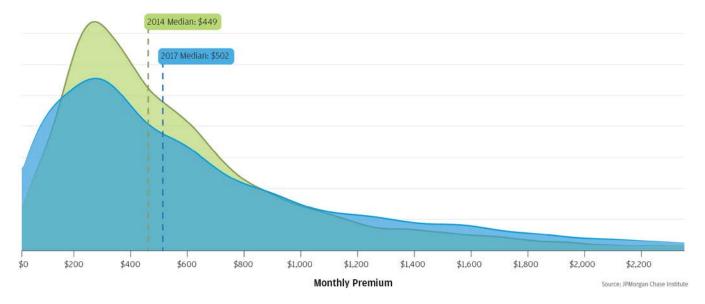
# **Findings**



In 2017, the typical nonemployer small business spent about \$500 per month on health insurance premiums.

Our data show that nonemployer business owners paid a wide range of health insurance premium payments in 2017. Figure 1 presents the range of payment levels in April 2017. The typical nonemployer small business paid about \$500 each month for health insurance. While one-quarter of nonemployer business owners spent less than \$250, another 25 percent paid more than \$1,000 for their health insurance premiums in 2017. The range we observe reflects a mix of single and family plans, though variation in plan types does not entirely explain the variation in the data.

Figure 1: Distributions of Health Insurance Premium Payments, 2014 and 2017



Moreover, health insurance premium payment levels have grown in recent years. Figure 1 also shows how the distribution of HIPP has changed since 2014. The median payment increased by 11.6 percent, from \$449 to \$502 in the three years between April 2014 and April 2017, or a compound annual growth rate of 3.7 percent during this period.<sup>3</sup>

The median nonemployer small business HIPP represents a mix of single and family coverage plans \$997 JPMCI Median \$833 Single Coverage Average \$667 Family Coverage Average \$502 \$492 \$476 \$449 \$378 \$321 \$286 \$271 2014 2015 2016 2017

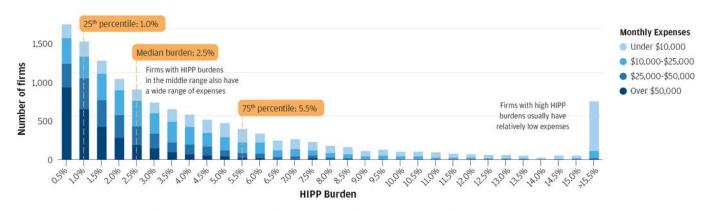
Figure 2: Median Nonemployer Small Business HIPP, Compared to Benchmarks from the Individual Health Insurance Market

Note: The eHealth Health Insurance Price Index is shown for each open enrollment period, which typically starts the prior year, and reflects payments that would be made during the benefit year. For example, the 2017 open enrollment period began on November 1, 2016 and ended January 31, 2017, for the 2017 benefit year. The JPMCI median is the median payment of nonemployer small businesses for April of each year.

According to the eHealth Health Insurance Price Index, the average monthly unsubsidized health insurance premiums on the individual market were approximately \$378 for single coverage and \$997 for family plans in 2017, as shown in Figure 2. While our data provide a unique view of the health insurance premium payments of small business owners, they do not directly inform health insurance plan characteristics by differentiating single coverage from family plans. However, the eHealth data suggest that the median nonemployer small business HIPP we observe is a representative mix of premiums for single and family coverage plans.

For current or potential small business owners, health insurance premiums can be a significant expense. Consider the perspective of a potential entrepreneur. If she were an employee, she would pay the employee portion of her health insurance premiumsapproximately \$101 per month for single coverage or \$476 for families in 2017.5 If she were to start her own business, her monthly payment would be higher because she would have to purchase a health plan on the individual market and lose any employer-provided health benefits. Health insurance premiums are sizable and can affect small business owners' operating decisions, including the decision to become a small business owner.6

Figure 3: HIPP Burden (HIPP as Share of Operating Expenses) Distribution, 2017



Note: Observations with numbers of firms under our reporting threshold suppressed. We define HIPP Burden as health insurance premium payments as a share of overall observed expenses.

Source: JPMorgan Chase Institute

Health insurance premiums are just one of the many operating expenses small businesses face. For a larger firm with higher overall expenses, a given level HIPP might be less significant, while the same HIPP level for a smaller firm with lower overall expenses might be much more substantively impactful. Therefore, we define a firm's HIPP burden as its premium payment divided by its estimated operating expenses.<sup>7</sup> Premiums constituted about 2.5 percent of a typical nonemployer small business's monthly expenses in 2017. This burden varied across small businesses, as illustrated in Figure 3. A quarter of firms had burdens below 1.0 percent and another quarter experienced burdens above 5.5 percent. A significant number of firms had either very low or very high burdens, usually as a result of having relatively high or low expenses, respectively.



Nonemployer small business owner health insurance payments have grown substantially since 2014, although the rate has slowed.

A relative strength of our longitudinal data is that it allows us to differentiate cross-sectional growth in premium payments from changes in health insurance premiums experienced by individual firms. Accordingly, we investigated intra-firm HIPP growth, not only in our full cross-sectional sample of over 30,000 firms that allows entry and exit, but also in a longitudinal panel of 3,505 firms that are in our cross-sectional sample for all months of our sample period.

Figure 4 shows that the median within-firm growth rate of health insurance premiums slowed from about 10 percent in 2014 to about 7 percent in 2017 in both of our samples. These median within-firm premium growth rates are notably higher than the 3.7 percent compound annual growth rate of the median payment discussed in Finding 1. While our data do not differentiate payment changes attributable to plan changes from price changes for the same plan, they do reflect the actual choices nonemployer business owners make when purchasing health insurance.

25% HIPP growth rates exhibit similar trends in both the cross-sectional 75th Percentile sample and the longitudinal panel 20% Year-over-year Growth 15% Nonemployer small businesses experience typical HIPP growth rates of 7-10% 10% 5% 25th Percentile 0% Jan 2014 Jul 2014 Jan 2015 Jul 2015 Jan 2016 Jul 2016 Jan 2017 --- Cross-sectional Sample Panel Sample

Figure 4: Nonemployer Small Business HIPP Growth Rates for the Longitudinal Panel and Cross-sectional Samples

The distribution of HIPP growth rates is wide in both samples and somewhat wider in the full sample. HIPP growth rates in the 75th percentile were about 5-10 percentage points higher than the median growth rate. In contrast, premium growth in the 25th percentile has been low or near zero in the last few years. In the appendix, we show that the ranges of HIPP levels over time for the two samples also exhibit similar trends.

Nonemployer small businesses experienced higher typical HIPP growth rates than those of average employer-sponsored plans 8.8% 8.6% 8.3% 6.8% 4.7% 4.0% 3.8% 3.4% 3.4% 3.0% 2.9% 2.4%

2016

2015

Employer-sponsored plans, single

Figure 5: Annual Growth in Monthly Premiums. Small Businesses in the Panel Compared to Employer-sponsored Plans

Source: Kaiser/HRET Survey of Employer-Sponsored Health Benefits; JPMorgan Chase Institute

2017

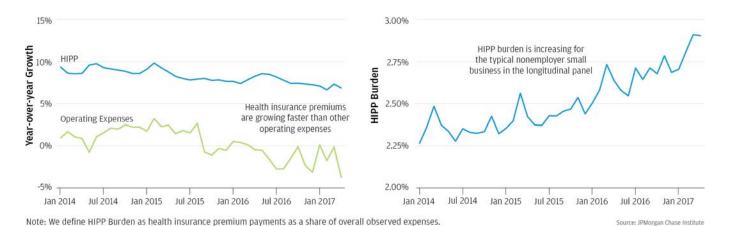
Figure 5 shows that the median within-firm growth in premium payments in our panel is higher than the growth in benchmarks for employer-sponsored health plans. Kaiser Family Foundation and the Health Research & Educational Trust estimate that between 2014 and 2017, average monthly premiums in employer-sponsored plans grew by 2 to 5 percent annually. The difference between the growth rates in benchmarks and the median growth rates observed in our sample highlights not only the contrast between employer-sponsored and individual health plans but also how aggregate data can obscure the experiences of individual firms.

Employer-sponsored plans, family

Figure 6: HIPP Burden in the Longitudinal Panel

2014

JPMCI (individual market)



Health insurance premiums are just one the many expenses small businesses face. In the past few years, health insurance premiums have grown significantly, and the magnitude of the increase is particularly striking in comparison to the growth in other operating expenses. Figure 6 shows that the median growth rate in HIPP for the longitudinal panel, while declining, remained higher than the median growth rate of operating expenses throughout the sample period. A similar relationship holds for the cross-sectional sample.

The second part of Figure 6 shows how health insurance payments have become an increasing share of a typical small business's operating expenses, as premium growth outpaced other operating expenses. In 2014, the median HIPP burden was 2.3 percent. In 2017, the median burden had grown to 2.9 percent, increasing about 0.20 percentage points each year.

Although HIPP levels and growth rates exhibit similar trends in the cross-sectional sample and the longitudinal panel, their HIPP burdens do not. In the full sample, the median HIPP burden in 2017 was 2.5 percent, as shown in Figure 3, after a slight decline from 2014. Our data allow us to observe health insurance premiums and burdens within the same firm over time, and this provides the opportunity to document within-firm trends that the changing composition of a cross-sectional sample and aggregate data otherwise might mask.

## Finding **Three**

Nonemployer small businesses with higher HIPP burden levels were more likely to stop purchasing health insurance on the individual market.

Our longitudinal data also allow us to explore the dynamics of nonemployer business owner health insurance purchases. While our cross-sectional sample contains over 30,000 distinct nonemployer small businesses over our entire observation window, only 10,000-14,000 nonemployer small businesses met our selection criteria in any given month. Our selection criteria, which ensure that firms in the sample are active nonemployer small businesses that make health insurance payments, are discussed in greater detail in the appendix. In the typical month/year, 650 firms entered our sample, while 643 exited. We focus on the characteristics of the firms that exited to better understand the response of nonemployer business owners to the cost of health insurance.<sup>8</sup>

In particular, nonemployer small businesses with high HIPP burdens were more likely to exit our cross-sectional sample. We illustrate this by tracing the histories of the 12,487 firms in our sample in April 2016. About 36 percent, or 4,464 firms, no longer appeared in our sample a year later in April 2017. Figure 7 shows that among these firms, those with higher HIPP burdens were more likely to exit our sample than businesses with lower HIPP burdens. Specifically, 42 percent of the firms with health insurance payments amounting to 6.5 percent of expenses or more were no longer in the sample a year later. In contrast, among firms with HIPP burdens under 1.0 percent in April 2016, 32 percent were not in the sample one year later. This pattern is consistent throughout our sample period.

≥ 6.5% 26% 13% 3% 24% 11% 2% 3.5% to 6.5% April 2016 HIPP Burden 20% 11% 2% 2.0% to 3.5% Firms with high HIPP burdens were more likely to leave our sample in the following year, most commonly because they discontinued HIPP 21% 1.0% to 2.0% 10% 3% 19% 10% 3% < 1.0% 0% 10% 20% 30% 40% 50% Share of firms Discontinued HIPP Insufficient Activity Closed Account

Figure 7: Percent of Firms Exiting the Sample, by HIPP Burden

Note: We define HIPP Burden as health insurance premium payments as a share of overall observed expenses.

Source: JPMorgan Chase Institute

Figure 7 also shows the reasons firms exited our sample. The most common reason was the discontinuation of electronic health insurance payments. More than half of the exits result because we no longer observed health insurance payments. There are several explanations for this aside from losing health insurance coverage. It could be that the small business owner gained health insurance through another source, such as a family member with an employer-based plan or Medicare. It is also possible that they replaced electronic health insurance payments with payments through a channel that we cannot codify (e.g. they switched to an insurer that only accepts paper checks).

If, however, it is the case that these small business owners discontinued paying health insurance altogether, their businesses and households may be especially vulnerable to shocks due to large and unexpected health care expenditures. This is especially alarming given evidence that half of all small businesses hold less than a month of cash buffer days in reserve (Farrell and Wheat, 2016).

Small business owners who discontinued paying health insurance may be especially vulnerable to shocks due to large and unexpected health care expenditures.

Notably, a relatively small fraction of firms that exited our sample did so because their accounts closed—we found no evidence suggesting that small business owners were going out of business because of high HIPP burden. In addition, about 31 percent of the firms exiting our sample between April 2016 and April 2017 did so because they did not meet our criteria for having sufficient account activity or HIPP regularity. None of the exits were due to nonemployer firms transitioning into employer firms, as our sample only contains small businesses that remained nonemployers for our entire observation window.

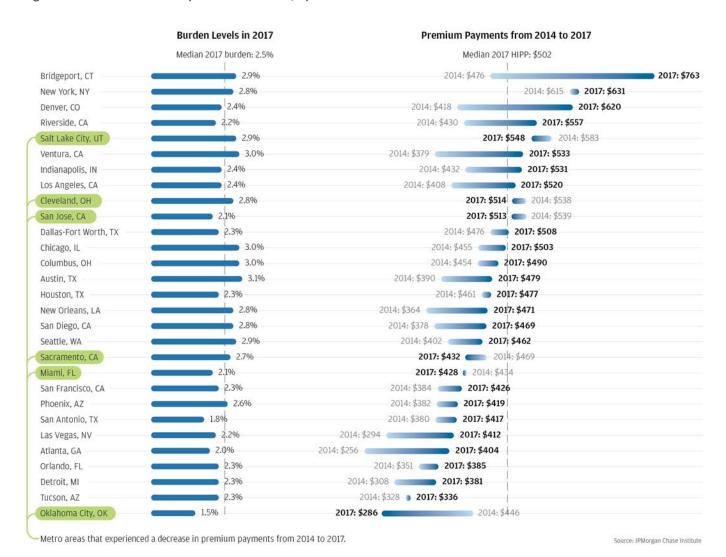


Nonemployer small business health insurance premium payment levels and burden vary widely by metropolitan area and industry.

The extent to which nonemployer small business owners pay high health insurance premiums or premiums that reflect a high share of the overall expenses of a business is informed in part by the location of that business and the industry in which the business operates.

Figure 8 shows the median HIPP and burdens for 29 metropolitan areas. <sup>10</sup> Median HIPP levels differed strikingly across metropolitan areas. The typical HIPP in the Bridgeport, CT metro area was nearly \$500 larger than the typical HIPP in the Oklahoma City metro area. Premium payments within metro areas also varied over time, with the Bridgeport and Denver metro areas experiencing particularly large increases in median HIPP levels from 2014 to 2017.

Figure 8: Median Premium Payment and Burden, by Metro Area and Year<sup>11</sup>

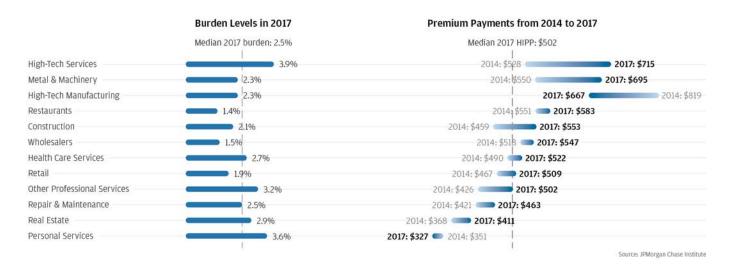


Premium payment burdens also varied widely. In April 2017, the median burden in Austin, the metro area with the highest burden, was 1.6 percentage points higher than the median burden in the Oklahoma City metro area. While the Oklahoma City metro area had both the lowest HIPP level and HIPP burden in April 2017, there generally was no relationship between HIPP levels and burden across our 29 metro areas.

Median HIPP levels have not grown in all metropolitan areas over time. Figure 8 shows that while median HIPP levels grew for the majority of metro areas in our sample, we observe six metro areas where median premium payments declined.

We also observe substantial variation in HIPP levels and burden by industry, as shown in Figure 9. In the high-tech services industry, the median nonemployer small business had a HIPP level of \$715/month in April 2017, nearly \$400 larger than the median premium payment in the personal services industry. There was no clear relationship between median HIPP level and burden by industry. In many cases, industries with high health insurance premium payments had relatively low median burdens.

Figure 9: Premium Payment and Burden, by Industry and Year<sup>12</sup>



# **Conclusions and Implications**

This brief leveraged the unique longitudinal JPMorgan Chase Institute small business data asset to explore the dynamics of health insurance premium payments among nonemployer small business owners. We found that these payments were large, growing quickly, and posed an increasing economic burden to small businesses. Moreover, while this study does not attempt to account for differences across local health insurance markets, health insurance premium levels, growth and burden vary meaningfully by both industry and market.

As we continue a national dialogue about the evolution of health insurance markets, we offer the following implications of our findings about health insurance premium payments by nonemployer business owners:

- Health insurance premiums are a material expense for nonemployer business owners. We found that the typical nonemployer business owner paid health insurance premium payments that are 2.5 percent of her overall expenses in a given month in 2017, and were substantially higher for smaller nonemployer businesses. These payments may be larger than the out-of-pocket premiums business owners might have paid for employer-sponsored insurance if they were employees. These differentials are consistent with other research suggesting that business creation may be hampered by the relative costs of health insurance faced by small business owners (Fairlie et al., 2011).
- Health insurance premiums are an increasing economic burden for nonemployer business owners. We also find that most nonemployer firms experienced substantial health insurance premium growth significantly faster than the growth of their other operating expenses. Small business owners who maintain health insurance are left with a decreasing share of funds to spend on their business or use to support their families.
- Nonemployer businesses for whom health insurance premiums are most burdensome are exiting the health insurance market. Over 40 percent of the nonemployer businesses with a HIPP burden of 6.5 percent or greater in 2016 exited our sample within a year, largely due to discontinued electronic health insurance payments. Many of these small business owners are especially financially fragile, holding less than a month of cash buffer days in reserve (Farrell and Wheat, 2016). To the extent that the owners of these businesses have in fact exited the health insurance market, their businesses and households may be especially vulnerable to shocks due to large and unexpected health care expenditures.
- Aggregate health insurance premium growth rates may provide a limited perspective on the experience of individual firms. Our longitudinal view allowed us to determine that health insurance premium payment burdens are growing over time for individual firms. In contrast, the declining burden we observed in our cross-sectional sample illustrates a potential effect of the dynamism of the small business sector on conclusions drawn from aggregate data. Specifically, high rates of premium payment discontinuation among high burden firms might keep a policy maker who only observed cross-sectional aggregate data on burden growth from fully understanding the burden growth experienced by individual firms.

Health insurance premiums are an increasing economic burden for nonemployer business owners.

• Policy makers should consider the impact of health insurance market reforms on nonemployer small business owners. While health insurance premiums for nonemployer firms are growing faster than premiums for employer-sponsored insurance, we find that this growth rate is decelerating. Our ability to assess the full implications of this deceleration is limited by our inability to observe the characteristics of the health insurance plans associated with this deceleration in growth rate. In particular, we do not observe whether the actuarial value of plans purchased by these business owners has increased or decreased over time. Nevertheless, all else equal, health policy choices that might support rather than disrupt this deceleration may help to limit the increasing economic burden that health insurance premiums otherwise impose on small business owners.

# Data Asset & Methodological Appendix

#### **Constructing our Sample**

The report is based on two different samples: a cross-sectional sample and a panel sample. The cross-sectional sample allows us to analyze health insurance premium payment dynamics across a wide range of firms, including those that were founded or exited during our overall study period. Specifically, we defined a cross-section for each focal month in this brief by including all firms that fulfill the following criteria:

- 1. Meets basic firmographic requirements for each of the 15 months leading up to and including the focal month;
- 2. Is not an employer;
- 3. Has 13 out of 15 months with premium payment transactions; and
- 4. Has a premium payment in the focal month, the two months preceding the focal months, and the three months preceding each of these months by a year.

The basic firmographic requirements identify businesses that are likely to be small and active. Specifically, we required that a business never have an end-of-month balance in excess of \$20 million, or be identified with more than one geographic location or more than one industry classification. We also required a firm to have at least \$500 in outflows and 10 combined inflows and outflows in each month, for at least six months in every 15 months. Moreover, we limited our sample to metropolitan areas where Chase has a representative footprint and 12 selected industries that comprise key elements of the small business sector.<sup>13</sup>

We further restricted our sample to firms for which we never observe monthly payroll outflows larger than the approximate minimum monthly wage of a full-time employee. This increases our confidence that the small businesses in our sample are nonemployers and, importantly, that they are paying for health insurance for themselves and their families as opposed to their employees.

Finally, we required health insurance premium payments in the three months up to the focal month and the three months one year prior in order to minimize effects due to the timing of cash flows. While health insurance payments tend to be consistent from month to month, the timing of other operating expenses can vary. To smooth these cash flows, we measure all health insurance premium payments and expenses using a three-month average. That is, a firm's HIPP for July 2015 is the average of May, June, and July 2015 payments, and premium payments are required in each of the three months. The year-over-year growth rate, from July 2014 to July 2015, requires 15 (mostly) continuous months of health insurance payments: May-July 2014 for the July 2014 observation, May-July 2015 for the July 15 observation, and the nine months from August 2014 through April 2014.

These criteria produced a sample with an average of 12,900 firms per month.

In order to support some analyses of within-firm payment changes, we also constructed a panel sample, comprised of 3,505 firms that appear in our cross-sectional sample every month.

#### Nonemployer HIPP, Cross-sectional Sample and Longitudinal Panel

The ranges of nonemployer health insurance payments are similar for both the cross-sectional sample and the longitudinal panel. In either sample, firms typically made health insurance premium payments of about \$500 per month in 2017. The distributions of payments are also similar, although the range between the 25th and 75th percentiles is somewhat wider for the cross-sectional sample.

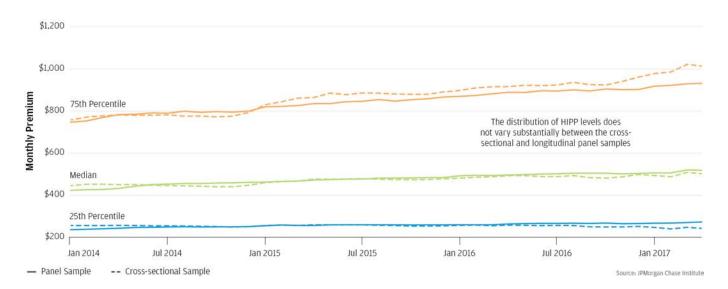


Figure A1: Distribution of Health Insurance Payments, Cross-Sectional and Longitudinal Panel Samples

#### **Disaggregating Single and Family Plans**

The source data for this brief largely consist of anonymized small business deposit account transactions. While these data contain a large number of data elements for each transaction, these elements do not allow us to precisely determine whether an individual transaction corresponds to a single coverage plan or a family plan. Attempting such an exercise based on payment levels would be an imprecise task which falls beyond the scope of this study. One reason is the regional heterogeneity of prices, which is discussed in Finding 4. As Figure 1 shows, due to regional price variation, there is no clear separation in the price distributions of single coverage plans and family plans. That is, a family plan in Oklahoma City could potentially cost less than a single plan in Denver or New York City.

The distribution of payment levels within individual Core-based Statistical Areas (CBSAs) more clearly illustrates the mix of single and family plans in our data. Figure A2 shows that premium payments in both New York City and Houston have a distribution with a clear mode, as well as a smaller peak at a slightly higher payment level that could indicate the difference between single and family payments. However, the distinction is not sufficiently clear to allow us to differentiate between plan coverage types based on payment levels alone.

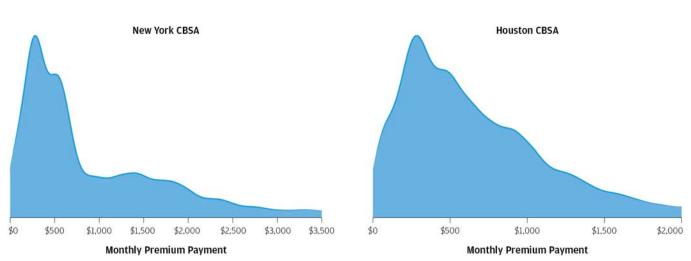


Figure A2: Distributions of Monthly Premium Payments in New York and Houston Metro Areas

Source: JPMorgan Chase Institute

## **Endnotes**

- 1 US Census Nonemployer Statistics, 2014. US Census Bureau, Statistics of US Business, 2014.
- 2 Employee Benefit Research Institute Issue Brief, no. 419.
- 3 Figures in this brief are not adjusted for inflation.
- 4 Within local markets, the distribution of payments is suggestive of the heterogeneity of plans in our data, which we describe in more detail in the appendix.
- 5 Kaiser Family Foundation and Health Research & Educational Trust.
- 6 Comparisons between employer-sponsored plans and health insurance on the individual market are imperfect and complicated by policies that may target the self-employed and households separately. We cannot observe the tax status or household income of the small business owners in our sample, and it is beyond the scope of this brief to estimate the effective cost of health insurance after various policy provisions.
- 7 We estimated operating expenses as the sum of all outflows less identified financial outflows, fees, and transfers. This approach does not exclude investment outflows, which we cannot cleanly identify. We nevertheless labeled this sum as operating expenses because investment outflows are likely unsubstantial in our population of small nonemployer businesses.
- 8 In a separate analysis, we also explored the characteristics of firms that enter our cross-sectional sample. HIPP burden does not correlate with overall entry rates or the adoption of HIPP. We found that entering firms are slightly more likely to have low HIPP burdens.
- 9 The ranges of HIPP burdens were chosen to include similar numbers of firms in each range.
- 10 The selected 29 metropolitan areas reflect all metropolitan areas located within the Chase branch footprint where we observe a number of nonemployer small businesses larger than our reporting threshold.
- 11 All yearly values are taken for the same month, April. The dotted lines represented median values in 2017.
- 12 All yearly values are taken for the same month, April. The dotted lines represented median values in 2017.
- 13 The selected industries are: construction, health care services, high-tech manufacturing, high-tech services, metals and machinery manufacturing, other professional services (e.g., lawyers, accountants, consultants, marketing, media, and design), personal services (e.g., dry cleaning, beauty salons, etc.), real estate, repair and maintenance, restaurants, retail, and wholesalers.

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