

**The Impact of Pay Transparency
on Bank Compensation, Employment, Performance and Opacity**

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Abstract

How does pay transparency affect bank opacity? We answer this question by studying the impact of the introduction of pay transparency laws across nine U.S. states with both advert-, individual- and bank-level data. We find that after the introduction: (1) more adverts include pay information; (2) bank employees, especially loan officers, leave for non-banks as wages are higher there; and (3) banks respond to these departures by increasing their own employee compensation. The departures of experienced employees and catch-up in wages precede more bank risk-taking and lower bank loan performance, and dispersion in loan loss provisioning! (96 words)

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1. Introduction

Increasing transparency of financial institutions has been identified as one of the crucial channels to increase the safety and soundness of the financial sector. Although opacity may minimize information leakages and help to avoid bank runs (Gorton 2013; Dang, Gorton, Holmström & Ordoñez 2017; Parlatore 2024), a lack of transparency may increase lending procyclicality and assist financial institutions in inflating the value of distressed assets and their capital adequacy (Laeven & Majnoni 2003; Huizinga & Laeven 2012). Proposed improvements in bank reporting standards and increased disclosure of information on bank activities are aimed at mitigating such problems.

However, the theory predicts that enforcing greater transparency on banks may result in bank managers adopting strategies making their institutions more opaque, as such a response helps managers avoid being disciplined by the owners (Wagner 2007). In this paper, we test these predictions by examining how financial institutions respond to pay transparency laws, which are regulations requiring disclosure of salary information in job adverts. We examine if the policy affects banks performance and if it leads to banks earnings becoming more opaque.

We exploit the staggered implementation of pay transparency laws in 9 U.S. states. The introduction of this policy was motivated by the existence of wage gaps between individuals of different genders, races or cultural backgrounds.¹ The objective of such laws is —by reducing information frictions related to potential salary expectations— to prompt employees to renegotiate their current salaries or seek alternative employment. Both renegotiations and departures may alter wage structures and compress the gender wage gap. Early evidence suggests that providing salary ranges in job adverts leads to such wage changes in the private sector (Skoda 2022; Frimmel, Schmidpeter, Wiesinger & Winter-Ebmer

1. The U.S. Bureau of Labor estimates that in the U.S., in 2021, women earned on average only 84 cents on each dollar earned by men (Dalrymple 2023). Disproportional earnings are not limited to different genders but also are observed among individuals of different races. Although this phenomenon may partly reflect various differences between women and men (age, education, work experience, occupation, industry, or work hours), a significant part can be attributed to some form of discrimination (Foster, Murray-Close, Landivar & DeWolf 2020).

2023; Arnold, Quach & Taska 2025). However, many other, even unintended, consequences of such transparency laws may still be unknown.

It seems possible, for example, that firms respond by adjusting their business models. Pay transparency laws may also affect the quality of services provided by the employees, leading to a drop in firms' performance, which they may be inclined to conceal from investors or regulators.²

The introduction of pay transparency laws will reveal or make more apparent gaps in pay offered by firms operating in the same sector and cross-sectoral pay differences in providing a similar service. For instance, depository financial institutions (henceforth, "banks") and non-depository financial institutions (henceforth, "non-banks") offer similar services,³ such as granting credit to firms or households. Both types of institutions also provide similar job opportunities, with positions such as loan officers. However, according to the U.S. American Community Survey (ACS), bank employees, on average, receive significantly lower compensation than their peers employed by non-banks. This is true for both executives and loan officers,⁴ with the former responsible for overseeing and guiding the overall direction and performance of the financial institution, while the latter more operationally responsible for evaluating and approving loan applications (see Table 1).⁵

[Table 1 here]

The effect of pay transparency for bank employees in job adverts is ex-ante unknown. Reduction in asymmetric information regarding the pay offered by competitors may prompt banks to increase their

2. Our focus on bank risk taking is motivated by the adverse effects of financial crises which throughout history have repeatedly originated in excessive credit risk taking by these financial institutions. Because banking crises significantly depress asset prices, output, and employment (Reinhart & Rogoff 2009), bank regulation and supervision across the world are both elaborate and coordinated (Claessens, Kose, Laeven & Valencia 2014).

3. Non-banks include sales financing and leasing companies (e.g. automobile and machinery financing), mortgage companies (e.g., construction lending, home equity credit lending or reverse mortgage lending), personal credit institutions, or credit and charge cards issuers.

4. Our definition of a loan officer includes also credit councillors and loan interviewers who are also involved in the loan application process.

5. Several factors may explain the pay gap between banks and non-banks, including the differences in job security (Datta 2019) or the cost of regulatory compliance (Alvero, Ando & Xiao 2023). Philippon and Reshef (2012) for example, document the development of bank wages during the last hundred years. Prior to 1930, wages paid by banks are much higher than those paid by other corporations. After the Second World War and until 1980, bank wages become much more equal. But from 1980 onwards, and coinciding with deregulation, wages in the banking sector again depart and become much higher than in other sectors. Consequently, our empirical strategy is intended to account for such developments and their drivers.

salaries. This, in turn, may allow them to attract and retain higher-quality employees, including loan officers. Subsequently, this may lead to more accurate risk assessments of borrowers and reduce banks' risk. Conversely, increased salaries may incentivize banks to try to generate higher returns by adopting more risky lending strategies. Transparency regarding pay gaps may also negatively affect employees' morale (Akerlof & Yellen 1990; Card, Mas, Moretti & Saez 2012; Breza, Kaur & Shamdasani 2018; Cullen & Perez-Truglia 2022) or incentivize them to change employment. Given that the accurate risk assessment of borrowers often relies on soft information that is collected by loan officers but difficult to transfer (Stein 2002; Berger, Miller, Petersen, Rajan & Stein 2005), bank employee turnover may trigger higher loan defaults (Drexler & Schoar 2014).

First, using information on more than 5 million job posts advertised by banks and non-banks collected from more than 45,000 websites by Lightcast, we find that pay transparency laws result in significant decreases in posts excluding salary information in all states adopting the policy. The shares of such posts in states compelling employees to reveal salary information in adverts falls from more than 90 percent prior to law adoption to less than 40 percent after the laws became effective. Importantly, this increase in pay transparency was not limited to any specific areas within states but rather was geographically dispersed, which may allow individuals to better understand salary gaps in their local areas.

Next, using American Community Survey data and deploying an identification strategy relying on both static *and* dynamic difference-in-differences estimations exploiting staggered introduction of the pay transparency laws in U.S. states, we find evidence suggesting that the policy makes bank employees, especially loan officers, depart to non-banks, where wages are traditionally higher. Banks respond by increasing their wages by approximately 11 percent for loan officers. Leveraging information from the reports on bank condition and income (Call Reports) and comparing banks subject to pay transparency laws with those not affected by these policies we show that this catch-up in bank wages and employee turnover subsequently leads to more bank risk-taking and lower bank loan performance, with the share of loan defaults rising by approximately 16 percent. At the same time, financial institutions increase their discretionary loan loss provisions by 18 percent, making their earnings significantly more opaque.

Further analysis shows that restrictions on labour mobility, related to the non-compete disclosures, reduce these adverse effects of pay transparency, implying that employee turnover is likely the mechanism behind these results. In addition, exploiting information on bank enforcement actions, our additional findings suggest that institutions with better-quality employees drive the increase in loan defaults and earnings opacity. We also show that the effect of pay transparency on loan defaults and opacity is significantly weaker for banks advertising new loan officer positions, particularly if job adverts specified existing job experience in the role (maybe because by advertising as such, banks succeed in hiring new loan officers with experience and in softening the impact of the recent departure by experienced officers). However, the baseline results are stronger for banks not employing new loan officers during the sample period, which are more likely to lose their existing employees.

We refute several alternative explanations that could explain our baseline results. For example, we remove institutions involved in mergers and acquisitions since these activities may affect both salaries offered by banks and the quality of their loan portfolios. We also exclude institutions operating in states in which pay transparency laws become effective during the COVID-19 pandemic, adversely affecting employment conditions and banks' lending quality. Our results are robust across different estimation techniques addressing potential bias stemming from the treatment effects heterogeneity (Baker, Larcker & Wang 2022), including stacked difference-in-differences estimations suggested by Gormley and Matsa (2011) and the deployment of the dynamic estimator proposed by Sun and Abraham (2021).

Several additional sensitivity tests confirm the robustness of our findings. First, we include in the treatment group only states adopting pay transparency policies on January 1, 2023, to further exclude the possibility of bias resulting from heterogeneous treatment effects. Next, we exclude from the control group states adopting pay transparency policies at the city or county level before adopting it at the state level. We further exclude banks that move their headquarters to another state and match treatment and control group banks based on their pre-treatment size. We also perform tests where the control group includes only banks operating in states contiguous to those which adopt pay transparency laws or excludes banks from those contiguous states to test if the composition of the control group institutions may bias our results. We further provide the results with alternative clustering of standard errors, at the

bank level. We match treatment and control group banks based on their pre-treatment size, and provide the results with additional control variables, controlling for macroeconomic environment in states of their operation and the size of financial institutions. We also exclude banks which are part of bank holding companies. In all cases, our results still show the negative effect of pay transparency laws on the quality of banks' loan portfolios with almost unchanged magnitudes of the effect. We also conduct tests with a sample excluding treatment group institutions and where treatment status is assigned to banks operating in states neighbouring states adopting the law: These results refute the possibility that new policy results in spillover effects on banks operating in unaffected states.

We contribute to two strands of the literature. First, our results build on the literature examining the effect of performance-based compensation of bank loan officers and/or labour mobility on the quality of bank assets (Tzioumis & Gee 2013; Cole, Kanz & Klapper 2015; Agarwal & Ben-David 2018; Berg, Puri & Rocholl 2020; Heo & Ongena 2025). We complement these works with a novel identification approach which relies on differential changes in laws affecting many U.S. financial institutions at once by revealing pay discrepancies between companies, thereby affecting working conditions, salaries, employment, and salient corporate business practices, in this case, credit risk-taking.

Second, we add to papers showing the unintended consequences of regulations. In existing studies, closely related to our paper, Raz, McGowan and Zhao (2022) document that more stringent liquidity regulation leads to banks becoming less transparent, while Jiang, Levine and Lin (2016) show that banks increase their earnings opacity in response to bank branching deregulation. Our paper is the first to show how regulation, inducing more transparency, may lead to banks becoming more opaque.

Our findings also inform recent important policy debates. Although pay transparency leads to increased salaries in the private sector, it may also result in unintended adverse effects by decreasing financial institutions' safety and soundness. It may further lead to banks becoming more opaque, affecting investors' ability to assess their risk. To this extent, our results reinforce the rationale for closer supervision of financial institutions around the adoption of similar wage gap policies.

The remainder of the paper is structured as follows. Section 2 discusses the institutional setting and develops the hypotheses, while Section 3 discusses the identification strategy and data. Section 4 presents the results, and Section 5 concludes.

2. Institutional Setting and Hypotheses Development

In this section, we discuss the evolution of pay transparency laws in the U.S. and form a conceptual framework for the effect of recent changes in pay transparency legislation requiring disclosure of salary ranges in job adverts on pay, employment, and performance of financial intermediaries engaging in lending activities.

2.1 Pay Transparency Laws in the U.S.

In the U.S., legislative efforts to combat wage disparity date back to the passage of the Equal Pay Act by Congress in 1963. The act was intended to guarantee equal pay for equal work irrespective of employees' gender. More recently, the Lilly Ledbetter Fair Pay Act of 2009, which, by extending the period that a worker can file a pay discrimination claim, removed the statute of limitation for pay discrimination lawsuits.

In addition to federal laws, U.S. state legislators introduced various additional policies addressing the issue of unfair pay at the state level. Such policies include laws banning dismissal or punishment of employees enquiring about the pay of their colleagues (and individuals disclosing their salaries), introducing salary history bans and transparency laws which require employers to provide outright or on-request salary ranges in job adverts.⁶

Current research documents that protecting employees who inquire about and share salary information with their coworkers may reduce the gender pay gap. However, this effect typically and rather surprisingly may also lead to a reduction in average pay (Mas 2017; Bennedsen, Simintzi, Tsoutsoura & Wolfenzon 2022; Obloj & Zenger 2022; Baker, Halberstam, Kroft, Mas & Messacar 2023; Blundell,

6. Other laws targeted at reducing pay disparity include reporting of gender wage gap statistics, wage range disclosure to employees, collective disclosure of government employee public salaries.

Duchini, Simion & Turrel 2024).⁷ Theory shows that while employees could use the information about coworkers' pay to renegotiate their own pay conditions, employers may concurrently start to negotiate more aggressively to keep employment costs as low as possible (Cullen & Pakzad-Hurson 2023). At the same time, potential employees who expect to learn the salaries of their coworkers and renegotiate their salary in the future are likely to accept a lower initial salary to secure the job.⁸

Salary history bans forbid employers from requiring job candidates to disclose information regarding their previous salaries. Using salary history to determine pay may deprive individuals with currently low income from improving their salaries when changing jobs or from obtaining pay raises from current employees, subsequently making the pay gap persist over time. Similarly, pay based on previous salary information may also negatively impact those individuals, reducing their working hours or postponing their employment (due to, for example, assuming caregiving responsibilities) because their earnings would not benefit from inflation adjustments. Indeed, the existing literature documents that salary history bans positively affect wages (Hansen & McNichols 2020; Bessen, Denk & Meng 2024).

In this research, we are interested in examining the effect of *pay transparency laws*, which require employers to disclose the salary range in their job adverts outright or on request by job candidates. Providing information on salaries paid by competing firms informs workers about potential salaries they could earn by switching employers. At the same time, employers are likely to increase salaries to retain their employees or attract new quality employees.

We observe that, as of January 2025, ten U.S. states (California, Colorado, Connecticut, Maryland, Illinois,⁹ New York, Nevada, Rhode Island, Washington, and Hawaii) have decided to implement such

7. Exceptions include Gulyas, Seitz and Sinha (2023) who finds no effect of such transparency laws on wages.

8. Apart from affecting wages and gender wage gap, pay transparency laws by informing employees about earnings of their peers may adversely affect job satisfaction and job productivity (Akerlof & Yellen 1990; Card, Mas, Moretti & Saez 2012; Breza, Kaur & Shamdasani 2018; Cullen & Perez-Truglia 2022).

9. Given that the sample period of our data ends in the first quarter of 2025, individuals and institutions from Illinois are not part of the treatment group.

state-wide laws.¹⁰ Several other states consider introducing such measures in the future.¹¹ Employers not complying with the new regulation face monetary penalties of up to 10,000 USD per violation or a civil lawsuit from employees or job applicants who may seek compensation and punitive damages and costs. Table 2 provides details on the timing of the implementation of these laws by state authorities, the type of laws applying (outright sharing or on request), employers affected by the law, and the penalties faced by non-compliers.

[Table 2 here]

Current research and anecdotal evidence show that significant number of private sector firms, including financial institutions do comply with the new policy.¹² Importantly, our analysis does not rely on fully complying with the pay transparency policy, nor that salary information was completely omitted from job posts prior to the introduction of the law. As more adverts provide the information bank employees are able to form a better understanding of the within- and cross-industry pay gaps. More frequent disclosure of salary scales is also likely to reach greater numbers of bank employees and allow individuals to better understand salary gaps in greater number of locations. To test directly whether the pay transparency laws were effective, we obtain the data from a leading provider of information on job adverts, Lightcast. This dataset allows us to identify, among other things, which job adverts include salary information. As shown in Panel A of Table 3, financial institutions rarely provide salary information to job candidates. 84 percent of postings during our sample period do not include salary information, with banks being more secretive than non-banks (86 vs. 71 percent). Individuals

10. Several cities also decided to implement similar laws at the city-level (e.g., New York City, NY; Ithaca, NY; Jersey City, NJ; Toledo, OH; and Cincinnati, OH) and Westchester County (NY) introduced a county-wide rule. Our subsequent work reported below focuses on the state-level changes because exploiting city- and county-level pay transparency law changes to assess their effect on banks' asset portfolio quality is much more problematic compared to state-level laws since only six banks are headquartered and operate solely in these cities, with only two banks operating solely in those cities during the post-treatment period. As such, it is not clear whether banks that operate branches in affected and other cities may hire employees in locations outside the affected cities and it is not clear whether the law would apply to these institutions. Nevertheless, comparing delinquency rates of banks operating at least one branch in one of the affected cities with banks headquartered in the same state but operating branches in one of the affected cities supports our baseline results presented in Table 7 below.

11. The states of Alaska, District of Columbia, Kentucky, Maine, Massachusetts, Michigan, Missouri, Montana, New Jersey, Oregon, South Dakota, Vermont, Virginia, West Virginia, considered the introduction of pay transparency laws but either rejected it or delayed voting on it.

12. See Arnold, Quach & Taska (2025) for the effect of pay transparency law introduced in Colorado, or Minneapolis FED available at: https://www.minneapolisfed.org/article/2024/pay-transparency-in-job-postings-trends-trade-offs-and-policy-design#_ftn1.

considering applying for loan officer posts are provided with even less salary information. Overall, 86 percent of such posts advertised by all credit providers do not contain any information on potential pay, with bank adverts accounting for 88 percent and non-banks accounting for 79 percent.

Closer inspection shows that the introduction of pay transparency laws significantly affects disclosure of salary information. As shown in Panel B, prior to the introduction of pay transparency laws 92 percent of bank and non-bank job adverts in states adopting the law did not disclose salary information (91 percent for loan officers posts). As evident in Panel C, introducing the policy reduced the number of such posts to 38 percent (45 percent for loan officer jobs). The share of such posts fell from 93 to 37 percent for banks (from 93 to 43 percent for loan officer posts) and from 81 to 43 percent for non-banks (from 83 to 55 percent for loan officer posts). Importantly, as highlighted in Panel D, the share of job adverts not disclosing salary information in states not adopting pay transparency laws is almost identical to those in states adopting the policy. This suggests that the adoption of the law is likely to be driven by the pre-adoption differences in the level of salary information disclosure.¹³

Figure 1 shows the evolution in the share of job postings not disclosing salary information in quarters preceding and following the adoption of the pay transparency laws in treated states. The solid line shows the share of such posts in both banks and non-banks. The dashed line represents shares for banks and dash-dotted line for non-banks. Vertical line denotes the end of the quarter just before the adoption of the law, while quarter 0 represents the end of the first quarter after law adoption. Both banks and non-banks significantly decrease the share of posts omitting salary information, which highlights their compliance with the new policy.

[Table 3 here]

[Figure 1 here]

Another important dimension of any state pay transparency law is its geographical reach. The policy does increase the number of postings revealing the approximate salary of a potential employee. However, prior to the policy it may not always have been easy for individuals to estimate if the potential

13. We elaborate on this issue in Section 3.5.

higher earnings which could be earned in one location could be proportional to the increased expenses there (i.e., rent, cost of goods). This lack of information could deter individuals from seeking employment outside their current place of work and/or place of residence. As such, a greater geographical coverage of postings with salary information within a state could have a more significant effect on employees' turnover and/or their morale.

Figure 2 illustrates a significant increase in the number of counties in which ads reveal salaries between the pre-treatment (Panel A) and post-treatment period (Panel B) in states adopting the law. Darker polygons denote a higher share of adverts including salary information in a county. In the majority of counties, the policy results in an increase in such postings. In addition, we find that in 41 counties and 734 cities the share of such adverts increased from zero percent prior to pay transparency implementation. Overall, these findings suggest that bank employees in more locations will be made aware of local pay gaps.

[Figure 2 here]

2.2 Hypotheses

The existing literature documents that performance-based compensation of bank loan officers may lead to adverse effects, deteriorating the quality of bank assets, for example (Tzioumis & Gee 2013; Cole, Kanz & Klapper 2015; Agarwal & Ben-David 2018; Berg, Puri & Rocholl 2020). In this paper, we test whether the performance of banks is affected by employees' compensation under the introduction of pay transparency laws and how less strictly regulated non-banks (which provide similar employment opportunities as banks) react.

Individuals often lack clear expectations about the pay offered by jobs they interview for (Hall & Krueger 2012) or salaries earned by their superiors (Cullen & Perez-Truglia 2022). Cullen (2024) suggests that cross-firm pay transparency resulting from stated salary ranges in job posts by informing

employees about salaries offered by competing firms may persuade them to search for better-paid employment.¹⁴ This is particularly true for high-quality, underpaid individuals.

Table 1 documents a significant disparity between wages paid by banks and non-banks. On average, commercial and savings banks pay approximately 22,000 USD less than non-banks. This pay gap concerns executives as well as non-executive employees, including loan officers responsible for screening and approving loan applications. Revealing this pay disparity may prompt existing bank employees to search for alternative, better-paid employment and persuade the best quality job prospects to seek employment with non-banks. Drexler and Schoar (2014) find that loan officer turnover may affect the probability of bank borrowers defaulting on their loans due to difficulty in transferring soft information often necessary for prudent lending (Stein 2002; Berger, Miller, Petersen, Rajan & Stein 2005).

Pay transparency may also trigger adverse effects on underpaid bank employees' motivation to perform their tasks diligently, similar to revealing information on peers' salaries (Akerlof & Yellen 1990; Card, Mas, Moretti & Saez 2012; Breza, Kaur & Shamdasani 2018; Cullen & Perez-Truglia 2022).

Alternatively, by reducing information frictions, cross-firm pay transparency may trigger salary increases due to increased competition for employees between banks and non-banks.¹⁵ This may trigger an increase in banks' risk-taking through an increased provision of lending to more risky borrowers to boost revenues. Ultimately, these effects may negatively impact banks' loan performance.

Based on the preceding discussion, we proceed to test the following hypotheses.

Hypothesis 1a: Pay transparency deteriorates banks' loan portfolio quality.

On the other hand, increasing salaries may persuade quality employees to either stay or move to banks which ultimately may not affect or even positively affect the quality of bank assets. Additionally,

14. Belot, Kircher and Muller (2019) conduct experiment documenting that providing individuals with pay information in job adverts broadens the set of jobs they consider and increases their job interviews especially for participants who otherwise search narrowly.

15. Arnold, Quach and Taska (2025) document an increase in salaries paid by firms located in Colorado following adoption of the law requiring disclosure of expected salary ranges in job postings. Frimmel, Schmidpeter, Wiesinger and Winter-Ebmer (2023) and Skoda (2022) report similar effects in Austria and Slovakia.

gaining information on salaries at different positions may motivate current employees to improve their efforts and performance to achieve promotion. This could translate into a positive effect of cross-firm (or cross-industry) pay transparency on banks' lending quality or no effect at all.

Hypothesis 1b: Pay transparency does not, or even positively, affects banks' loan portfolio quality.

To the extent that pay transparency laws are likely to affect wages in the banking industry and the quality of banks' loan portfolios, managers of depository institutions may be incentivised to become more opaque by engaging in earnings smoothing through manipulation of loan loss provisions. Consistent with Wagner (2007), such a response will allow managers to avoid being disciplined in case of financial losses caused by an increase in operational expenses or non-performing loans.

Hypothesis 2: Pay transparency results in greater banks' earnings opacity.

3. Identification Strategy and Data

To test our hypotheses, our identification strategy relies on difference-in-differences estimations leveraging employee- and bank-level data.

3.1 Employee-level specification

Employee-level analysis relies on wages and employment information extracted from the American Community Survey (ACS).¹⁶ This survey provides us with annual-level information for 8,040,200 individuals employed in the U.S. during the period 2017-2023.¹⁷ We can distinguish between part-time and full-time employees using information on hours worked by them in a week and weeks in employment per year. We can identify the sector, industry, and occupation, and trace the location of their employment to the state level. In addition, the survey allows us to identify various demographic characteristics of survey respondents, including their age, gender, race, and marital status. Using this information, we estimate the following difference-in-differences specification:

16. American Community Survey data can be extracted from: <https://usa.ipums.org/usa/index.shtml>.

17. Because ACS data is only available right now until 2023, we are not able to explore the effect of all pay transparency law implementations specified in Table 2. Particularly, our employee-level specification does not account for the adoption of the law by the states of New York and Hawaii.

$$Y_{ist} = \beta(State_s * Law_t) + \gamma X_{ist} + \delta_s + \varphi_t + \varepsilon_{it}, \quad (1)$$

where Y denotes the outcome variables wage and the employment status (full-time vs part-time) of individual i , employed in state s , in year t . $State$ is a binary variable taking the value of 1 for states adopting pay transparency laws requiring employees' disclosure of salary range in job adverts (outright or on request), and zero otherwise. Law takes a value of 1 for year-quarters following state adoption of a pay transparency law and a value of 0 for pre-adoption period. Following Cullen and Pakzad-Hurson (2023), X_{ist} denotes a set of control variables that include age (quadratic), education, year-by-industry (NAICS 3-digit) and year-by-occupation (SOC 3-digit) indicators.¹⁸ δ_s are state fixed effects that control for time-invariant observable and unobservable state characteristics, while φ_t represents the year-quarter fixed effects controlling all observable and unobservable macroeconomic conditions. We allow for interactions between available demographic characteristics, namely, marital status, race, and gender, and we allow region-by-industry effects to differ by gender. We cluster standard errors by state and by year to allow for both serial correlation within states over time and cross-sectional correlation across states within a given year.

3.2 Bank-level specification

To perform the bank-level analysis, we use the Consolidated Reports of Condition and Income (Call Reports) filed quarterly by all commercial and savings banks operating in the U.S. between the first quarter of 2017 and the last quarter of 2024.¹⁹ Call reports allow us to measure expenses incurred by financial intermediaries on salaries and employee benefits, the number of banks' full-time employees, the volume of banks' outstanding loans, and the volume of non-performing loans.

Using bank-level data, we compare changes in salaries, employment, and loan performance of financial institutions exposed to pay transparency laws (treatment group) to those not affected (control group), before and after the law change. We estimate the following specification:

18. The set of control variables in specification 1 is consistent with that of Cullen and Pakzad-Hurson (2023). However, we obtain similar results using specification 1 excluding all these covariates.

19. Call reports data can be retrieved from: <https://cdr.ffiec.gov/public/PWS/DownloadBulkData.aspx>.

$$Y_{ist} = \beta(State_s * Law_t) + \delta_i + \varphi_t + \varepsilon_{ist}, \quad (2)$$

where Y denotes the outcome variables, i.e., the average salary expenses, salary expenses, number of employees, the share of non-performing loans²⁰, and the earnings opacity measure of bank i , operating in State s , at year-quarter t . $State$ is a binary variable taking a value of 1 for states adopting pay transparency laws requiring employees' disclosure of salary range in job adverts outright or on request, and zero otherwise. Law takes a value of 1 for year-quarters following state adoption of a law transparency law, and a value of 0 for the pre-adoption period. δ_i are bank fixed effects that control for time-invariant observable and unobservable bank characteristics (such as, for example, its business model or location), while φ_t represents the year-quarter fixed effects controlling for all observable and unobservable macroeconomic conditions. In all specifications, we cluster heteroscedasticity-adjusted standard errors at the state level.

To ensure that we analyze only loans of institutions affected by pay transparency laws we include in our sample only those institutions operating in one state (single-state banks). We can identify these institutions using the Summary of Deposits (SoD) dataset maintained by the Federal Deposit Insurance Corporation. SoD data allows us to determine the location of each branch of all banks operating in the U.S. each year. In addition, this strategy helps us reduce the possibility that financial institutions do not conform to the new pay transparency rules and hire new employees in states that do not require pay transparency.²¹

To address the potential issues with applying static difference-in-differences estimations to exploit the effect of policies introduced in a staggered manner highlighted by the recent literature (Baker, Larcker & Wang 2022), we employ additional estimation techniques. We replicate our results using Gormley and Matsa (2011) stacked difference-in-differences estimator and interaction weighted (IW) estimator proposed by Sun and Abraham (2021).

20. Following Jiménez, Ongena, Peydró and Saurina (2014), we use loans past due for 90 plus days as a measure of loan defaults to avoid self-cures or accounting errors associated with loans past due for a shorter period of time.

21. We also restrict our treatment group sample to institutions which operate during at least one pre and one post treatment period.

Estimations based on Gormley and Matsa (2011) procedure create cohorts of treated and untreated banks using bank-year observations for 10 quarters before and 10 quarters after adoption of each pay transparency law.²² Subsequently, data across different cohorts are pooled together to estimate:

$$Y_{isct} = \beta(State_{sc} * Law_{tc}) + \delta_{ic} + \varphi_{tc} + \varepsilon_{isct}, \quad (3)$$

where Y denotes the outcome variables for bank i , operating in State s , belonging to cohort c , at year-quarter t . $State$ is a binary variable taking a value of 1 for banks operating in states s in cohort c adopting pay transparency laws requiring employees' disclosure of salary range in job adverts outright or on request, and zero otherwise. Law takes a value of 1 for year-quarters following state adoption of a law transparency law, and a value of 0 for the pre-adoption period for each cohort c . δ_{ic} are bank-cohort fixed effects that control for time-invariant observable and unobservable bank characteristics (such as, for example, its business model or location), while φ_{tc} are year-quarter-cohort fixed effects controlling for all observable and unobservable macroeconomic conditions. In all specifications, we cluster heteroscedasticity-adjusted standard errors at the state level.

Similarly, Sun and Abraham (2021), estimations are also performed using 10 quarters before and after each adoption of the law with the 10th pre-treatment period and 10th post-treatment period aggregated. For 5 out of 9 pay transparency law adoptions, data limitations preclude us from observing post-treatment effects after quarter 9, as such the estimates for 10th period are likely to be biased due to a drop in the number of observations. Therefore, our tables as well as Figures 1 and 2 report Sun and Abraham (2021) estimates for 9 pre- and post-periods only. In addition, the first pre-treatment period is the omitted reference period.

3.3 Banks' earnings opacity measure

To capture banks' earnings opacity, we follow Jiang, Levine and Lin (2016) and Beatty and Liao (2014) and construct discretionary loan loss provisions by estimating the following specification:

22. We choose the estimation window of 10 quarters before and after the introduction of the new law to be consistent between Gormley and Matsa (2011) Stack DiD & Sun and Abraham (2021) IW estimators. In Sun and Abraham (2021), we bunch data at the 10th pre- and post-treatment period to account for the effect of the law in earlier and later periods for banks subject to the law before and after the 10th quarter.

$$\begin{aligned}
LLP_{ist} = & \alpha_0 + \alpha_1 \Delta NPA_{ist+1} + \alpha_2 \Delta NPA_{ist} + \alpha_3 \Delta NPA_{ist-1} + \alpha_4 \Delta NPA_{ist-2} + \alpha_5 \text{SIZE}_{ist-1} + \\
& \alpha_6 \Delta LOAN_{ist} + \alpha_7 \Delta GSP_{st} + \alpha_8 \Delta HPI_{st} + \alpha_9 \Delta UNEMP_{st} + \alpha_{10} \text{State}_{sc} * \text{Law}_{tc} * \Delta NPA_{ist+1} + \\
& \alpha_{11} \text{State}_{sc} * \text{Law}_{tc} * \Delta NPA_{ist} + \alpha_{12} \text{State}_{sc} * \text{Law}_{tc} * \Delta NPA_{ist-1} + \alpha_{13} \text{State}_{sc} * \text{Law}_{tc} * \\
& \Delta NPA_{ist-2} + \alpha_{14} \text{State}_{sc} * \text{Law}_{tc} * \text{SIZE}_{ist-1} + \alpha_{15} \text{State}_{sc} * \text{Law}_{tc} * \Delta LOAN_{ist} + \alpha_{16} \text{State}_{sc} * \\
& \text{Law}_{tc} * \Delta GSP_{st} + \alpha_{17} \text{State}_{sc} * \text{Law}_{tc} * \Delta HPI_{st} + \alpha_{18} \text{State}_{sc} * \text{Law}_{tc} * \Delta UNEMP_{st} + \varepsilon_{ist},
\end{aligned} \tag{4}$$

where LLP_{ist} is the ratio of loan loss provisions to lagged total loans in bank i in state s in quarter t . ΔNPA_{ist} is the change in nonperforming assets divided by lagged total loans to capture changes in risk-taking and risk culture. We include the current value of NPA , as well as lags and leads of the ΔNPA_{ist} to capture current, historical and forward-looking information on changes in NPA, based on which banks may be choosing the current level of LLP . SIZE_{ist-1} is the natural logarithm of total assets in the previous quarter, accounting for differences in the level of monitoring by regulators and private sector stakeholders varying with the size of financial institutions. $\Delta LOAN_{ist}$ is the change in total loans to lagged total loans included to control for the possibility that lending quality could drop with the increasing volume of banks' lending. ΔGSP_{st} , the change in Gross State Product obtained from the, ΔHPI_{st} , the change in state House Price Index retrieved from the Federal Housing Finance Agency, and $\Delta UNEMP_{st}$ the change in state unemployment rate provided by the Bureau of Labour Statistics capture the effects of time-varying macroeconomic state-specific conditions that affect LLP . Each explanatory variable is further interacted with State_{sc} and Law_{tc} to exclude the possibility that we capture change in change in accuracy of the LLP model induced by introduction of the pay transparency laws, rather than change in discretionary $LLPs$.

We estimate equation (4) using OLS, calculate residuals ε_{ist} , the abnormal component of LLP , and take the natural logarithm of the absolute value of these residuals, denoted by EO , because both negative and positive residuals may indicate discretionary manipulation of $LLPs$.

3.4 Summary statistics

Table 4 provides summary statistics for our variables.

[Table 4 here]

3.5 Pay transparency laws and salary information disclosure in job adverts

Prior to discussing our main results we use the Sun and Abraham (2021) IW estimator to provide a more formal results for the effectiveness of the new policy illustrated in Figure 1 using Lightcast data. We present the results in Figure 3, where the dependent variable is a dummy variable equal to one for job adverts excluding salary information. We find that the number of such posts falls after the law adoption by approximately 30 percentage points in post-treatment quarters. This effect persists in all post-treatment quarters. This result is very similar to the findings in Arnold, Quach & Taska (2025) who find that the law introduced in Colorado resulted in an effect of similar magnitude. Importantly however, the differences in the pre-treatment quarters are not economically significant and do not indicate that the number of postings omitting salary information was much higher in states adopting the law, which could suggest that this was the underlying reason for the adoption of the law.

[Figure 3 here]

4. Results

In this section, we first discuss the effect of pay transparency on employment and earnings obtained using individual-level information (Specification 1). Next, we confirm these results by looking at bank-level data and explore loan performance measures for depository credit providers using Specification 2. We then discuss alternative explanations behind the bank performance results and provide robustness tests.

4.1 Main Results

4.1.1 Employee-level results

Table 5 presents coefficients and standard errors (in parentheses) for the individual-level results. First, we find that revealing salary information in job adverts leads to an increase in full-time employment in the private sector. Following the introduction of pay transparency laws, the number of full-time employees in treated states increases by 5 percent relative to control group states. However, this overall

effect can be mainly attributed to an increase in employment in non-financial firms. When focusing on credit providers, we uncover an interesting relationship. Depository credit providers experience a decrease in employment once pay information in job adverts becomes available to employees. On the contrary, non-depository credit institutions hire more employees. Additional analysis reveals that these effects on employment in credit institutions are driven by loan officers who leave employment at commercial and savings banks and credit unions and take up positions at non-depository institutions. These effects are consistent with Hypothesis 1a, which suggests that revealing disparity in pay offered by these institutions will prompt changes in employment.

[Table 5 here]

Next, we discuss the effect of pay transparency on employees' wages. Table 6 reports the results. We find that the introduction of the law increases earnings. Although the impact on overall private sector wages and those employed in sectors other than financial is modest (0.2 percent), we observe a significant increase in earnings in the banking industry, particularly among loan officers. On average, relative to bank loan officers working in the unaffected states, individuals in the same position working for depository institutions operating in the treatment group states earn 11 percent more once the pay transparency law is in place. These findings are consistent with the notion that institutions experiencing a reduction in employment due to observed pay differences relative to competing institutions will increase wages to retain existing workers and attract new job candidates.

[Table 6 here]

4.1.2 Bank-level results

Using the bank-level data, in Table 7, we find that average wages earned by bank employees in treated states increase by approximately 1,345 USD (1.345 measured in thousands of USD). Given the mean value of the average salary of 22,260 USD (22.26 in thousands of USD), these estimates imply a 6 percent increase in the average salary offered by banks in treated states following the enactment of pay transparency laws relative to the average salary offered banks not affected by these laws. This effect is driven by a 12 percent post-treatment increase in employees' salaries. On average, treated banks increase

salaries by approximately 300 thousand USD. The coefficient for the number of full-time employees obtained using standard difference-in-differences and stacked difference-in-differences estimations lacks statistical significance. However, the dynamic effects obtained using the IW estimator, illustrated in Figure 2 and presented in column 9 of Table 7, document that in the first four quarters after the law's adoption, employment in banks operating in affected states significantly falls relative to the control group banks. Only after six quarters does employment in treated institutions increase, which coincides with an increase in salary expenses in treated banks, which, as shown in column 6, increase after four quarters following the introduction of the pay transparency law. Unfortunately, data limitations restrict us from observing how salaries and employment vary across different occupations within banks. Nevertheless, the results presented in Table 7 highlight significant changes in salary expenses incurred by banks once individuals in affected states are able to observe salaries offered by competing institutions, including non-banks.

[Table 7 here]

[Figure 4 here]

Do these changes in bank operating expenditure and employment affect their asset quality? To explore this question, we investigate the effect of pay transparency laws on bank loan defaults in Table 8. Consistent with Hypothesis 1a, we find that the share of loans past due 90 and more days increases in treated banks relative to the control group institutions by 0.024. For the mean bank, this implies an increase in the share of non-performing loans of 16 percent. Column 3 of Table 8 and Figure 3 document the dynamics of this effect. We find that banks' loan performance significantly deteriorates only in the second year (from the fifth quarter) after the state legislators adopt the law. Together with the results documenting a reduction in the number of employees in the first four quarters after the adoption of the law, these findings are in line with the notion that the decrease in banks' loan quality could be driven by current bank employees leaving their posts, which may subsequently affect the use of soft information necessary for prudent lending decisions.

[Table 8 here]

[Figure 5 here]

Next, we consider if the adoption of the policy aimed at increasing pay transparency in the private sector led to banks becoming more opaque. We are particularly interested in earnings opacity. Given that an increase in salaries and distressed assets is likely to adversely affect profits, banks may have an incentive to smooth their earnings using discretionary loan loss provisions. We find support for this hypothesis in our data. In Table 9, we present the results documenting that banks subject to the pay transparency law increase their discretionary provisions by 18 percent. The dynamic results in column 3 of Table 9 and visually presented in Figure 4 show that this effect is present from the first quarter after adoption of the law, suggesting that banks predict the policy is likely to affect their profits and adjust their discretionary provisions accordingly.²³

[Table 9 here]

[Figure 6 here]

4.1.4 Mechanism, bank employee quality and institutions' hiring

To test whether financial institutions' employee turnover is likely to drive the deterioration in banks' loan portfolio following the introduction of pay transparency laws, we look at the interaction between pay transparency laws and the Inevitable Disclosure Doctrine (IDD). Recognition of the Inevitable Disclosure Doctrine by U.S. state courts intends to increase the protection of a firm's trade secrets by reducing the mobility of its workers who know its secrets to rivals (Klasa, Ortiz-Molina, Serfling & Srinivasan 2018). The coverage of the IDD includes all employees and firms' secrets. Agarwal, Lin, Zhang and Zhang (2024) document that by restricting the mobility of loan officers, the introduction of the IDD results in improved screening and monitoring of bank borrowers and subsequently leads to lower loan default probability. Prior to the start of our sample period, 18 states had IDD in place (AR, CT, DE, GA, IL, IN, IA, KS, MA, MN, MO, NJ, NY, NC, OH, PA, UT and WA). We construct a dummy variable *IDD* equal to one for all banks operating in these states, and zero for all banks operating in

23. The number of quarters included in the estimation window for Stack DiD and IW estimator is reduced to 7 due to the use of lead and lagged values of non-performing assets in the calculation of bank opacity measure.

states without IDD in place. In Panel A of Table 10, we replicate the results in Tables 8 and 9, including the triple interaction term between variables *IDD*, *State* and *Law*, which informs us about the differential effect of the pay transparency laws introduced in states with restrictions on labour mobility. The results suggest that in states where IDD is in place, pay transparency policy has a lower effect on the quality of banks' loans or the earnings opacity. The coefficients on the interaction term *State* and *Law* are consistent with our earlier findings presented in Tables 8 and 9, suggesting that the law is affecting our main dependent variables in states where the mobility of bank loan officers between banks is not restricted. The overall effect of the law on states with IDD in place, which is the sum of coefficients on double and triple interaction terms is insignificant and significantly lower highlighting a vital role of employees' mobility as a mechanism for the effect of pay transparency laws on banks' loan performance and opacity.

Another important factor to consider is the quality of bank employees. If pay transparency is driving the surge in banks' nonperforming loans due to the departure of employees, then the assumption is that employees leaving banks are of high quality. To test if this is the case, we look at enforcement actions issued against banks. To maintain a safe and sound banking system, the U.S. bank supervisory agencies (FDIC, Federal Reserve System, and the OCC) can sanction financial institutions and their employees for violation of law and regulations, or unsafe practices. These sanctions, enforcement actions, may impose a variety of restrictions on banks, including imposing restrictions on deposit taking or lending. The regulators may also impose sanctions on individuals employed by the bank, by imposing monetary fines or barring them from associating with a bank (Curry & Kenney 1999; Delis, Staikouras & Tsoumas 2016; Danisewicz, McGowan, Onali & Schaeck 2018). We collect information on enforcement actions imposed by all U.S. bank supervisory agencies and construct a dummy variable, *Sanction*, equal to one for banks which were repeatedly issued with enforcement actions (against the institution or employee) between 2011 and 2020,²⁴ and zero otherwise. This indicator is our proxy for the quality of bank

24. Information on enforcement actions is publicly available from year 1989. However, we focus on sanctions issued between 2011 and 2019 to capture the recent quality of bank employees. We restrict the sample of sanctions to the year 2019 to focus on pre-treatment actions (the first pay transparency law was introduced in Maryland in 2020) and avoid capturing actions triggered by a drop in banks' asset quality, which could be attributed to the pay transparency policies.

employees. In Panel B of Table 10, we again replicate the results in Tables 8 and 9, including the triple interaction term between variables *Sanction*, *State* and *Law*, which informs us about the differential effect of the pay transparency laws on banks' loan performance and earnings opacity in banks with higher and lower quality employees. The negative coefficients on the triple interaction term indicate that pay transparency laws seem to affect much less the quality of loan portfolio and earnings smoothing of banks with lower quality of employees. However, the coefficients on the interaction term *State* and *Law* are again consistent with our earlier findings presented in Tables 8 and 9, which indicates that the effect of pay transparency is mainly driven by changes in the employment of higher-quality employees. The overall effect of the law on banks with lower quality employees is again provided by the sum of coefficients on double and triple interaction terms. We observe that the share of nonperforming loans is decreasing, although this effect lacks statistical significance. However, such banks seem to still engage in earnings smoothing, although the effect is economically lower and again lacks statistical significance.

Next, we look at information provided by Lightcast. Specifically, we are interested in comparing loan performance and earnings opacity of banks hiring new loan officers with those that do not advertise new positions for loan officers. The rationale behind this test is that institutions which do hire new employees are likely to attract those working for their competitors. If this is the case, then we should observe stronger response to the pay transparency laws in non-advertising institutions, particularly in terms of loan performance since earnings opacity may increase due to increased operational expenses. This would be particularly true if advertising banks were focusing on hiring more experienced loan officers, with established loan relationships and soft information on borrowers which they can transfer to their new employer. In Panel C of Table 10 we saturate our baseline specification with a triple interaction term, between *State*, *Law* and *Advert*, where the last term takes a value of 1 for banks advertising loan officer positions. The negative coefficient on this triple interaction term indicates that advertising banks exhibit significantly lower response to pay transparency laws, both in terms of loan defaults and earnings opacity. The coefficient on the interaction term between *State* and *Law*, remain robust, indicating that the baseline results are driven by banks which do not advertise new positions for loan officers and are more likely to lose their existing ones to their competitors. The sum of coefficients

on the triple and double interaction terms show that hiring institutions subject to the new policy do not experience increased loan defaults and their earnings opacity is significantly lower.

In Panel D we replace term *Advert* with a term *ExpAdvert*, which identifies banks advertising positions for loan officers with existing experience performing the advertised position of loan officer. The results show that the effect of pay transparency policy on loan defaults is even less strong than in Panel C. However, the baseline results still persist for non-hiring institutions.

[Table 10 here]

4.2 Alternative Explanations

In this section, we aim to refute several potential alternative explanations behind the increase in bank risk-taking documented in the previous section. One concern, for example, could be that risk-taking and pay are driven by organizational changes such as bank mergers and acquisitions. The existing literature documents that bank consolidation affects loan pricing (Sapienza 2002) and borrower screening efforts (Panetta, Schivardi & Shum 2009), which ultimately can affect loan portfolio risk. At the same time, Cornett, McNutt and Tehranian (2006) find a significant reduction in banks' personnel expenses around mergers. However, when we remove merger banks in Table 11 Panel A, our findings are mostly unaffected. The same is true when failed banks (via liquidation and forced merger) are removed in Panel B.

We could be worried that states adopting pay transparency laws during COVID-19 (years 2020 & 2021) could be different as both pay, bank lending and corporate distress were affected by fiscal, macro-prudential and public health measures. Beck and Keil (2022) show that banks more geographically exposed to COVID-19 lockdown measures and the pandemic experience an increase in non-performing loans, while Larrimore, Mortenson and Splinter (2022) document earnings shocks during the pandemic. Therefore, in Panel C, we remove banks from such states, and again, we find that all findings remain unaffected.

[Table 11 here]

4.3 Robustness Tests

In Table 12, we subject our findings to a variety of robustness exercises. We start by varying the treatment group: In Panel A, by including only states adopting pay transparency laws by January 1, 2023, to further address the potential bias resulting from estimating difference-in-differences regressions with staggered treatment events (Baker, Larcker & Wang 2022). When the treatment group is restricted to states adopting the law only in the same period, our findings correspond to the baseline results.

In Panel B, by excluding states adopting pay transparency laws in cities or counties prior to the state-level adoption, we exclude the possibility that some banks in the treatment and control group are already subject to the law, which may bias our estimates. However, excluding institutions operating in New Jersey, New York, and Ohio does not change our results.

In Panel C, we exclude banks changing the state in which their headquarters is located not to attribute the impact incorrectly to the wrong state. Again, our estimates are very similar to the ones obtained so far. In Panel D and E, we alter our control group to include either only banks operating in states contiguous to those adopting pay transparency laws (Panel D) or exclude banks operating in contiguous states (Panel E) as these states could be more similar to the treated states in social and economic conditions than further-away states (and hence banks more similar also). The results do not indicate any significance of this control group choice. These tests also allow us to refute the idea that law changes in treated states may result in spillover effects elsewhere. Lack of spillover effects is further supported by tests presented in Panel F, where we assign the treatment status to control group states neighbouring states adopting pay transparency laws. The control group now consist of all other states not implementing the policy and states adopting the policy are excluded from the analysis. The rationale behind this test is that if the law results in changes in loan performance and earnings smoothing it would be more likely to be observed in treated and control group states sharing borders. However, the lack of statistically significant effects in this exercise again supports the notion that the effect of the law is limited to institutions operating only in affected states. In Panel G, we show that clustering standard errors at the bank level yields statistically significant results. Following Lemmon and Roberts (2010)

procedure in Panel H we match treatment and control group banks based on their pre-treatment size, measured using total assets.²⁵ In Panel I we re-estimate our baseline results with specifications saturated with additional control variables. We control for bank size, state GDP growth, state unemployment rate and state real estate prices. In both cases, our baseline estimates still hold. Finally, in Panel J we exclude institutions which are part of the bank holding company as banks and non-banks within such a company could be expected to coordinate financial and personnel policies for example. But our main estimates of interest are not affected by this exclusion.

[Table 12 here]

5. Conclusion

Early evidence shows that pay transparency laws, requiring employers to provide information on potential salaries in job postings, result in increased wages offered by the private sector firms (Skoda 2022; Frimmel, Schmidpeter, Wiesinger & Winter-Ebmer 2023; Arnold, Quach & Taska 2025). However, as shown in this paper, this positive effect may come at a price. We find that adopting this policy may significantly increase firms' risk-taking. Focusing on financial institutions, we document that pay transparency increases banks' loan delinquencies. This is likely to be driven by an increased turnover of bank employees, institutions chasing higher returns to compensate for increasing operating expenses, or due to reduced morale among bank employees. The latter could be caused by the fact that bank employees earn significantly less in the same role than their counterparts employed by non-bank credit providers. The ability to learn about this pay gap, may adversely affect bank employees' motivation to perform their duties diligently. In addition to affecting bank performance, the introduction of pay transparency also leads to increased earnings smoothing, making the assessment of their condition more difficult.

25. We first estimate a probit model regressing a dummy variable equal to 1 for banks operating in states adopting pay transparency laws (zero otherwise) on banks' average total assets in the pre-treatment period, and 0 otherwise. We then compute propensity scores using the estimates obtained from the probit regression and match each treated bank with four control group banks with the most similar propensity score. We repeat this procedure for each treatment event. The results obtained using this procedure are robust to various number of matched banks.

Given that pay transparency policies are a popular method to reduce pay gaps around the world (Cullen 2024), these findings inform an important policy debate, prescribing a closer examination of financial institutions around adopting these laws.

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Table 1. Pay gap between depository and non-depository credit institutions.

	All Occupations	Loan Officers	Other occupations	CEOs
Banking, saving inst., credit unions	95,446	81,713	96,913	164,032
Non-depository credit institutions	118,079	95,994	123,340	238,892

Notes. This table presents the average salaries earned by bank and non-bank employees in USD. The information is based on the data from the U.S. American Community Survey (ACS) for years 2017-2023.

Table 2. Implementation of the state-wide pay disclosure laws.

<i>State</i>	<i>Effective date</i>	<i>Requirements</i>	<i>Coverage</i>	<i>Non-compliance penalty</i>	<i>Legal basis</i>
California	January 1, 2023	Salary range provided in all job postings and position's salary range provided to current employees upon request.	Employers with at least 15 employees, must meet all the requirements of the law.	Civil penalty between 100 USD and 10,000 USD for each violation.	https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220SB1162
Colorado	January 1, 2021	Hourly or salary compensation, or a range and a general description of all benefits and other compensation provided in all job postings (inc. promotions).	All employers with at least one employee in the State.	Civil penalty between 500 USD and 10,000 USD for each violation.	https://leg.colorado.gov/sites/default/files/2019-a/085_signed.pdf
Connecticut	October 1, 2021	Salary range must be provided by employer to job candidates and current employees on request.	All employers with at least one employee in the State.	Employers may face civil action for compensatory and punitive damages, plus costs.	https://www.cga.ct.gov/2021/ACT/PA/PDF/2021PA-00030-R00HB-06380-PA.PDF
Hawaii	January 1, 2024	Salary range or hourly wage rate provided in all job postings (excl. internal transfers and promotions).	All employers with at least 50 employees (excl. public employees with compensation determined under collective bargaining agreement).	Employers may face civil action for compensatory and punitive damages, plus costs.	https://www.capitol.hawaii.gov/sessions/session2023/bills/GM1306.PDF
Maryland	October 1, 2020	Wage scale provided to job applicants on request.	All employers active in the State.	A warning for a first violation, a 300 USD fine for a second violation, and a 600 USD fine for a third or subsequent violation	https://www.dllr.state.md.us/forms/equalpay.pdf
Nevada	October 1, 2021	Salary information provided to applicants for any role they interview	All employers active in the State.	Employers may face civil action. The Labor Commission may impose	https://www.leg.state.nv.us/App/NELIS/REL/81st2021/Bill/7896/Text

		for. Salary information provided to current employees seeking a promotion or internal transfer on request.		additional fine of 5,000 USD per violation	
New York	September 17, 2023	Salary and hourly rate ranges provided for all job adverts (inc. promotions and transfers).	All private sector employers with 4 or more employees.	Fines up to 1,000 USD for the first violation, up to 2,000 USD for the second violation, and up to 3,000 USD for the third and subsequent violations.	https://legislation.nysenate.gov/pdf/bills/2021/S9427A
Rhode Island	January 1, 2023	Pay range or rate for a given position to job applicants upon request.	All employers with at least one employee in the State.	Fine between 1,000 USD and 5,000 USD.	http://webserver.rilin.state.ri.us/BillText/BillText21/SenateText21/S0270A.pdf
Washington	January 1, 2023	Wage scale or salary range and a general description of all of the benefits and other compensation provided for all advertised positions.	All employers with 15 or more employees in the State.	Employers face paying damages to employees and fines of up to 500 USD for first violation, 1,000 USD or 10 percent of damages (whichever is greater) for repeated violations, plus fees and costs.	https://lawfilesext.leg.wa.gov/biennium/2021-22/Pdf/Bills/Session%20Laws/Senate/5761-S.SL.pdf?q=20220502103426
<i>Not included in the treatment group</i>					
Illinois	January 1, 2025	Salary range and benefits information provided in all job postings.	Employers with at least 15 employees.	Civil penalty between 500 USD and 10,000 USD for each violation.	https://www.ilga.gov/legislation/BillStatus.asp?DocTypeID=HB&DocNum=3129&GAID=17&SessionID=112&LegID=148283

Notes. This table presents the information on the adoption of pay transparency laws by the U.S. states.

Table 3. Salary information in finance industry job adverts

Panel A: All credit intermediation firms - Banks and Non-banks

<i>Institution type</i>	<i>All</i>	<i>Banks</i>	<i>Non-banks</i>
# of adverts	5,252,710	4,488,797	763,913
# no salary information	4,388,146	3,843,848	544,298
% no salary information	83.5%	85.6%	71.3%
# of adverts – loan officer	401,657	312,916	88,741
# no salary information – loan officer	346,304	276,095	70,209
% no salary information – loan officer	86.2%	88.2%	79.1%

Panel B: Institutions in states introducing pay transparency: Pre-introduction

<i>Institution type</i>	<i>All</i>	<i>Banks</i>	<i>Non-banks</i>
# of adverts	962,673	850,618	112,055
# no salary information	883,482	792,356	91,126
% no salary information	91.8%	93.2%	81.3%
# of adverts – loan officer	78,995	57,057	21,938
# no salary information – loan officer	71,542	53,309	18,233
% no salary information – loan officer	90.6%	93.4%	83.1%

Panel C: Institutions in states introducing pay transparency: Post-introduction

<i>Institution type</i>	<i>All</i>	<i>Banks</i>	<i>Non-banks</i>
# of adverts	348,157	298,974	49,183
# no salary information	130,850	109,829	21,021
% no salary information	37.5%	36.7%	42.7%
# of adverts – loan officer	22,782	17,918	4,864
# no salary information – loan officer	10,315	7,657	2,658
% no salary information – loan officer	45.3%	42.7%	54.6%

Panel D: Institutions in states not introducing pay transparency

<i>Institution type</i>	<i>All</i>	<i>Banks</i>	<i>Non-banks</i>
# of adverts	3,941,880	3,339,205	602,675
# no salary information	3,373,814	2,941,663	432,151
% no salary information	85.6%	88.1%	71.7%
# of adverts – loan officer	299,880	237,941	61,939
# no salary information – loan officer	264,447	215,129	49,318
% no salary information – loan officer	88.2%	90.4%	79.6%

Notes. This table presents the number of total job adverts and the number and share of adverts excluding salary information for all credit providers, banks and non-banks. Part-time jobs, internships, and remote jobs are excluded.

Table 4. Summary statistics

<i>Variable</i>	<i>Observations</i>	<i>Mean</i>	<i>St. dev.</i>	<i>Min</i>	<i>Max</i>
Panel A: Individual-level data					
Wage income	3,715,239	75,299	77,597	4	870,000
Full-time employment	8,040,200	0.462	0.499	0	1
Panel B: Bank-level data					
Average salary	140,007	22.369	9.120	0.618	482.067
Salary expenses (million USD)	140,007	2.374	12.645	0.007	1,076.132
Employment (Number)	140,007	95.565	505.078	1	32,094
Loans defaults	140,007	0.150	0.585	0	31.109
Earnings opacity	124,665	0.002	0.011	0	2.098

Notes. This table presents summary statistics for all dependent variables.

Table 5. The effect of transparency laws on employment

Industry:	Private sector		Commercial and savings banks, credit unions ("banks")			Non-depository credit institutions ("non-banks")		
	All private sectors	Non-financial	All employees	Loan officers	Other employees	All employees	Loan officers	Other employees
Occupation:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
State*Law	0.005*** (0.002)	0.005*** (0.002)	-0.012 (0.013)	-0.078** (0.030)	-0.006 (0.013)	0.012 (0.013)	0.070*** (0.020)	-0.004 (0.017)
Observations	8,040,200	7,893,755	94,452	8,473	85,965	51,984	9,921	42,046
R-squared	0.315	0.311	0.046	0.042	0.048	0.034	0.044	0.039
Controls	YES	YES	YES	YES	YES	YES	YES	YES
State FE	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES

Notes. This table reports the coefficients and standard errors clustered at the state-year level (in parentheses) obtained using equation 1, documenting the effect of the introducing pay transparency laws on full time employment in all private sector companies (Column 1), non-financial private sector firms (Column 2), banks (Columns 3-5), and non-banks (Columns 6-8). For banks and non-banks we estimate the results for all employees (Columns 3 and 6), loan officers (Columns 4 and 7), all other employees (Columns 5 and 8). The dependent variable is a dummy variable equal to 1 for individuals in full time employment, and 0 otherwise. The main explanatory variable is an interaction term between the variable *State* (equal to 1 for individuals employed in states adopting the pay transparency law, and zero otherwise) and *Law* (equal to 1 for years following the adoption of the pay transparency law, and zero otherwise). ***, **, and * indicate significance at the 1 percent, 5 percent, and 10 percent statistical level, respectively.

Table 6. The effect of transparency laws on salaries

Industry:	Private sector		Commercial and savings banks, credit unions ("banks")			Non-depository credit institutions ("non-banks")			
	Occupation:	Total (1)	Non-financial (2)	All employees (3)	Loan officers (4)	Other employees (5)	All employees (6)	Loan officers (7)	Other employees (8)
Treatment		0.002 (0.005)	0.002 (0.005)	-0.004 (0.021)	0.107* (0.060)	-0.012 (0.022)	0.008 (0.017)	-0.042 (0.054)	0.017 (0.021)
Observations		3,715,239	3,594,682	79,204	7,634	71,556	41,339	7,941	33,381
R-squared		0.432	0.431	0.415	0.322	0.426	0.379	0.250	0.410
Controls		YES	YES	YES	YES	YES	YES	YES	YES
State FE		YES	YES	YES	YES	YES	YES	YES	YES
Year FE		YES	YES	YES	YES	YES	YES	YES	YES

Notes. This table reports the coefficients and standard errors clustered at the state-year level (in parentheses) obtained using equation 1, documenting the effect of introducing pay transparency laws on salaries earned by employees in all private sector companies (Column 1), non-financial private sector firms (Column 2), banks (Columns 3-5), and non-banks (Columns 6-8). For banks and non-banks we estimate the results for all employees (Columns 3 and 6), loan officers (Columns 4 and 7), all other employees (Columns 5 and 8). The dependent variable is a logarithm of salary. The main explanatory variable is an interaction term between the variable *State* (equal to 1 for individuals employed in states adopting the pay transparency law, and zero otherwise) and *Law* (equal to 1 for years following the adoption of the pay transparency law, and zero otherwise). ***, **, and * indicate significance at the 1 percent, 5 percent, and 10 percent statistical level, respectively.

Table 7. The effect of transparency laws on Salary and Employment

Dependent variable	AVERAGE SALARY				SALARY				EMPLOYMENT	
	Specification	Standard DID (1)	Gormley-Matsa Stack DID (2)	Sun-Abraham IW Estimator (3)	Standard DID (4)	Gormley-Matsa Stack DID (5)	Sun-Abraham IW Estimator (6)	Standard DID (7)	Gormley-Matsa Stack DID (8)	Sun-Abraham IW Estimator (9)
State*Law		1.800** (0.773)	1.437** (0.603)		0.481 (0.300)	0.343* (0.182)		2.317 (3.653)	0.917 (2.111)	
Dynamic Post-Treatment Estimates										
$t = 0$			1.537*** (0.366)			0.161*** (0.049)			-1.946*** (0.638)	
$t = 1$			0.856*** (0.222)			0.037 (0.036)			-2.785*** (0.613)	
$t = 2$			0.468** (0.218)			-0.016 (0.047)			-1.516*** (0.532)	
$t = 3$			0.892*** (0.299)			-0.003 (0.043)			-1.408*** (0.480)	
$t = 4$			1.150*** (0.395)			0.225*** (0.047)			-0.580 (0.508)	
$t = 5$			2.610*** (0.821)			0.301*** (0.051)			-0.184 (0.695)	
$t = 6$			0.739 (0.528)			0.187*** (0.072)			1.421 (1.566)	
$t = 7$			0.640*** (0.226)			0.258*** (0.089)			2.987* (1.615)	
$t = 8$			1.009 (0.662)			0.261*** (0.093)			2.308 (1.709)	
$t = 9$			0.207 (0.280)			0.085 (0.183)			0.559 (2.921)	
Observations	140,007	435,656	140,007	140,007	435,656	140,007	140,007	435,656	140,007	435,656
R-squared	0.739	0.771	0.740	0.934	0.964	0.934	0.977	0.987	0.977	0.977
Bank FE	YES	NO	YES	YES	NO	YES	YES	NO	YES	
Quarter FE	YES	NO	YES	YES	NO	YES	YES	NO	YES	
Bank-cohort FE	NO	YES	NO	NO	YES	NO	NO	YES	NO	
Quarter-cohort FE	NO	YES	NO	NO	YES	NO	NO	YES	NO	

Notes. This table reports the coefficients and standard errors clustered at the state level (in parentheses) obtained using equation 2, documenting the effect of introducing pay transparency laws on salaries and employment in the banking sector. The dependent variable is average salary expenses (Columns 1-3), salary expenses (Column 4-6), and the number of full time employees (Column 7-9). The main explanatory variable is an interaction term between the variable *State* (equal to 1 for banks headquartered and operating only in states adopting the pay transparency law, and zero otherwise) and *Law* (equal to 1 for quarters following the adoption of the pay transparency law, and zero otherwise). ***, **, and * indicate significance at the 1 percent, 5 percent, and 10 percent statistical level, respectively.

Table 8. The effect of transparency laws on bank loans defaults

Dependent variable Specification	Standard <i>DID</i> (1)	LOAN DEFAULTS		
		<i>Gormley-Matsa</i> <i>Stack DID</i> (2)	<i>Sun-Abraham</i> <i>IW Estimator</i> (3)	
State*Law	0.051*** (0.015)	0.030** (0.014)		
Dynamic Post-Treatment Estimates				
<i>t</i> = 0			0.025 (0.022)	
<i>t</i> = 1			0.006 (0.005)	
<i>t</i> = 2			0.010 (0.008)	
<i>t</i> = 3			0.033* (0.018)	
<i>t</i> = 4			0.010 (0.013)	
<i>t</i> = 5			0.028*** (0.008)	
<i>t</i> = 6			0.073*** (0.010)	
<i>t</i> = 7			0.052*** (0.011)	
<i>t</i> = 8			0.102*** (0.016)	
<i>t</i> = 9			0.077*** (0.025)	
Observations	140,007	435,656	140,007	
R-squared	0.502	0.590	0.502	
Bank FE	YES	NO	YES	
Quarter FE	YES	NO	YES	
Bank-cohort FE	NO	YES	NO	
Quarter-cohort FE	NO	YES	NO	

Notes. This table reports the coefficients and standard errors clustered at the state level (in parentheses) obtained using equation 2, documenting the effect of introducing pay transparency laws on the quality of banks' loan portfolio. The dependent variable is the ratio of loans past due 90+ days to total loans, measure of loan defaults. The main explanatory variable is an interaction term between the variable *State* (equal to 1 for banks headquartered and operating only in states adopting the pay transparency law, and zero otherwise) and *Law* (equal to 1 for quarters following the adoption of the pay transparency law, and zero otherwise). ***, **, and * indicate significance at the 1 percent, 5 percent, and 10 percent statistical level, respectively.

Table 9. The effect of transparency laws on bank earnings opacity

Dependent variable	EARNINGS OPACITY		
	Standard DID (1)	Gormley-Matsa Stack DID (2)	Sun-Abraham IW Estimator (3)
State*Law	0.173*** (0.048)	0.183*** (0.048)	
Dynamic Post-Treatment Estimates			
$t = 0$			0.188*** (0.054)
$t = 1$			0.159** (0.076)
$t = 2$			0.116 (0.073)
$t = 3$			0.238*** (0.058)
$t = 4$			0.072 (0.059)
$t = 5$			0.325*** (0.055)
$t = 6$			0.194** (0.084)
$t = 7$			0.381*** (0.063)
Observations	124,665	346,479	124,665
R-squared	0.262	0.324	0.263
Bank FE	YES	NO	YES
Quarter FE	YES	NO	YES
Bank-cohort FE	NO	YES	NO
Quarter-cohort FE	NO	YES	NO

Notes. This table reports the coefficients and standard errors clustered at the state level (in parentheses) obtained using equation 2, documenting the effect of introducing pay transparency laws on salaries and employment in the banking sector. The dependent variable is the earnings opacity measure. The main explanatory variable is an interaction term between the variable *State* (equal to 1 for banks headquartered and operating only in states adopting the pay transparency law, and zero otherwise) and *Law* (equal to 1 for quarters following the adoption of the pay transparency law, and zero otherwise). ***, **, and * indicate significance at the 1 percent, 5 percent, and 10 percent statistical level, respectively.

Table 10. Pay transparency, bank loan defaults, and earnings opacity – Mechanism and additional results

Dependent variable	LOAN DEFAULTS		EARNINGS OPACITY	
	Standard Specification DID (1)	Gormley-Matsa Stack DID (2)	Standard DID (3)	Gormley-Matsa Stack DID (4)
PANEL A: BANK EMPLOYEE MOBILITY				
State*Law*IDD	-0.032 (0.032)	-0.047 (0.031)	-0.121 (0.119)	-0.186* (0.094)
State*Law	0.064*** (0.020)	0.048*** (0.013)	0.214*** (0.025)	0.252*** (0.065)
<i>State*Law+ State*Law*IDD</i>	0.033 (0.025)	0.001 (0.028)	0.093 (0.116)	0.066 (0.068)
Observations	140,007	435,656	124,665	346,479
R-squared	0.502	0.590	0.262	0.324
PANEL B: BANK EMPLOYEE QUALITY				
State*Law*Sanctions	-0.162 (0.106)	-0.070 (0.071)	-0.166 (0.288)	-0.014 (0.292)
State*Law	0.054*** (0.016)	0.031* (0.016)	0.176*** (0.044)	0.184*** (0.050)
<i>State*Law+State*Law*Sanctions</i>	-0.108 (0.103)	-0.039 (0.067)	0.010 (0.314)	0.169 (0.286)
Observations	140,007	435,656	124,665	346,479
R-squared	0.502	0.590	0.262	0.325
PANEL C: BANKS EMPLOYING LOAN OFFICERS				
State*Law*Advert	-0.079* (0.042)	-0.036*** (0.013)	-0.121 (0.141)	-0.118 (0.128)
State*Law	0.090*** (0.022)	0.046*** (0.010)	0.226*** (0.082)	0.250*** (0.076)
<i>State*Law+State*Law*Advert</i>	0.011 (0.026)	0.009 (0.017)	0.104 (0.082)	0.131* (0.076)
Observations	140,007	435,656	124,665	346,479
R-squared	0.502	0.590	0.265	0.327
PANEL D: BANKS EMPLOYING LOAN OFFICERS WITH PRIOR JOB EXPERIENCE				
State*Law* ExpAdvert	-0.111*** (0.034)	-0.070*** (0.019)	-0.090 (0.122)	-0.087 (0.119)
State*Law	0.104*** (0.020)	0.064*** (0.019)	0.205*** (0.066)	0.229*** (0.064)
<i>State*Law+State*Law* ExpAdvert</i>	-0.008 (0.027)	-0.006 (0.015)	0.115 (0.083)	0.142* (0.081)
Observations	140,007	435,656	124,665	346,479
R-squared	0.502	0.590	0.264	0.326

Notes. This table reports the coefficients and standard errors clustered at the state level (in parentheses) documenting the effect of introducing pay transparency laws on banks' asset portfolio quality. The dependent variable is the ratio of loans past due 90+ days to total loans, a measure of loan defaults. The main explanatory variables are an interaction term between the variable State (equal to 1 for banks headquartered and operating only in states adopting the pay transparency law, and zero otherwise) and Law (equal to 1 for quarters following the adoption of the pay transparency law, and zero otherwise), and triple interaction term between State, Law and *IDD* equal to 1 for banks operating in states with the Inevitable Disclosure Doctrine, and zero otherwise (Panel A); *Sanctions*, equal to 1 for banks repeatedly sanctioned with a regulatory enforcement actions between years 2011-2019, and zero otherwise (Panel B); *Advert* equal to 1 for banks advertising new loan officer positions during the sample period, zero otherwise (Panel C); and *ExpAdvert* equal to 1 for banks advertising new loan officer positions during the sample period requiring existing work experience in the role, zero otherwise (Panel D). ***, **, and * indicate significance at the 1 percent, 5 percent, and 10 percent statistical level, respectively.

Table 11. Pay transparency, bank loan defaults, and earnings opacity – Alternative explanations

Dependent variable	LOAN DEFAULTS		EARNINGS OPACITY	
	Standard <i>DID</i> (1)	<i>Gormley-Matsa</i> <i>Stack DID</i> (2)	Standard <i>DID</i> (3)	<i>Gormley-Matsa</i> <i>Stack DID</i> (4)
PANEL A: MERGER BANKS EXCLUDED				
State*Law	0.053*** (0.017)	0.032*** (0.011)	0.196*** (0.047)	0.214*** (0.029)
Observations	125,491	390,352	111,612	310,165
R-squared	0.505	0.594	0.263	0.326
PANEL B: FAILED BANKS EXCLUDED				
State*Law	0.051*** (0.016)	0.031** (0.015)	0.173*** (0.048)	0.184*** (0.048)
Observations	138,815	432,810	123,718	344,501
R-squared	0.503	0.592	0.261	0.324
PANEL C: COVID-19 LAW ADOPTION				
State*Law	0.060*** (0.019)	0.027 (0.019)	0.145** (0.067)	0.129** (0.050)
Observations	138,677	267,479	123,418	213,661
R-squared	0.511	0.582	0.263	0.338

Notes. This table reports the coefficients and standard errors clustered at the state level (in parentheses) obtained using equation 2, documenting the effect of introducing pay transparency laws on the quality of banks' loan portfolio. The dependent variable is the ratio of loans past due 90+ days to total loans, measure of loan defaults. The main explanatory variable is an interaction term between the variable *State* (equal to 1 for banks headquartered and operating only in states adopting the pay transparency law, and zero otherwise) and *Law* (equal to 1 for quarters following the adoption of the pay transparency law, and zero otherwise). In Panel A we replicate the results presented in Table 7 with banks engaged in mergers excluded, removing failed banks (Panel B), and excluding banks operating in states adopting pay transparency laws during Covid-19 pandemic (Panel C). ***, **, and * indicate significance at the 1 percent, 5 percent, and 10 percent statistical level, respectively.

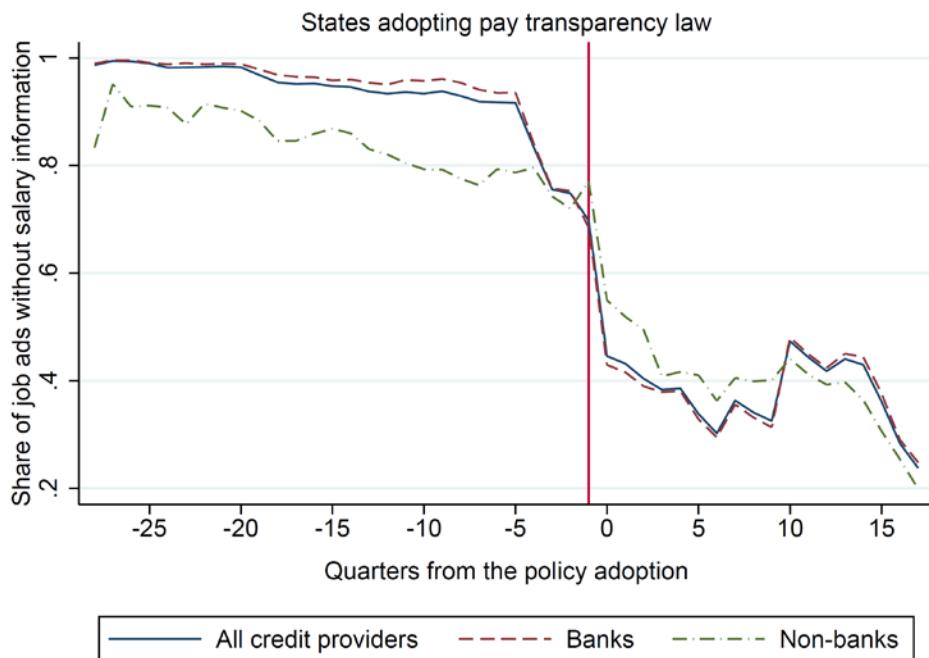
Table 12. Pay transparency and bank loan defaults – Sensitivity tests

Dependent variable	BANK LOAN DEFAULTS		BANK EARNINGS OPACITY	
Specification	Standard <i>DID</i> (1)	<i>Gormley-Matsa</i> <i>Stack DID</i> (2)	Standard <i>DID</i> (3)	<i>Gormley-Matsa</i> <i>Stack DID</i> (4)
PANEL A: JANUARY 2023 PAY TRANSPARENCY LAWS				
State*Law	0.073*** (0.014)	0.045*** (0.010)	0.221*** (0.018)	0.140*** (0.046)
Observations	133,213	71,289	118,628	58,889
R-squared	0.513	0.567	0.262	0.340
PANEL B: STATES ADOPTING LAWS IN CITIES EXCLUDED				
State*Law	0.060*** (0.015)	0.046*** (0.009)	0.173*** (0.058)	0.194*** (0.060)
Observations	130,801	351,756	116,502	279,888
R-squared	0.500	0.590	0.258	0.317
PANEL C: BANKS CHANGING STATE OF HEADQUARTER EXCLUDED				
State*Law	0.051*** (0.015)	0.030** (0.014)	0.173*** (0.047)	0.183*** (0.047)
Observations	139,606	434,367	124,349	345,614
R-squared	0.502	0.591	0.261	0.323
PANEL D: ONLY CONTIGUOUS STATES IN THE CONTROL GROUP				
State*Law	0.054** (0.022)	0.037** (0.015)	0.152** (0.058)	0.174*** (0.051)
Observations	42,570	124,670	37,852	99,097
R-squared	0.577	0.680	0.315	0.382
PANEL E: NO CONTIGUOUS STATES IN THE CONTROL GROUP				
State*Law	0.047*** (0.016)	0.026* (0.015)	0.177*** (0.048)	0.183*** (0.049)
Observations	108,554	335,818	96,740	267,290
R-squared	0.405	0.475	0.237	0.299
PANEL F: CROSS-STATE SPILLOVER EFFECTS				
State*Law	-0.007 (0.017)	-0.007 (0.018)	-0.009 (0.044)	-0.039 (0.035)
Observations	128,880	410,003	114,727	222,741
R-squared	0.517	0.562	0.259	0.315
PANEL G: STANDARD ERRORS CLUSTERED AT THE BANK LEVEL				
State*Law	0.051** (0.024)	0.030* (0.016)	0.173*** (0.036)	0.182*** (0.040)
Observations	140,007	435,626	124,665	346,470
R-squared	0.502	0.590	0.262	0.324
PANEL H: CONTROL GROUP BANKS MATCHED ON PRE-TREATMENT SIZE (4 MATCHES)				
State*Law	0.055** (0.022)	0.042** (0.018)	0.138** (0.052)	0.168*** (0.047)
Observations	42,832	125,287	38,222	100,070
R-squared	0.544	0.687	0.282	0.344
PANEL I: ADDITIONAL CONTROL VARIABLES INCLUDED				
State*Law	0.052*** (0.014)	0.034*** (0.013)	0.172*** (0.049)	0.179*** (0.049)
Observations	136,220	425,026	124,665	346,479
R-squared	0.510	0.597	0.262	0.325
PANEL J: BANK HOLDING COMPANY BANKS REMOVED				
State*Law	0.051*** (0.016)	0.029** (0.015)	0.199*** (0.053)	0.203*** (0.049)
Observations	121,212	378,191	108,179	364,782
R-squared	0.504	0.593	0.257	0.302

Notes. This table reports the coefficients and standard errors clustered at the state or bank level (in parentheses) obtained using equation 2, documenting the effect of introducing pay transparency laws on the quality of banks' loan portfolio. The dependent variable is the ratio of loans past due 90+ days to total loans, a measure of loan defaults. The main explanatory variable is an interaction term between the variable *State* (equal to 1 for banks headquartered and operating only in states adopting the pay transparency law, and zero otherwise) and *Law* (equal to 1 for quarters following the adoption of the pay transparency law, and zero otherwise). In Panel A we replicate the results presented in Table 7 with the treatment group including only banks headquartered and operating in states adopting the law in January 1, 2023, removing states which adopt pay transparency laws in cities and counties prior to adopting the law at the state level (Panel B), excluding banks changing the State of headquarter (Panel C), including in the control group only banks operating in states contiguous to states adopting pay transparency (Panel D), removing from the control group banks operating in contiguous states (Panel E), excluding states adopting the law and

assigning treatment to their neighbour states (PANEL F), with standard errors clustered at the bank level (Panel G). In Panel H, we match treatment and control group banks on their pre-treatment size, and in Panel I, we saturate our baseline specifications with state macroeconomic indicators (GDP growth, unemployment rate, real estate price index) and proxy for bank size (log of total assets). In Panel J, we exclude institutions which are part of the bank holding companies. ***, **, and * indicate significance at the 1 percent, 5 percent, and 10 percent statistical level, respectively.

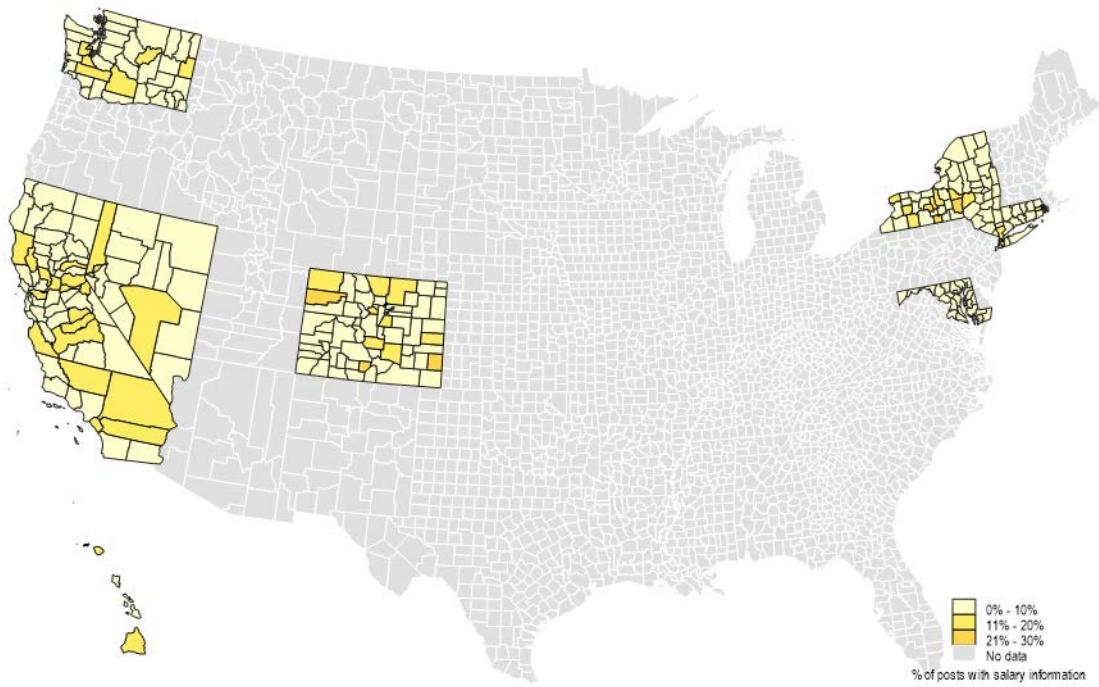
Figure 1. Salary information in job postings



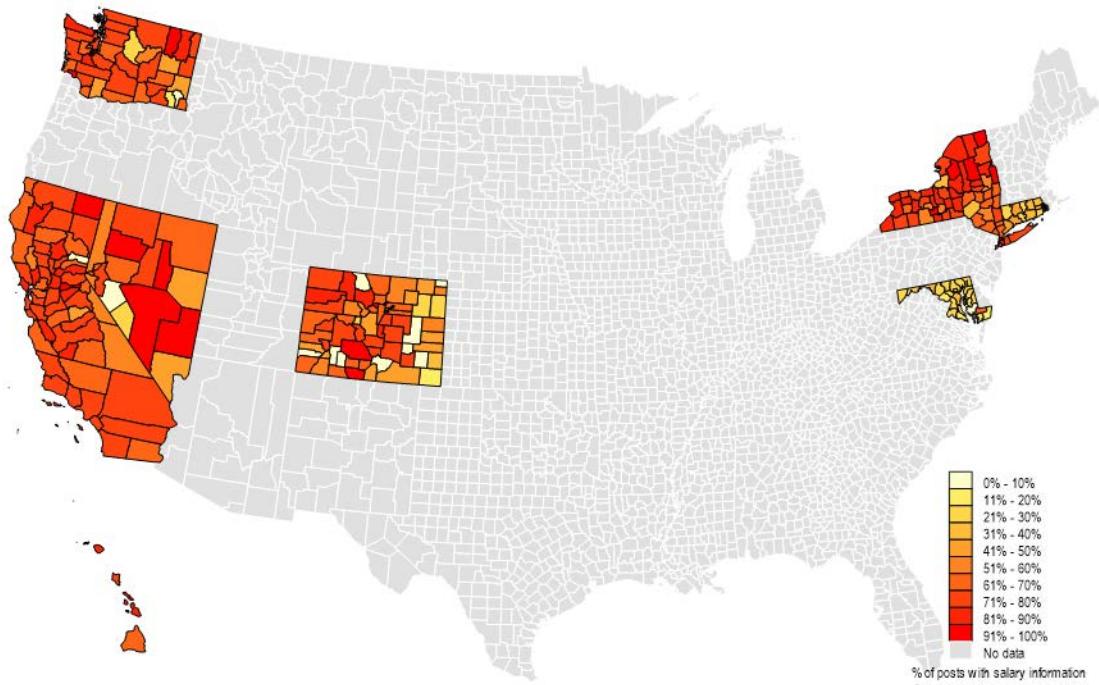
Notes. This figure presents the evolution in the share of job postings not disclosing salary information for all credit providers (solid line), banks (dashed line) and non-banks (dashed dotted line).

Figure 2. The effect of transparency laws on the geographical coverage of job adverts including salary information

Panel A: Pre-treatment period

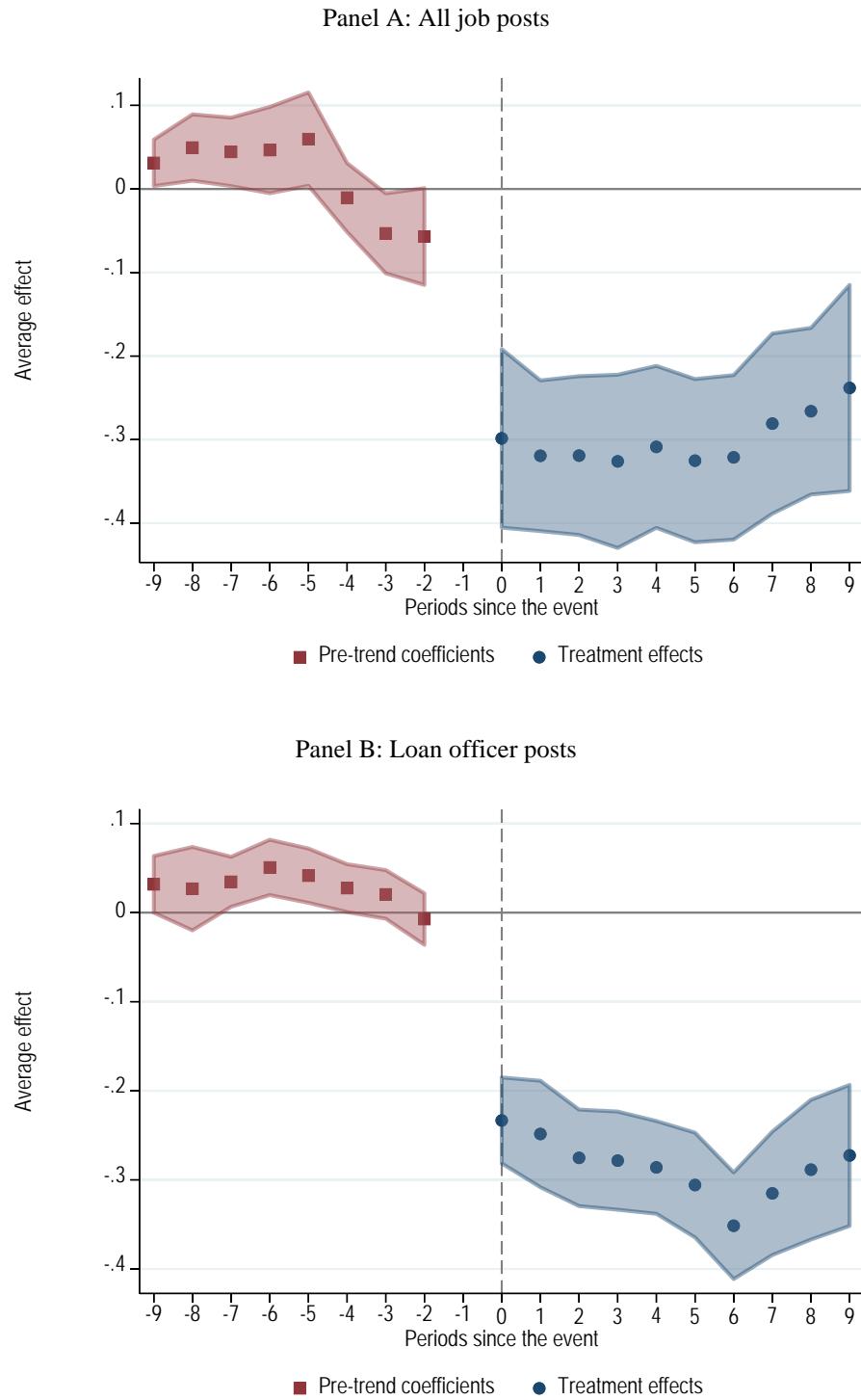


Panel B: Post-treatment period



Notes. This figure presents the share of adverts with salary information across counties of states implementing pay transparency laws.

Figure 3. The effect of transparency laws on salary disclosure in job adverts – Dynamic effects



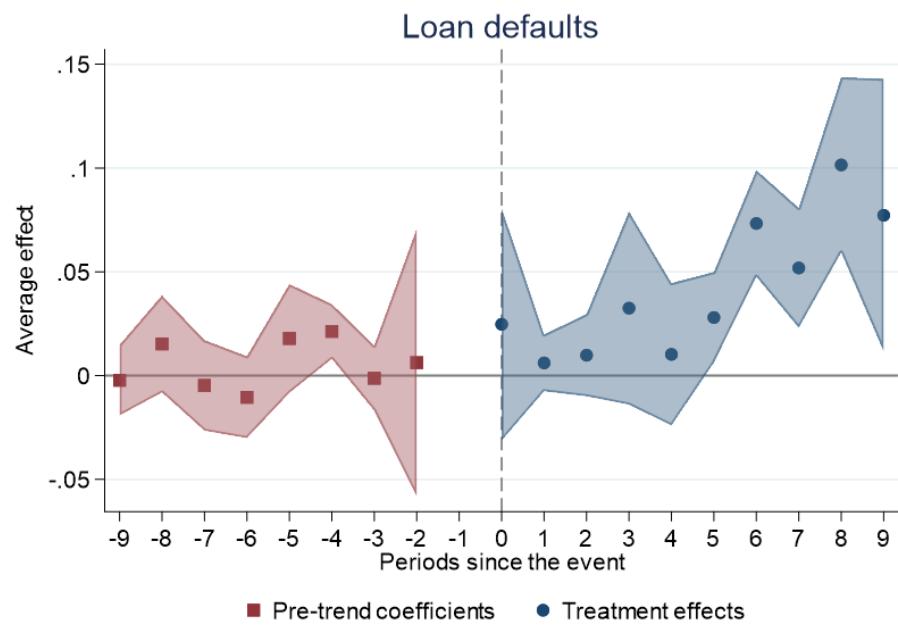
Notes. This figure presents the dynamic effects of pay transparency laws on salary disclosure in job adverts using Sun and Abraham (2021) IW estimator. The dependent variable is a dummy variable equal to 1 for job posts excluding salary information, and zero otherwise.

Figure 4. The effect of transparency laws on average salary, salary and employment – Dynamic effects



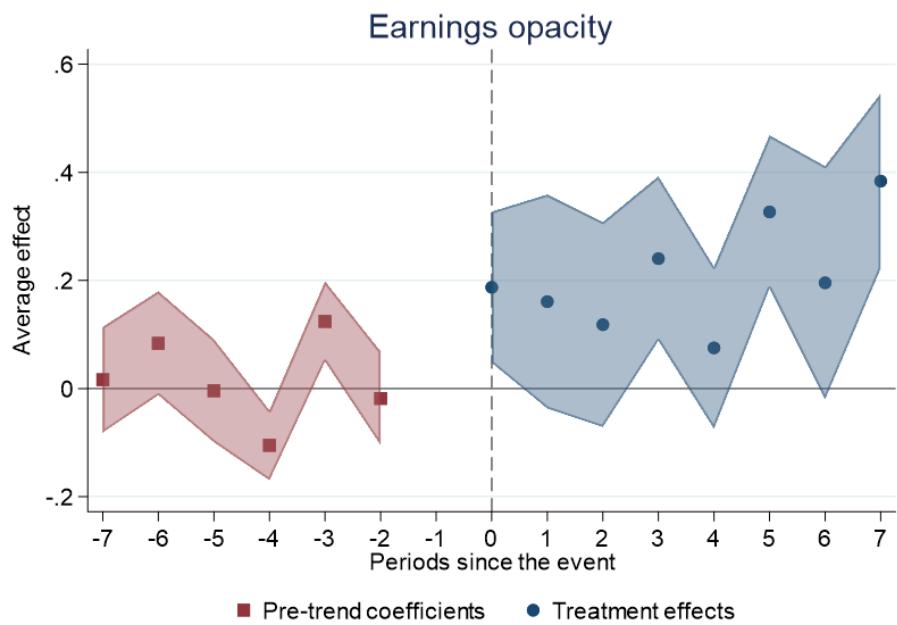
Notes. This figure presents the dynamic effects of pay transparency laws on banks' average salary, salary expenses, and employment obtained using Sun and Abraham (2021) IW estimator.

Figure 5. The effect of transparency laws on bank loan defaults – Dynamic effects



Notes. This figure presents the dynamic effects of pay transparency laws on banks' loan defaults obtained using Sun and Abraham (2021) IW estimator.

Figure 6. The effect of transparency laws on bank earnings opacity – Dynamic effects



Notes. This figure presents the dynamic effects of pay transparency laws on banks' earnings opacity obtained using Sun and Abraham (2021) IW estimator.