Poor Performance as a Predictable Outcome:
Financing the Administration of Unemployment Insurance

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Abstract: Effective administration of unemployment insurance (UI) is central to its ability to smooth consumption and act as an automatic stabilizer. The federal government allocates funds to administer UI to the states using a "resource justification model" that gives the states no incentive to provide high-quality service at reasonable cost. We first document the weak performance of the UI system in recent recessions (including the Covid recession) and present estimates of a descriptive model relating state workloads to performance. We then characterize the problem of administering UI in light of a standard principal-agent model, which leads to a method of allocating funds that would motivate states to adopt new technologies and improve performance.

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Financing the administration of unemployment insurance (UI) is an obscure topic, even among UI aficionados,[1] and fixing its problems has been referred to as "the economic equivalent of replacing aging water pipes" (Landergan 2021). But the importance of financing UI administration should be self-evident: Long lags between initial claims and first benefit payments impede the ability of UI to fulfill its main goals of consumption smoothing and automatic countercyclical stabilization.

The obscurity of UI administrative financing results in part from its apparent simplicity: the funds for administration are allocated to each state by the federal government from FUTA payroll tax revenues—a flat 0.6% on the first $7,000 of each employee's annual earnings.[2] In contrast, regular state UI benefits are funded at the state level by experience-rated payroll taxes, and both the complexity of the various approaches to experience rating and the incentives they create have led to decades of research and debate (Lachowska, Vroman, and Woodbury 2020).

Both the Great Recession and the Covid Recession revealed glaring gaps in the ability of the UI system to deliver benefits to eligible claimants in a timely way (see below). In addition to the many media reports of benefit payments being delayed by overwhelmed UI infrastructures and personnel, the performance of the UI system was criticized during the Covid Recession by the U.S. Department of Labor's Office of

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[1] Only four pages of the final report of the National Commission on Unemployment Compensation (1980) discussed administrative financing, and only one of the 63 research papers prepared for the commission addresses the topic (Interstate Conference of Employment Security Agencies 1980). Similarly, only one of the 47 background papers prepared for the Advisory Council on Unemployment Compensation (1993–1996) addressed administrative financing (Davidson and Martin 1998), and the topic is discussed relatively briefly in one of the three ACUC reports (Advisory Council on Unemployment Compensation 1996, pp. 83–86). The topic goes virtually unmentioned in Blaustein (1993) and O'Leary and Wandner (1996).
[2] The 0.6% tax rate applies to employers in states that comply with the Social Security Act's requirements to provide a UI program. If the U.S. Department of Labor finds a state out of compliance, the FUTA tax rate effectively increases to 6%. This tax incentive was the original inducement for to adopt UI programs, and it is available to the USDOL to enforce compliance with standards set it sets.

Inspector General (2021) and in a remarkable report issued by the California State Auditor (2021).

It is fair to say that the USDOL's methods of allocating UI administrative funds to the states has always been arcane and bureaucratic (Friedman and Kinsinger 1948; Haber and Murray 1966; United States General Accounting Office 1989; Kohl 1990; Whittaker, Isaacs, and Overbay 2020). Since the late 1990s, administrative funds have been allocated to the states using the so-called Resource Justification Model (U.S. Department of Labor n.d.), which bases a state's administrative budget on workload. Under the RJM, each state submits detailed information about its operations to the USDOL's Office of UI, and the RJM is used to calculate the number of staff years required and cost per staff year for the projected workload. States are allowed to request additional funding for "non-personnel services" like IT and communications, and they can request additional funding when workloads increase due to unforeseen events, but allocations are paid quarterly on a "use-it-or-lose-it" basis, so the RJM creates no incentive to economize or innovate. Most importantly, UI administrative financing takes no account of a state's performance or quality of service.

Proposed solutions have focused on the inadequate technology of the states' existing systems. In August 2021, USDOL announced a "comprehensive approach … to modernize and reform" the UI system by means of "direct technical assistance through tiger teams,[3] … tools to address immediate fraud concerns, …, [and] modernizing antiquated state technology" (U.S. Department of Labor 2021). Legislative proposals

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[3] "Tiger teams" are described as "multi-disciplinary teams … of fraud specialists, equity and customer service specialists, UI program specialists, behavioral insights specialists, business intelligence analysts, computer systems engineers, … and project managers."

have similarly emphasized technology. Sen. Ron Wyden's "Unemployment Insurance Technology Modernization Act of 2021" would require USDOL to "develop, operate, and maintain a modular set of technology capabilities to modernize the delivery of unemployment compensation (United States Senate, Committee on Finance 2021). According to Senator Wyden, "My bill requires a complete overhaul of unemployment insurance technology, and paves the way for one website to apply for jobless benefits, not 53." The Wyden proposal, then, combines a technological solution with nationalization of UI administration.

In contrast, our point is to frame the problem of UI administrative financing as one of information and incentives. The federal government is the principal, and the states are its agents, so the role of the federal government is to formulate a mechanism that creates an incentive to provide high-quality administration and low cost.

I. Measuring UI Administrative Performance

The U.S. Department of Labor requires each state to report 13 UI performance outcomes on a monthly basis (U.S. Department of Labor 2017). These include promptness of first UI payments, time taken to determine nonmonetary eligibility and the quality of those determinations, detection of overpayments, and the age of pending appeals. For each outcome, DOL also defines an "acceptable level of performance."

To measure first payment promptness, each state examines all first payments made in the preceding month and tabulates those payments by type (intrastate vs. interstate; regular UI, UI for federal workers, and UI ex-service members) and by "time lapse" (in seven-day intervals), defined as the number of days between the end of the first compensable week and the date the first payment was mailed or deposited in the

claimant's account (typically a debit card or bank account). Under the DOL's standards, a state that makes at least 87% of its first payments within 21 days is performing acceptably.[4]

How stringent is this standard? For someone who filed a claim online on January 9, 2022, the week of the 9th would count as the week in which the claim was made, the week of January 16 would be the waiting week, and the first compensable week would be the week of January 23, the end of which is January 28. If this claimant's first UI benefit check was mailed or deposited by February 18 (within 21 days of January 28), it would be considered "prompt" under the DOL's "core measures of acceptable performance."

Figure 1 shows the percentage of first payments that were prompt (i.e., made within 21 days) at yearly frequency for all 50 states during 1997–2021. (Percentages are weighted by number of first payments, and the volume of first payments is shown by the size of the circle associated with each year.) The figure suggests that, before the Covid Recession (2020 and 2021), the system overall performed reasonably well except in several years between 2009 and 2014. If we look at first-payment timeliness nationally during three roughly equal intervals that include the Dot-com Recession (1997–2004), the Great Recession (2005–2012), and the Covid Recession (2013–2021), it becomes clear that the overall performance of the system has deteriorated over the last 25 years: during the first period, first-payment timeliness was 88.9%, in the second, 84.2%, and in the most recent, 74.2%.

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[4] The 21-day standard is for states with a waiting week. For states with no waiting week, the standard is 14 days. Currently, only Connecticut, Georgia, Iowa, Maryland, Michigan, Nevada, New Jersey, and Wyoming have no waiting week (U.S. Department of Labor 2020).

Figure 2 shows the percentage of first payments that were prompt at monthly

frequency in California, Massachusetts, and Michigan during 1997–2021. In all three,

promptness often fell below the 87% standard set by USDOL, with California frequently

falling below the standard starting in 2007, Massachusetts starting at the end of 2001, and

Michigan throughout the entire period.

II. Promptness and Workload

We would expect a substantial portion of the variation in promptness to be explained by

demand conditions and the volume of claims (or workload). To examine how much of the

performance of states can be explained in this way, we estimate a simple model of the

promptness of first payments ($promptness_{st}$, measured as the percentage of first payments

made within 21 days in state s, month t) as a function of workload [$\log(workload_{st})$,

measured as the log of the three-month moving average of first payments volume] and

state fixed effects (a_s):

(1) $promptness_{st} = \beta_1 \log(workload_{st}) + a_s + u_{st}$

We estimate the model over a monthly panel of the 50 states during 1997–2021, and also

for subperiods 1997–2012 and 2013–2021.[5] We do not include time effects because they

are highly correlated with workload.

Figure 3 shows binscatters of first-payment promptness ($promptness_{st}$) against

$\log(workload_{st})$ for 1997–2012 and 2013–2021, after taking out state effects. The

estimated slope coefficient of equation (1) differs substantially between the two periods

(–3.88 in the earlier period, –10.06 in the later—see the notes to Figure 3), and the entire

bin cloud for 2013–2021 lies below the bin cloud for 1997–2012, so the technology of

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[5] The data again are from the ETA 9050 report ("Time Lapse of All First Payments except Workshare")—
see U.S. Department of Labor. 2017.

administering UI appears to have worsened since 2012. This worsening deserves further examination because it does not appear to be driven simply by the extreme workloads that occurred during the Covid Recession (the bins in the southeast of the figure); that is, the mass of the 2013–2021 bin cloud clearly lies below and has a steeper slope than the 1997–2012 bin cloud.

We can use state fixed effects estimated from equation (1) over the full 1997–2021 period to gauge the first-payment promptness of states, adjusted for the workload conditions faced by the UI agencies. The results of plotting these fixed effects against unadjusted state effects (i.e., state averages from a regression of *promptness*$_{st}$ only on state indicators) can be seen in Figure 4. After adjusting for workload, some states that appear to be poor performers in the raw data improve substantially. For example, promptness in Massachusetts, Michigan, North Carolina, and New Jersey is well below average without adjusting for workload, but close to average after adjusting, and California appears to be an excellent performer after adjusting for workload. Several small states appear to perform well (unadjusted), but after adjusting for workload, they are only average or below average (for example, Alaska, Montana, Nebraska, North Dakota, South Dakota, West Virginia, and Wyoming). These patterns suggest the importance of scale and/or advantages of concentrated populations economies in administering UI.

III. Financing UI as a Principal-Agent Problem

Following Davidson and Martin (1998), we argue the problems of first-payment promptness have resulted from an unsatisfactory mechanism for financing UI administration, leading to underfunded infrastructure and weak incentives to administer

the system efficiently. The existing mechanism ignores the principal-agent relationship between the federal government (the principal) and the states (the agents).

Establishing UI in the 1930s required federal legislation—the Social Security Act (SSA)—because the same problems of adverse selection and moral hazard that preclude a private market for UI held back the states. In particular, states tend to ignore the stabilization benefits of UI and may prefer low benefits so they can keep taxes low. States may also prefer not to make it "too easy" to access UI because this reduces benefit payouts and keeps payroll taxes levied on employers low. So there may be little incentive to administer UI efficiently, even if the funding for administration comes from the federal government.

It follows that the federal role in allocating administrative funding is twofold. First, it needs to encourage efficient (i.e., high quality, low cost) administration that includes innovation. Second, it should compensate states for circumstances arguably beyond their control (i.e., the "state of nature") such as high unemployment, low population, and low density, the latter two of which make it difficult to take advantage of scale economies. Under the SSA the USDOL has the tools to do this—it controls administrative funding and could rescind the FUTA credit for a state that does a poor job of administrating UI.

The problem is one of information: Good outcomes depend on both effort and the state of nature, but both are difficult to observe. The difficulty observing effort is clear, but performance can be measured, and the measures already exist. The state of nature in this case is the technology of producing high quality service at low cost. Each state's circumstances differ in a variety of ways (as the USDOL often reminds us) including law

and practice, demographics, and industry composition. How these differences translate into differences in the cost of delivering service is unknown (but modeling could help)

Davidson and Martin (1998) argue that an efficient allocation mechanism involves three elements. The first is pay for performance: the USDOL should choose shadow prices for different types of performance and pay for meeting targets. This amounts to monitoring quality and allocating administrative funding to reward high quality. The second is a residual contract: if the funds paid to the state are not all used, the state keeps the residual. This creates an incentive for the state to keep costs low, although it may require time for a legislature to understands the mechanism. Third, the USDOL needs to make lump-sum payments to states facing high unemployment or other unforeseen circumstances. This last is the only element of an efficient allocation mechanism that is current used by the USDOL.

IV. Alternative Reforms

We consider four alternatives to pay-for-performance and the residual contract mechanism: federal provision of technical assistance to the states, nationalizing UI administration, eliminating the federal role, and contracting out UI administration (either privately or to other states). We argue that only contracting out has the potential to perform as well as pay-for-performance, but it would require changes to the SSA that are unlikely to happen.

Federal technical assistance is essentially the "tiger team" approach proposed by the USDOL—assisting the states in improving UI administration by improving information technology. Because it views the problem of administration as technical, it misses the underlying principal-agent problem. Indeed, technical assistance has long been

available to the states: the UI Information Technology Support Center (UI ITSC) has existed since 1994 to promote and assist with "development of information technology solutions, modernization of state UI systems, and information sharing among state UI agencies," but its impact on the quality of UI administration has been "disappointing," according to several UI administrators who have spoken with one of us.[6] As long as a state's preferences differ from those of the federal government, there is no guarantee that good technology will solve the problem. Good technology can be used poorly or inefficiently, and the quality of services could remain poor, either by design or by accident.

Nationalizing UI administration appears to be the goal of Sen. Wyden's proposed legislation. It would transfer responsibility for UI administration to the federal government, so UI would be administered in the same way as Social Security. Nationalizing UI administration would require a major amendment to the Social Security Act (Section 302), which provides for payments to the states for "the proper and efficient administration" of the UI law, but more fundamentally, centralizing administration would exacerbate the underlying information problem inherent in administering UI. In addition to collecting information on performance and motivating (now federal) agencies in each state to deliver high quality service, the USDOL would need to have a comprehensive understanding of the UI laws of each state, including nonmonetary eligibility criteria, which are the most difficult features of UI to administer (Corson, Hershey, and

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[6] UI ITSC is a collaboration among the National Association of State Workforce Agencies (NASWA), the USDOL, and the state workforce agencies—see <http://www.itsc.org/Pages/ITSC-Website.aspx>. Since 2009, it has been housed at NASWA and funded mainly by grants from the Employment and Training Administration of USDOL. NASWA also administers the Workforce Information Technology Support Center (federally funded since 2016) "to implement effective and creative technology solutions."

Kerachsky 1986). The record of Social Security suggests federal administration would not be a panacea (see, for example, U.S. Government Accountability Office 2015, 2019, and 2020).

Although eliminating the federal role in UI administration has not to our knowledge received recent attention, giving the states responsibility for both financing and conducting UI administration is clearly a possibility. However, if states naturally prefer lower-cost, lower-quality service, then eliminating the federal role is a recipe for worse performance—more wrongful denials, slower determination of eligibility, longer waits for appeals. The USDOL could still monitor performance, but it would have no financial leverage. Moreover, it would lose the ability to give states additional administrative funding when states face high unemployment—precisely when additional funding is most needed and state budgets are likely to be stretched.

Contracting out UI administrative services (either privately or to another state) is another option that, to our knowledge, is not currently being considered, but it does have the potential to solve the principal-agent problem. Like other options, it would require a major amendment to the SSA, which specifies that a "State agency" will administer each state's UI law, and politically it seems unlikely. Further, it would still require the federal government to collect performance data. But the threat of taking UI administration out of a state's hands could be more credible than the threat of withholding the administrative grant from a state. Still, it is unclear whether contracting out would be any more effective than pay-for-performance and a residual contract.

V. Summary and Conclusion

The problems of UI administration have been cast as technological—the need to adopt new computer technology, to redesign methods for workers to claim UI, and for states to determine eligibility efficiently, among many issues. Technology is indeed a central part of the problem, but the underlying problem is economic—the need for the federal government to allocate UI administrative funds in a way that gives the states incentives to provide high quality, efficient UI services. The Resource Justification Model currently used to allocate UI administrative funds takes no account of a state's performance. Without a system that ties administrative funding to measures of system performance, even the best system of information technology cannot guarantee good performance.

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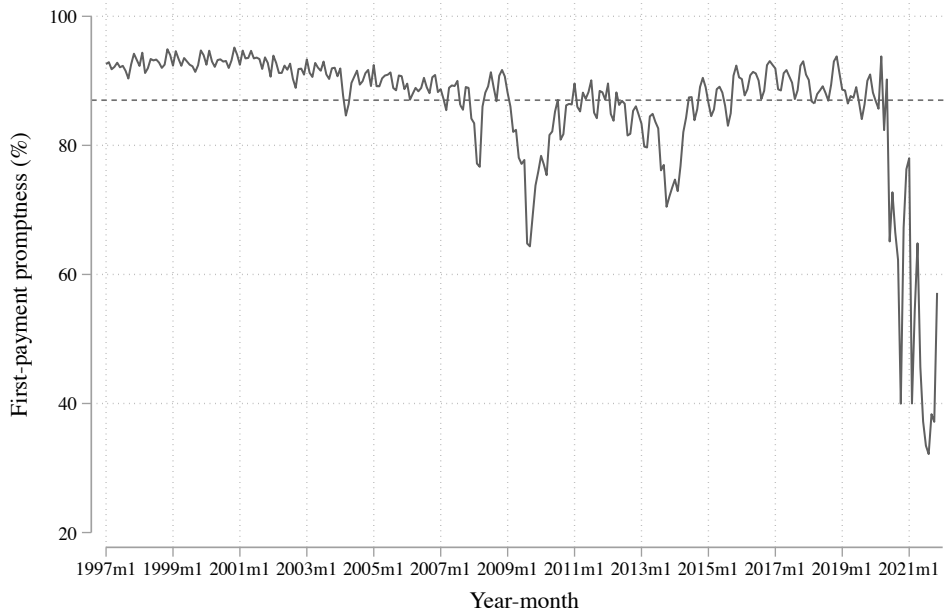
Figure 1
Monthly percentage of first payments within 21 days, all states, 1997–2021
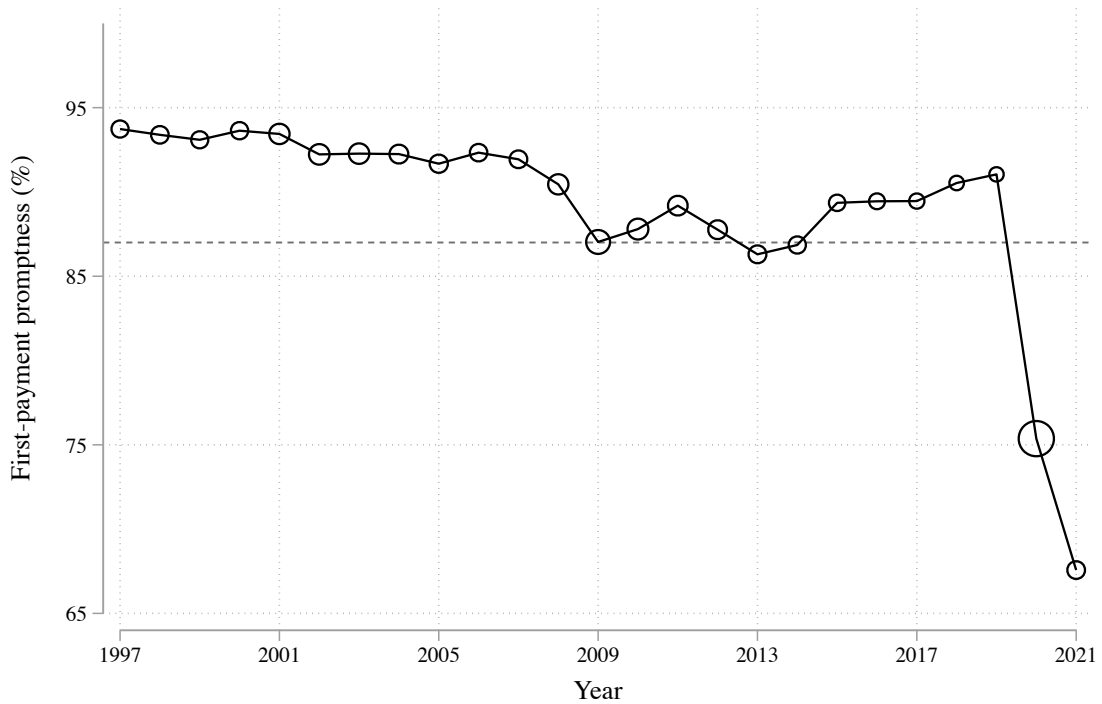
Notes: The figure shows the percentage of first payments that were prompt (made within 21 days of the end of the first compensable week) at yearly frequency for all 50 states during 1997–2021. Percentages are weighted by the number of first payments, and the volume of first payments is shown by the size of the circle associated with each year. The horizontal dashed line indicates the USDOL's 87% for acceptable performance. Data are from the ETA 9050 report (U.S. Department of Labor 2017).

Figure 2
Monthly percentage of first payments within 21 days, California, Massachusetts, and
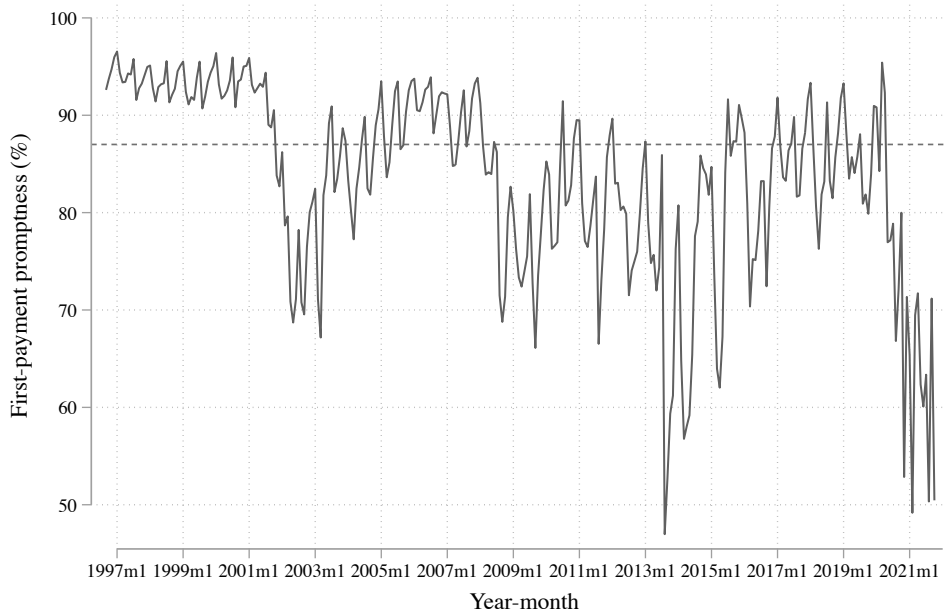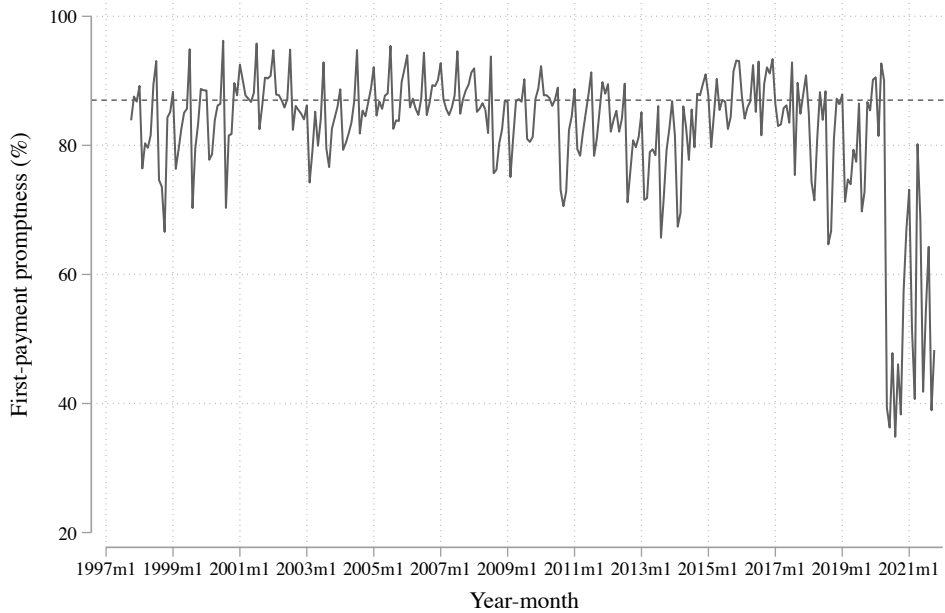Michigan, 1997–2021

California

Massachusetts

Figure 2 (continued)
Monthly percentage of first payments within 21 days, California, Massachusetts, and Michigan, 1997–2021

Michigan

Notes: The figures show the percentage of first payments that were prompt (made within 21 days of the end of the end of the first compensable week) at monthly frequency in California, Massachusetts, and Michigan during 1997–2021. The horizontal dashed lines indicate the USDOL's 87% for acceptable performance. Data are from the ETA 9050 report (U.S. Department of Labor 2017).

Figure 3
Binscatters of first payment promptness against workload, controlling for state fixed effects, 1997–2012 and 2013-2021
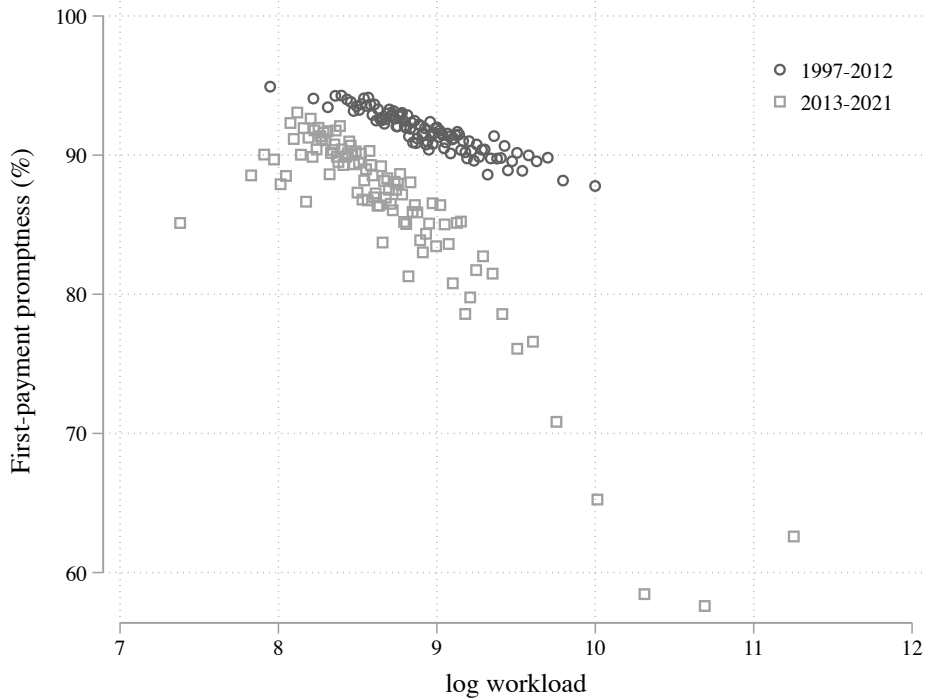
Notes:
For 1997–2012, the fitted equation is:
$promptness_{st} = -3.877 \log(workload_{st}) + a_s$ $R^2 = 0.352$, RMSE = 5.140, $n = 9{,}527$
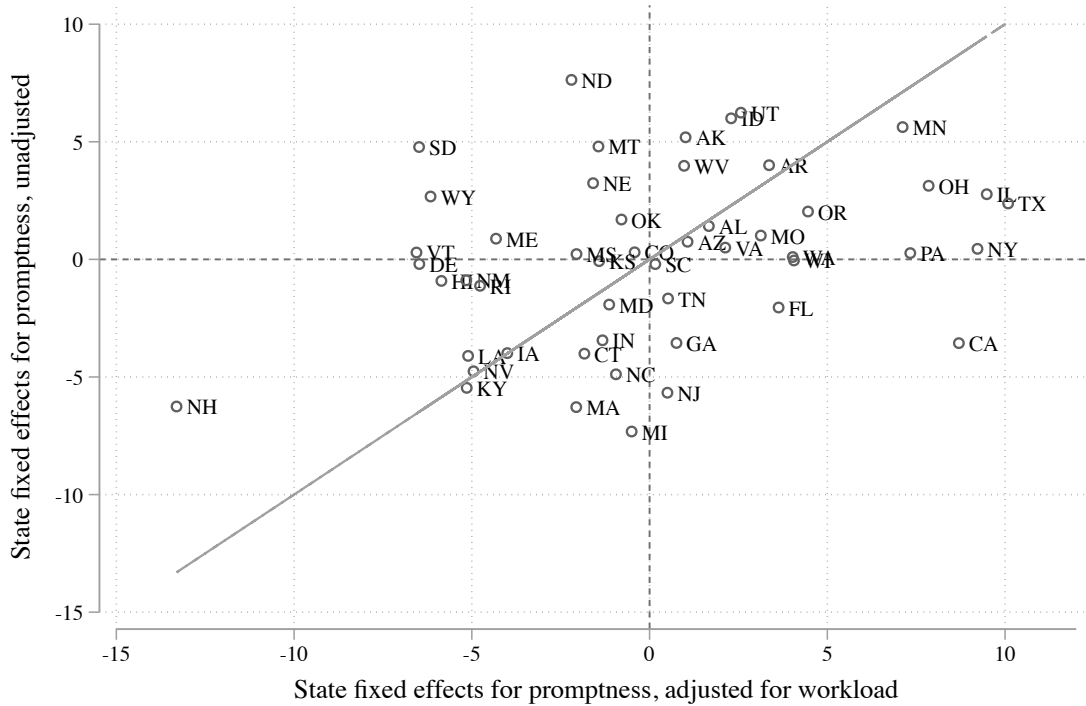   (0.496)
For 2013–2021, the fitted equation is:
$promptness_{st} = -10.062 \log(workload_{st}) + a_s$ $R^2 = 0.296$ RMSE = 11.886, $n = 5{,}332$
             (1.039)
For 1997–2021, the fitted equation is:
$promptness_{st} = -4.740 \log(workload_{st}) + a_s$ $R^2 = 0.177$ RMSE = 9.268, $n = 14{,}859$
             (0.720)
Data are from the ETA 9050 report (U.S. Department of Labor 2017).

Figure 4
State effects for promptness, adjusted for workload (*x*-axis) and unadjusted (*y*-axis)

Notes: The figure shows state fixed effects for promptness on the *x*-axis [from equation (1) estimated over 1997–2021], and simple unadjusted state effects on the *y*-axis (average promptness by state estimated from a regression of *promptness*$_{st}$ on state indicators).