

CFI in Focus

Health Insurance and Individual Financial Outcomes

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Several health insurance reforms have been implemented in the U.S. in recent years, with additional policy changes at both the state and federal levels being proposed and discussed. While the general trend in the U.S. has been to expand health insurance coverage, some policies have disenrolled individuals or restricted their eligibility for certain programs. The most prominent set of expansions were implemented under the Affordable Care Act (ACA) of 2010, which greatly expanded the Medicaid program and introduced the state-run Health Insurance Marketplaces. However, even after these recent expansions, approximately 9 percent of Americans remained uninsured as of 2019. In this article, we review how health insurance can affect financial outcomes of individuals using two specific reforms of health insurance programs in the U.S. from the last two decades.

The fundamental purpose of health insurance is to reduce the risk of incurring large health-care expenditures. For individuals with predictable and recurring medical expenditures, health insurance can also serve as a type of subsidy to finance these expenditures. Individuals without health insurance or with incomplete coverage have few options to pay for health-care expenses. One option for these individuals is to pay for health-care spending using their savings or credit; another is to default on their debt obligations. However, defaulting on debt can generate financial and emotional strain as debtors may face wage and asset garnishment or personal bankruptcy.

Although there has been a lot of recent research on the financial effects of expanding health insurance coverage to previously uninsured individuals, a few important questions remain. First, does health insurance provide financial benefits to all recipients, or are there groups that receive reduced or no financial benefits? For example, do young adults, who tend to be healthier and in less need of medical care than other demographic groups, receive financial benefits from having health insurance? Another important policy question is whether health-insurance coverage expansions and contractions have symmetric effects on financial risk reduction. In other words, is the magnitude of financial gains when providing health insurance coverage the same as the magnitude of financial loss when reducing coverage? This is an important question because expansions and contractions in coverage are embedded in the eligibility requirements for both private insurance (e.g., disenrollment of dependents at age 26 for employer-sponsored plans under the ACA) and public insurance (e.g., personal income cutoffs for Medicaid eligibility or Medicare age cutoffs). In addition, policy changes have led to

expansions and contractions in health insurance coverage (e.g., state Medicaid expansions under the ACA). These are important questions to understand when considering future changes to health insurance policies.

Health Insurance for Young Adults

Health insurance in the U.S. consists of a patchwork of public and private health insurance programs that cover specific populations under certain conditions. Most Americans (49.6 percent in 2019) receive private (i.e., commercial) health insurance through employer-sponsored insurance plans.¹ These insurance plans, which vary widely across employers, offer some type of coverage of health-care expenditures for employees and their dependents. Typically, employer-sponsored insurance costs (premiums) are shared by employees and employers.

In our recent paper, "[Financial Consequences of Health Insurance: Evidence from the ACA's Dependent Coverage Mandate](#)," we examine how the expansion of family health insurance plans' coverage for dependents under the age of 26 via the ACA's dependent coverage mandate (DCM) affected the financial conditions of this population.² Prior to the passage of the ACA in 2010, young adults in the U.S. were exposed to potentially catastrophic medical expenditure risk because of low health-insurance coverage rates. From 2006 to 2009, data from the U.S. Census Bureau show that the uninsured rate of adults ages 19–25 was approximately 35 percent, which is about 75 percent higher than the rate for middle-age adults. This lack of insurance coverage, combined with short credit histories and a limited ability to acquire additional credit, also implies that even small medical shocks could have serious negative financial consequences for young individuals during this period.

To estimate the effect of gaining access to health insurance on financial outcomes of young adults, we use the mandate's eligibility rule that requires parents' private health insurance plans to provide coverage to adult dependents until the age of 26. We do this in two different ways. First, we compare the amount of out-of-pocket (OOP) medical expenditures paid by young adults between the ages of 23 and 25 with the OOP medical expenditures of young adults between the ages of 27 and 29. We do this comparison before and after the implementation of the ACA to see if young adults eligible to receive parental insurance via the DCM had lower medical expenditures than individuals who were too

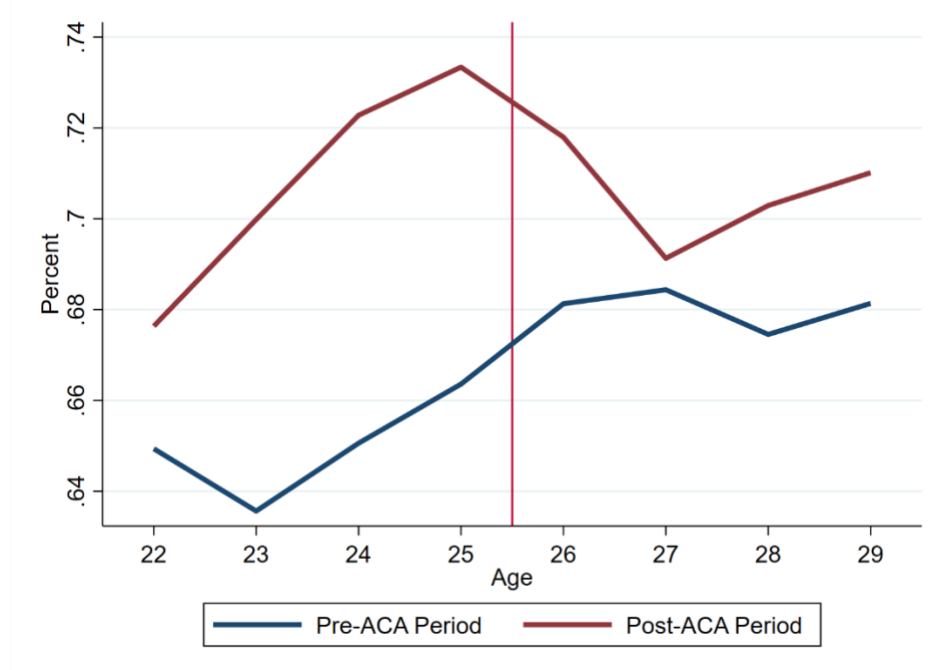
¹ For additional details, see <https://www.kff.org/other/state-indicator/total-population/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D>.

² See N. Blascak and V. Mikhed. (2019). "Financial Consequences of Health Insurance: Evidence from the ACA's Dependent Coverage Mandate." Federal Reserve Bank of Philadelphia Working Paper 19-54.

old to be eligible. Secondly, we compare the financial outcomes of young adults born between the years of 1985 and 1986 (who were between the ages of 24 and 25 at the time of the reform in 2010 and therefore eligible to receive insurance) with the outcomes of individuals born in the years of 1982 and 1983 (who were between the ages 27 to 28 and therefore ineligible). We follow individuals in both of these groups over time from 2007 to 2013 to see how the financial outcomes of young adults who became eligible for insurance in 2010 changed in comparison to young adults who just missed the age cutoff. Because we follow individuals born in specific years over time, we know the years when they are eligible for parental insurance and when they become ineligible.

Second, to estimate the effects of *losing* insurance access, we exploit the aspect of the mandate that limits insurance coverage to dependents up to their 26th birthday. We may expect to see differences in the age dynamics in financial outcomes before and after the implementation of the mandate since young adults in the post-DCM period lose their parental coverage at age 26. In Figure 1, we illustrate the changes in the insured rate before and after the implementation of the mandate by age, with a noticeable drop in insurance coverage at the cutoff at age 26 in the post-DCM period. We take advantage of this age cutoff and compare financial outcomes across ages before and after the DCM's implementation.

Figure 1. Percent of Individuals Having Insurance by Age Before and After the ACA's Implementation



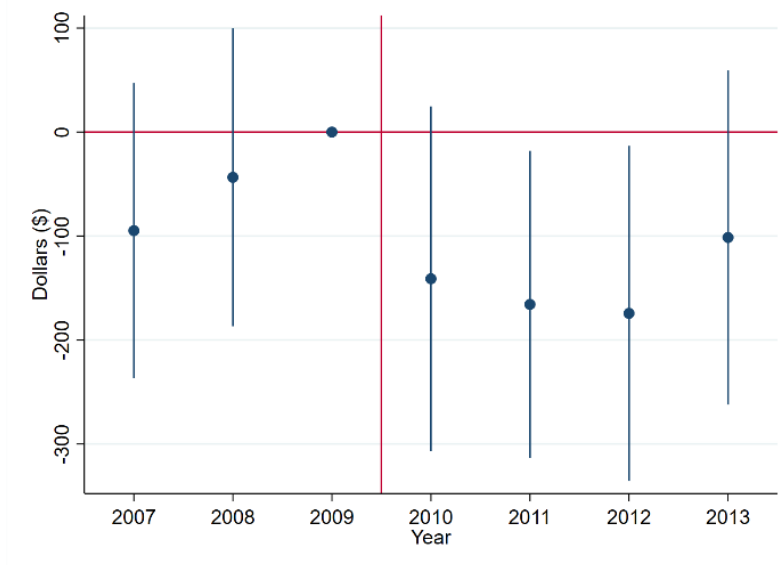
Notes: Based on authors' calculations using the Medical Expenditure Panel Survey (MEPS) data; pre-ACA is defined as the years before the ACA was passed in 2010.

To measure the financial effects of both gaining and losing health insurance coverage under the DCM, we use individual-level credit and debt information on a 5 percent random sample of U.S. adults with a credit report from the Federal Reserve Bank of New York/Equifax Consumer Credit Panel (CCP) and survey data on medical expenditures and health-care utilization from the Medical Expenditure Panel Survey (MEPS).

Our results indicate that gaining access to insurance improves the financial outcomes of young individuals. In particular, we find that the introduction of the mandate reduced the probability of having debt in third-party collections (which includes unpaid medical bills), the number of third-party collections, and the amount of debt in third-party collections. We focus on the debt owed to third-party debt collectors because this is how most unpaid medical bills are recovered by medical care providers, and it is the collection firm that reports this debt to the credit bureaus. We also find that, in some cases, the mandate lowered the probability that a young adult would file for personal bankruptcy while covered by the law. Filing personal bankruptcy is an extreme form of financial distress, which involves either the liquidation of the filer's nonexempt assets or the filer being put on a mandatory multiyear debt repayment plan. Using MEPS data, we confirm results from previous studies that have shown that OOP medical expenditures declined for young individuals covered by the mandate.

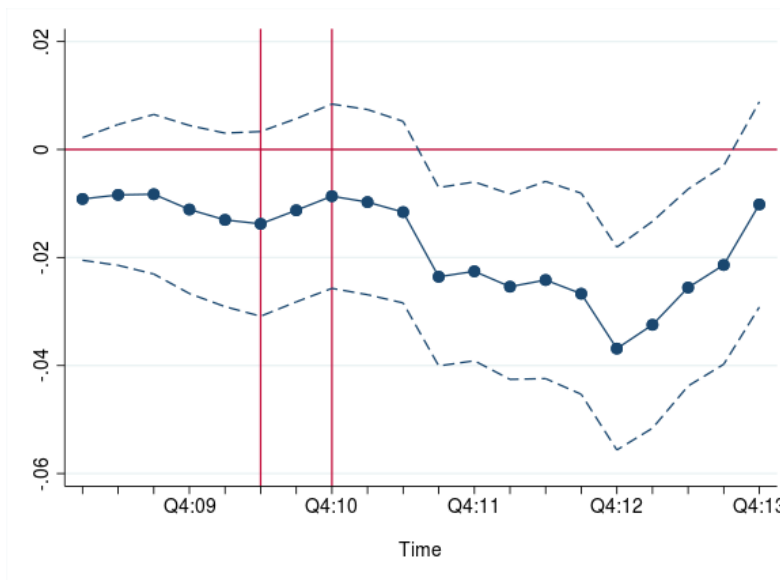
Figures 2 and 3 illustrate some of these findings. In Figure 2, we show that young adults under the age of 26 had lower OOP medical expenditures in the years after the DCM was implemented compared with individuals older than 26. In Figure 3, we can see that young adults who were eligible to receive parental insurance when the mandate was enacted in 2010 had fewer accounts sent to third-party debt collectors in the two years immediately after receiving coverage (these cohorts aged out of the mandate by 2013, thus losing these gains). Along with these results, we also find that these individuals have a lower probability of incurring very large OOP medical expenditures, suggesting that health insurance limited catastrophic medical expenditure risk.

Figure 2. Effect of the Dependent Coverage Mandate on Out-of-Pocket Medical Expenditures



Notes: Based on authors' calculations using MEPS data. Sample consists of individuals between the ages of 23 and 25 and between the ages of 27 and 29. Dots represent event-study coefficient estimates, while bands show 95 percent confidence intervals. These confidence intervals are based on Huber-White standard errors.

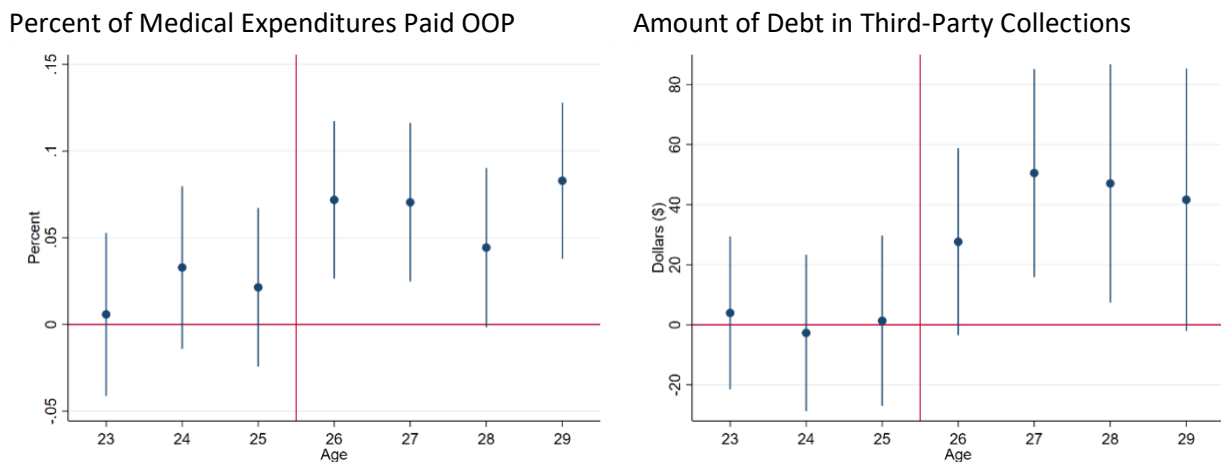
Figure 3. Effect of the Dependent Coverage Mandate on the Number of Third-Party Collections



Notes: Based on authors' calculations using data from the Federal Reserve Bank of New York/Equifax Consumer Credit Panel. Sample consists of individuals born in 1982–1983 and 1985–1986. Dots represent event-study coefficient estimates, while bands show 95 percent confidence intervals. These confidence intervals are based on Huber-White standard errors. The first horizontal red line corresponds to the time of the mandate's enactment in second quarter 2010, and the second line shows the implementation date of the ACA, which occurred in fourth quarter 2010. Some insurance plans started covering dependents until their 26 birthday before the mandate effective date.

Along with estimating the financial effects of gaining health insurance through the DCM, we calculate the effects of losing health insurance via the mandate’s automatic disenrollment mechanism when a young adult reaches age 26. We do this by comparing individuals who turned age 26 prior to the passage of the ACA with individuals who turned age 26 after the ACA was in effect. Figure 4 shows that individuals who turned age 26 after 2010 and aged out of the mandate have a higher percentage of medical expenditures paid OOP and an increase in the amount of debt in third-party collections compared with individuals turning 26 in the pre-ACA period. Since some previous studies have found that many young adults transitioned to worse quality health-insurance plans after they aged out of the mandate (Dahlen, 2015), our findings may suggest that the quality of health insurance plays an important role in the financial protection of covered individuals.

Figure 4. Effects of Dependent Coverage Mandate on Medical Expenditures and Collections



Notes: Based on authors’ calculations using MEPS data (left panel) and data from Federal Reserve Bank of New York/Equifax Consumer Credit Panel (right panel). Dots represent event-study coefficient estimates, while bands show 95 percent confidence intervals. These confidence intervals are based on Huber-White standard errors.

Overall, our results indicate that expanding health insurance to young adults improves their financial well-being and losing access to generous parental health insurance plans worsens financial outcomes. This implies that despite being healthier than other age demographics, young individuals receive valuable financial protections from health insurance. The results of our analysis have important policy implications, and we contribute to the growing body of evidence that the provision of health insurance may benefit individuals beyond providing access to health care or reducing OOP costs. If policymakers are to properly assess the expansion or contraction of health insurance, they should also

consider the effect of providing or removing health insurance on the financial outcomes of individuals, not just measures of physical health and access to health care.

Medicaid Contractions and Financial Distress

Medicaid is the public health insurance program for low-income individuals and families with children in the United States. Since its origin in 1965, the general trend for the Medicaid program has been to expand eligibility, which has resulted in it becoming the largest public health insurance program in the U.S., covering almost 20 percent of the U.S. population by 2019.³ Along with its size, Medicaid is a complex program with state specific requirements on eligibility, coverage, and copays and cost sharing. Originally, Medicaid eligibility was tied to eligibility for cash assistance (formerly known as Aid for Families with Dependent Children), but it has since expanded to cover some disabilities, long-term care, and low-income individuals without children. Because of these expansions, potential Medicaid recipients have generally opted to take advantage of their eligibility, which has led to enrollment increasing from 4 million individuals in 1966 to 73.8 million in 2017.

The body of research on the effects of Medicaid expansions is extensive and has examined a wide variety of outcomes, including health, employment, provider behavior, and consumer financial health. The research on financial outcomes has generally found that individuals who receive coverage (or become eligible for coverage) receive substantial financial benefits. While this previous research provides estimates of the financial effects of Medicaid *expansions*, it does not necessarily indicate what the effects of future Medicaid program *contractions* would be. Understanding the impact of program contractions are of particular interest, given the current policy landscape, as recent proposals for Medicaid program reforms most commonly discussed by states are not just simple reversals of the recent expansions of eligibility to low-income adults. Instead, states have been proposing either new forms of eligibility requirements, such as work requirements or more frequent income verification, or making their programs less generous to recipients by either introducing and/or increasing premiums, deductibles, and copays or removing coverage for certain types of services.

To examine the effects of a public health insurance program's contraction on consumer financial outcomes, in another recent paper titled "[Missouri's Medicaid Contraction and Consumer Financial](#)

³ See <https://www.kff.org/other/state-indicator/total-population/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D>.

[Outcomes](#),” we study the effects of a major reform to Missouri’s Medicaid program in 2005.⁴ This reform resulted in approximately 100,000 Missourians losing their Medicaid eligibility and a lower benefit generosity for the remaining enrollees. Unlike Tennessee’s 2005 Medicaid reform, in which the majority of the changes were centered on the disenrollment of childless adults from the program, Missouri’s reform was much broader in scope. Using data from the restricted version of MEPS, we first examine how this reform affected insurance status and medical expenditures of Missourians. We then estimate the effect of the reform on individual financial outcomes using data from the CCP. Since everyone in Missouri was subject to the reform, we find a comparable group of individuals not affected by the policy change that resided in neighboring states and compare their outcomes before and after the reform’s implementation to the outcomes of individuals living in Missouri.

Our first set of results in Table 1 using MEPS data shows that the contraction of Missouri’s Medicaid program led to lower Medicaid enrollment and Medicaid spending. In particular, we estimate that the probability of an individual in Missouri being on Medicaid declined by 4 percentage points, and the uninsured rate increased by 2 percentage points in the years following the reform. These results are similar to those found by Zuckerman, Miller, and Pape (2009), who estimated that the uninsured rate in Missouri increased by 1.7 percentage points following the reform. We also find that the Medicaid cut led to a 30 percent increase in OOP medical spending and an 18 percent decrease in Medicaid spending for individuals living in Missouri. While these estimates are similar in magnitude to those found in previous studies that have shown that Medicaid expansions decrease OOP expenditures, we note that those studies have generally focused on the low-income population (i.e., Medicaid-eligible population).⁵ Table 1 summarizes our findings using MEPS data.

⁴ See J. Bailey, N. Blascak, and V. Mikhed. (2020). “Missouri’s Medicaid Contraction and Consumer Financial Outcomes.” Federal Reserve Bank of Philadelphia Working Paper 20-42.

⁵ Previous studies have shown that Medicaid expansions have generally decreased OOP expenses for low-income populations by 28 percent to 33 percent (Blavin, Karpman, Kenney, and Sommers, 2018; Gotanda, Jha, Kominski, and Tsugawa, 2020). Although our estimates are roughly in-line with these prior results, we focus on Missouri’s overall population instead of the Medicaid-eligible population. This implies that our estimates are likely serve as a lower bound for the overall effect on OOP expenses for the Medicaid-eligible population.

Table 1. Effect of Missouri Medicaid Cut on Insurance Status and Spending

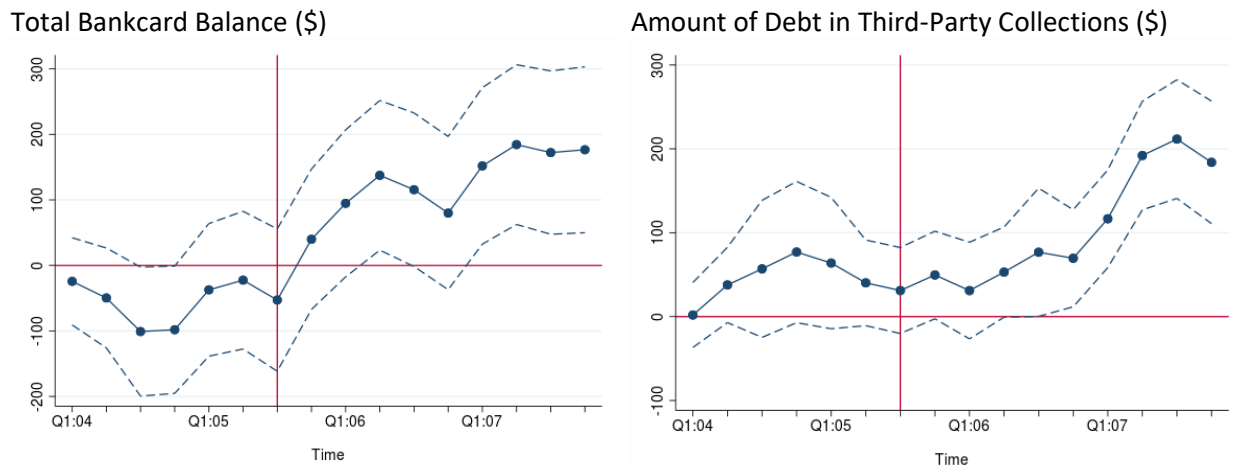
	Medicaid Receipt	Uninsured	Medicaid Spending	OOP Spending	Any OOP Spending
<i>Missouri_i</i> <i>× Post2005_t</i>	-0.039*** (0.004)	0.022** (0.007)	-0.180*** (0.037)	0.303*** (0.009)	0.017*** (0.003)

Notes: Based on authors' calculations using the restricted Medical Expenditure Panel Survey (MEPS) data. Spending dependent variables are natural logs of spending plus one. Robust standard errors clustered by household are reported in parentheses. ***, ** indicate statistical significance (that we can reject a hypothesis that a coefficient is equal to 0) at 1 percent level and 5 percent level, respectively.

In our second set of results, we provide evidence that Missouri's Medicaid contraction led to increased financial strain for Missouri residents using data from the CCP. Consistent with our results that the Medicaid contraction increased overall OOP health-care spending, we find that individuals in Missouri had higher amounts of debt in third-party collections, owned more bankcards, and held higher bankcard balances. We estimate that the Medicaid contraction led to increases of 0.04 accounts in third-party collections and \$64 in debt owed to a third-party debt collector, both of which represent 13 percent increases relative to their prereform means. We also find that the number of bankcards held increased by 0.02 accounts (1 percent change) and that bankcard balances increased by \$133 (3 percent increase). Figure 5 illustrates some of these changes over time, comparing credit outcomes of Missourians and non-Missourians living within a 10-mile radius of the Missouri border.

Since not everyone in our CCP data was covered by Medicaid, these estimates are average effects for both the Medicaid-eligible population *and* the noneligible population. To recover the effects on the Medicaid-eligible population, we conduct back-of-the-envelope calculations by dividing our estimates by the percent of population below 100 percent or 150 percent of Federal Poverty Level (FPL), who would be eligible for Medicaid in Missouri at this period in time. These calculations suggest that for Medicaid-eligible individuals, credit card borrowing increased by \$558 to \$915, bankcard accounts increased by 0.07–0.12, and debt in collections increased by \$271 to \$444 as a result of the Medicaid cut in Missouri.

Figure 5. Effect of Missouri Medicaid Cut on Financial Outcomes



Notes: Authors' calculations using data from the FRBNY/Equifax Consumer Credit Panel. All coefficients are relative to 2003.

Our results for debt in collections, a frequently used measure of financial distress, are lower than most estimates from studies on recent Medicaid *expansions*, which have found that debt in collections can be reduced by \$390 to \$1,231. Comparing these estimates with ours, we argue that Medicaid expansions and contractions may have asymmetric effects on financial distress, with contractions having smaller effects than expansions. How can these asymmetric effects be explained? One potential explanation could be that newly enrolled Medicaid beneficiaries examined in the previous studies of Medicaid expansions have higher medical expenses or worse health conditions, and thus experience larger financial benefits, than the Medicaid-eligible individuals in our study, who were already covered by Medicaid for some time.

Although we find smaller financial effects from Missouri's Medicaid contraction than some studies of Medicaid expansions, it is important to emphasize that we still find substantial negative effects of the reform on the financial well-being of Missourians. This is consistent with a recent study by Argys, Friedson, Pitts, and Tello-Trillo (2020) showing that individuals who lost Medicaid eligibility during Tennessee's 2005 Medicaid reform had worse financial outcomes and with prior research showing that losing access to other types of public insurance and benefits can have negative financial consequences. Overall, our results are consistent with the hypothesis that a decrease in the generosity of health insurance benefits may worsen financial outcomes of lower socioeconomic status households.

Given the current policy discussions that states are having regarding Medicaid reform, our study provides important information regarding the potential financial spillover effects that may result from decreasing benefit generosity or restricting eligibility. In particular, acknowledging the presence of

asymmetries in these effects is important to properly assess the costs and benefits of any policy change, especially for populations that may be either credit constrained or less able to take on and manage additional debt.

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