The Incidence of Bank Regulations and Taxes on Wages: Evidence from US States

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Abstract

Banks and the financial sector have come under increased scrutiny since the 2008 financial crisis. Regulations concerning the banking sector have been re-written and there have been calls for increased taxation of banks (as companies) and the remuneration of bankers. In general, two sorts of taxes are commonly mentioned, taxes on the profits of banks and taxes on bank wages. As the corporate tax may be borne by labor, a natural question to ask is whether the economic incidence of these taxes really differs. The cost of regulations can also be passed on, but public finance economists typically ignore the incidence of regulations, a potentially important source of influence for banks. This paper focusses on two questions. First, we ask whether there is an earnings premium in the financial sector. Second, we examine the issue of tax and regulatory incidence by estimating the degree to which banking regulations and company taxes on banks influence wages in the banking sector. We use individual data on wages combined with data from US states on the states' tax rates and timing of regulatory changes applied to financial corporations. We find (i) a raw 45% earnings premium in the financial sector; (ii) a negative effect of corporate tax on wages in the manufacturing sector but a positive or no effect on wages in the banking sector, and (iii) lower wages in the banking sector in states that de-regulated earlier. The tax incidence result is somewhat surprising though it is consistent with Huizinga, Voget, and Wagner (2011), who find that home country corporate income taxation of foreign-source bank income is almost fully passed through to higher interest margins charged abroad. The result may have to do with specifics of the banking industry such as market power, labor mobility, or inelastic demand and elastic supply of banking services.

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I. Introduction

Banks and the financial sector have come under increased scrutiny since the 2008 financial crisis. Regulations concerning the banking sector have been re-written and there have been calls for increased taxation of banks (as companies) and the remuneration of bankers. The 2010 IMF Report to the G-20 provides an excellent summary of the many different sorts of taxes on banks have been either proposed or enacted. While the IMF Report evaluates bank taxes as a means to correct for externalities and other issues in light of the financial crisis, it is also instructive in summarizing the types of taxes on banks that have been discussed. In general, two sorts of taxes are commonly mentioned, taxes on the profits of banks and taxes on bank wages. As the corporate tax may be borne by labor, a natural question to ask is whether the economic incidence of these taxes really differs.

Recent taxes on bank wages have been focused on bonuses. Taxes on bank profits can take many forms including a general bank levy on assets or the corporate tax applied to the financial sector. The IMF recommendation, the Financial Activities Tax, combines a tax on bank profits and payments to labor. (As such it is equivalent to a VAT.) A Financial Transactions Tax (or Tobin Tax) is probably best viewed as a sales tax (possibly cascading) on financial services.

Most countries currently tax financial companies, along with other companies, as part of the corporate income tax. The revenue collected from the financial sector due to the corporate tax is substantial. The IMF reports that the UK collected 20.9% of total corporate income tax receipts from the financial sector during FY2006-08. In the US, the figure was 18.2% during FY 2006-07.

Some countries have also enacted sector-specific taxes on the banking sector, mainly directed at bonuses. Temporary taxes on bonuses have been enacted in the UK and France, for instance. The UK enacted a (temporary) 50% tax on bonuses above £25,000 in 2009 in the financial sector. The tax raised £3.46 billion. According to Price-Waterhouse-Coopers (2012), Italy, Greece and Ireland are the only European countries to have current taxes on bonuses in the financial sector.

Although public discussion has been directed at taxing bankers' remuneration and banks as companies, it is a well-known fact among economists that the statutory incidence of a tax usually differs from the economic incidence. For instance, a tax on banks as companies may be passed along to shareholders, labor or consumers of banking services. This raises the question of whether it matters (in terms of incidence) whether one taxes the remuneration of workers in the banking industry directly or whether a tax on bank profits will be passed through in the form of lower wages or other remuneration, a point on which there is little empirical evidence.

Moreover, public finance economists typically ignore the incidence of regulations, a potentially important source of influence for banks. Any examination of the banking industry should take care to consider its regulatory environment. It is well known that regulations (when thought of as quantity restrictions and in the absence of externalities or other market imperfections) generate excess burdens and losses in consumer and producer surplus in the same way as taxes, although the regulatory environment is often ignored by public finance economists. In contrast to the public finance literature, the banking literature typically ignores the tax side and sees regulations as a key to understanding the industry. Regulatory policy can also influence incidence since it has a bearing on the elasticity of supply of banking services. Incidence in the banking sector likely involves both tax incidence and the incidence of regulatory policy.

This paper focusses on two questions. First, we ask whether there is an earnings premium in the financial sector. Second, we examine the issue of tax and regulatory incidence by estimating the degree to which banking regulations and company taxes on banks influence wages in the banking sector.

To do this, we examine data on wages gathered at the individual level from the Integrated Public Use Microdata Series (IPUMS). The US part of this database consists of more than fifty high-precision samples of the American population drawn from fifteen federal censuses and from the American Community Surveys of 2000-2010. Our wage data correspond to the American Community Survey for 2003. Using this data we are also able to control for a number of individual level variables known to affect wages, such as age, sex, education level, and race. We are also able to identify the industry of the worker and the state in which they reside.

We combine this information on individuals and industries with information on US states. Most U.S. states tax banks as part of the corporate income tax. It should be noted that the rules applying to banks with respect to the corporate income tax base can differ from those applying to other companies. This is due to the nature of the financial business – profits are generated by the difference between interest paid and interest received, and losses on bad loans are a normal part of doing business. Nevertheless, the specifics with respect to banks differ across countries, as detailed in Price-Waterhouse-Coopers (2012), and in some countries there is little difference between the tax as apples to banks and other corporations. In the US, there is no difference between banks and other companies with respect to thin-capitalization rules, while in the UK and Switzerland such rules are applied differently for banks and in other countries such as France, Greece, and Spain, banks are exempted from thin-capitalization rules. For the US, the

main difference for the banking sector is that there is an allowance for reserves for loan losses; this allowance is accompanied by specific rules to limit potential abuse.

As noted in Section III, the tax base applied to banks differs across US States. When the tax base for US states is accounting profit, States usually start with a bank tax base that closely follows the taxable income that the taxpayer is required to report to the US Treasury for federal corporate tax purposes, but the tax rate differs across states. The top marginal rate on banks is often, but not always, the same as the top corporate tax rate in a state. We will exploit differences in bank tax rates across states as well as any differences between the corporate tax rate and bank tax rate within a state. In addition, banking regulations, and their differences across states, will be exploited in what follows.

With respect to a financial sector earnings premium our results suggest a raw 45% premium in the financial sector. With respect to incidence, our main findings are that the corporate tax negatively affects wages in the manufacturing sector, while the company tax on banks has either positive or no effect on wages in the banking sector. This latter result is somewhat surprising though it is consistent with Huizinga, Voget, and Wagner (2011), who find that home country corporate income taxation of foreign-source bank income is almost fully passed through to higher interest margins charged abroad. The result may have to do with specifics of the banking industry such as market power, labor mobility, or more traditional elasticity concerns. The timing of U.S. state bank deregulation is found to have important effects on current wages in the banking sector. Wages in the banking sector are lower in states that de-regulated earlier. This might be due to a more elastic supply of banking services and capital in de-regulated states or less market power in a more competitive environment.

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The paper is organized as follows. The next section offers a short literature review concentrating on incidence. The third section briefly discusses the origins and history of US State bank taxation and regulation. The fourth section describes our data and offers several tables describing the banking sector differences across US States. The fifth section presents our data with respect to the question of the wage premium in the financial sector. The sixth section offers a regression analysis of incidence in the banking sector using cross-state variation. The final section concludes.

II. Literature Review

The incidence of taxation is a fundamental part of the study of public finance. Who bears the burden of a tax boils down to a question of elasticities – those economic agents that are more able to avoid a tax end up bearing less of the burden than economic agents that cannot so easily avoid the tax. In spite of this simple proposition, the empirical identification of the incidence of a tax can be complex. Probably none is more complex than the incidence of the corporate tax, on which there is little agreement.

The standard theoretical analysis of the incidence of company taxes begins with the general equilibrium model of Harberger (1962). The model posits a perfectly competitive economy with a taxed corporate sector and an untaxed non-corporate sector, and with factors of production moving freely between the two sectors. There is some question about whether Harberger's formulation is the appropriate framework for thinking about the incidence of a tax on banks. This is because banks are financial intermediaries, not really producers of final products. Nevertheless, the banking services that the financial sector provides will be affected in much the same way as in Harberger's analysis and factors of production used in producing

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banking services will also be affected in the same fundamental way. It thus seems appropriate to begin to think about the incidence of a corporate tax in the banking sector by working through the lessons of Harberger's analysis as applied to banks.

Following Harberger, a tax on the banking sector will cause two sorts of reactions, dubbed the output and factor-substitution effects by Miezskowski (1967). First, to the extent that the demand for banking services is not perfectly elastic, a tax on banks will increase the price of banking services paid by consumers. The amount by which the price of banking services increases and the quantity of banking services falls depends on the elasticity of demand for (and supply of) banking services. If demand is completely inelastic, consumers of banking services will bear the entire burden of the tax, and neither capital nor labor in the banking sector bears any of the burden.

In the less extreme case, the higher price of banking services leads to a fall in the equilibrium quantity. As less banking services are provided in the economy, factors that produce banking services will be less in demand and will cease to be employed in the banking sector. As the model is one of full-employment, these factors must be absorbed in the other sectors of the economy. If the banking sector is capital intensive relative to the rest of the economy, large amounts of capital relative to labor must be employed in other sectors. This leads to a relatively large fall in the return to capital.

The second reaction caused by the tax on the banking sector is dubbed the factor substitution effect. To the extent that labor and capital are substitutes, the fact that capital is now more expensive results in a substitution of labor for capital employed in the banking sector. As

capital leaves and is re-employed where it is valued less, the economy-wide return to capital falls.

In an open economy, factors that are more mobile will have a greater elasticity and factors that are more immobile a smaller elasticity. Consequently, immobile factors will tend to bear the burden of the tax in an open economy. Incidence in an open economy with tax competition is discussed in a number of relevant papers, such as Gordon (1986), Razin and Sadka (1991), Zodrow and Mieszkowski (1986) and Wilson (1986). As the above-mentioned papers indicate, tax competition in this framework will result in low tax rates on mobile factors and the incidence will fall on immobile factors. Taxes on capital will lead to capital flight and a reduction in the capital-labor ratio, which decreases productivity and hence wages in the long-run. It also follows that if capital is taxed more heavily in one sector, as suggested in Mieskowski and Zodrow (1985), the marginal product of labor and wages could rise in the less heavily taxed sector.

In sum, labor will tend to bear less of the burden of a tax on banks (i) the more inelastic is the demand for banking services, (ii) the more capital-intensive is the banking sector relative to the rest of the economy, (iii) the easier it is to substitute labor for capital in the financial sector, and (iv) the more mobile is labor relative to capital in the banking sector.

The elasticity of supply (as well as demand) of banking services affects the incidence of a tax on banks. Differing regulatory environments across states is likely to affect the elasticity of supply of banking services. States that deregulated early would likely experience a more elastic supply of banking services, making it more likely for any tax to be passed on to labor in those states. In fact, the banking literature has established strong links between US state regulatory

environments and economic growth (Jayaratne and Strahan, 1996). In addition, the existence of financial centers such as London and New York suggest that agglomeration economies are not insignificant. We try to account for such factors in our empirical analysis.

Standard tax incidence models all rely on the assumption of perfectly competitive markets. It might be that the financial sector is not perfectly competitive which opens up the possibility of economic rents being earned in the financial sector. In fact, Philippon and Reshef (2009) find evidence of economic rents in the financial sector that can explain a wage premium of up to 50% in that sector. Egger, von Ehrlich and Radulescu (2012) examine the earnings premiums of executives and find a premium of 43% in the financial sector.

An initial examination of our wage data complements these studies on earnings premiums. Our data looks at the wage component of all employees, unlike Egger, von Ehrlich, and Radulescu (2012). Our data is also at the individual level, unlike Philippon and Reshef. Our results show a wage premium of a similar magnitude. We find a raw 45% premium in the financial sector, without correcting for differences in human capital or other factors that influence relative wages.

Our regression analysis will focus on the impact of corporate taxes in the banking sector. Some recent papers, surveyed by Gentry (2007), have attempted to estimate the degree to which corporate taxes are borne by labor, including Desai, Foley, and Hines (2007), Felix (2007), Felix and Hines (2009), Arulampalam, Devereux, and Mafinni (2010), and Altshuler and Liu (2011). These papers have generally found that corporate taxes lower wages, indicating that corporate taxes are partially borne by labor (Desai, Foley, and Hines estimate labor bears about 60% of the

corporate tax). We follow the general empirical approach of these papers, but we concentrate on differences in the incidence of company taxes in the banking sector.

A number of general equilibrium papers using an open-economy version of the Harberger model have attempted to measure the burden of the corporate income tax in an open economy environment. Among these are Randolph (2006) and Gravelle and Smetters (2006). Randolph finds that labor bears about 70 percent of the burden, while Gravelle and Smetters find a much lower proportion borne by labor.

III. US State Taxation and Regulation of Banks

Historically, banks in US States have been subject to unique tax regimes. Sylla, Legler, and Wallis (1987) indicate that taxation of banks by the states became an important revenue source when passage of the US Constitution forbade import and export taxes and state issuance of currency. Rather than create money themselves, states turned to chartering banks which could create money. States created revenue by investing in banks (buying shares) and by taxing banks. As stakeholders, states had incentives to increase bank rents, and often did so by placing geographical restrictions on banks. For instance, as noted in Kroszner and Strayhan (1999), states gained no revenue from out of state banks and hence prohibited out of state banks from operating in their territory.

McCray (1987) discusses some of the important legislative history. In its landmark 1819 McCulloch v. Maryland decision, the U.S. Supreme Court limited state taxes on national banks to taxes on real property or the value of banks shares unless authorized by Congress; states also applied this to state-chartered banks. Congress explicitly granted taxation of real property and the value of bank shares in The National Bank Act of 1864, and also limited the maximum tax on

banks. In 1923 and 1926, Congress amended the National Bank Act to allow taxation of national banks with headquarters in a State (and by extension to home-state-chartered banks) on income in one of three ways: (1) by including bank share dividends in the taxable income of a shareholder, (2) by imposing a net income tax, and (3) by levying a franchise tax according to or measured by net income.

In 1976 Congress removed all restrictions on state bank taxation (other than discrimination), but many states continue to apply a unique tax on banks. States mainly tax the financial sector as part of the state corporate income tax, but often separate out the financial sector with a franchise tax. The franchise tax uses as a base either corporate income or intangible assets (shares). When corporate income is used as the base, the tax is effectively the corporate income tax even though it is called a franchise tax. According to Fox and Black (1994), franchise taxes are popular because the income from U.S. government securities only can be included in the tax base if the tax is structured as a franchise tax. In addition, some states such as Texas constitutionally prohibit taxing income but not a franchise. Table 1 lists the corporate tax rate on banks as well as state franchise tax rates, and any share tax on banks for 1993 and 2007. Some franchise tax states use corporate income as the base, and when this base is used the bank corporate tax rate column of Table 1 is zero. A significant number of states use a different tax base with the franchise tax, however, such as assets, deposits, or gross receipts. These are recognizable by the significantly lower rate than states that use the corporate income base, and an attempt is made to identify the base in Table 1. Most states appear to have eliminated any tax on shares, with Pennsylvania being the exception.

The corporate tax rate on banks often mirrors the non-bank corporate tax, but not always. The states for which the financial corporate tax rate is above or below the non-bank rate in 2007

are indicated in Table 1 with asterisks, one if above and two if below. For instance, the non-bank corporate tax in Massachusetts is 9.5% while the financial corporate tax is 10.5%; the rationale given is that it is supposed to compensate for exemption from personal property and net worth taxes. Besides Massachusetts, states with higher corporate rates on banks for 2007 are California, Hawaii, and Missouri. As with the non-bank corporate tax, and as noted by Tannenwald (2000) states currently use formula apportionment for banks, so the tax is based on the proportion of in-state to total property, payroll, and sales (with weights sometimes differing between states).

IV. Data

The data that we use combines individual level data on wages and individual characteristics from IPUMS (Integrated Public Use Micro-data Series) for 2003 with state data on tax rates, regulatory environments, and agglomeration effects. The large literature on wage determination in labor economics has established strong connections between earnings and human capital, race, age, and sex. We therefore use these as control variables. We also use IPUMS information on the state of residence and industry. Our tax variables are the top statutory bank and non-bank corporate rates, taken from the Tax Foundation.

The IPUMS database compiles a consistent record of individuals. It includes individual characteristics as well as employment information. To compute our wage information, we use three variables: usual hours worked per week in the last 12 months, weeks worked in the last 12 months, and annual income in the last 12 months. Multiplying the first two pieces of data gives total hours worked in the last 12 months, and then dividing annual wage and salary income by total hours gives our measure of the wage rate. The annual income measure reports each individual's total pre-tax wage and salary income for the past 12 months. Sources of income

include wages, salaries, commissions, cash bonuses, tips, and other money income received from an employer. Payments-in-kind or reimbursements for business expenses are not included. The weeks worked variable reports the number of weeks that the individual worked for profit, pay, or as an unpaid family worker during the previous 12 months. The usual hours worked per week reports the number of hours per week that the individual usually worked during the previous 12 months if the person worked. Since the data includes unpaid family workers, there are some individuals who end up with a tiny wage rate using our calculation. To adjust for this, we eliminate individuals with a calculated wage less than five dollars since the minimum wage in 2003 was $5.15.

For industry classification, we use the IPUMS industry variable that mirrors the Census Bureau's 1990 classification system; it tells us the industry in which each individual worked. In some of the regression specifications we aggregate industries while in other specifications we use the full set of 3-digit industries. Each observation also has a state of residence indicator as well as race, sex, educational attainment, and age. Our sample year is 2003 and we eliminate people who did not work and those who had zero income in addition to those with a calculated wage below five dollars as mentioned above. Our final sample size is 522, 934 individual observations.

We supplement this dataset with information on states. This state data includes the top marginal tax rates on corporations, banks, individuals and retail sales. We also construct two state-level dummy variables. One is for states with right-to-work laws to reflect differences in wages due to different laws on union membership; the other is for states that de-regulated their banking sector relatively early.

To construct the state dummy with respect to the timing of bank de-regulation, we rely on Jayaratne and Strahan (1996, p. 641) and Kroszner and Strahan (1999). A first way that states began to deregulate banking was to permit intrastate branching. Table 2 lists three categories of states with respect to the timing of their banking deregulation: those that permitted intrastate banking prior to 1972, those that deregulated in this way after 1972, and those who continue to disallow intrastate branching. Among those that deregulated early are States that are well known for friendly banking environments such as Delaware and South Dakota.

Another important factor is the factor-intensity of the banking sector. The above literature review discussing the Harberger model of incidence notes that, generally speaking, labor will bear less of the burden of capital taxes the less labor-intense is that sector. Table 3 indicates the labor intensity by industry of the US economy in 2002. The figures are computed using the IRS Statistics of Income (SOI) data from tax returns of US companies and divide wages and salaries by total assets. By this measure the finance and insurance sector is less labor intensive (more capital intensive) than the average of the economy. This alone suggests that labor will bear less of the corporate tax in the banking sector, as noted in the literature review.

Finally, to account for any agglomeration effects, we construct the proportion of a state's GDP that emanates from the banking sector. Table 4 lists the finance and insurance share of GDP for each state for 2003. The States with the four highest shares of finance and insurance in 2003 were Delaware, South Dakota, Connecticut, and New York in that order.

Summary statistics for the main variables used in the analysis are presented in Table 5. The correlation matrix is presented in Table 6.

V. The Wage Premium in the Financial Sector

We begin our analysis of the data by examining the wage premium of the financial sector. It is useful to first note that the annual income data includes wages, salaries, commissions, cash bonuses, tips, and other money income received from an employer, but not payments-in-kind or reimbursements for business expenses. There is some top-coding at the high end of the annual income data. For the 2003 American Community Survey, values up to the 99.5th percentile within each state are actual values; higher values are the state means of all cases above these cutoffs.

Table 7 provides summary statistics on the computed wage, annual income, educational attainment, and age variables by aggregated industry. The average wage in the banking sector is computed as $32.44 for 30,469 observations while the overall average is $22.45 for 522,934 observations. With respect to the computed wage, the raw statistics indicate a wage premium in the banking sector of about 45 percent relative to wages for all industries. This could be partially economic rents but, of course, could also be due to greater human capital or experience in the financial sector. Indeed, the average level of educational attainment in the banking sector is greater than for any other industry. The average level of educational attainment in the banking sector is a bit over 2 years of college, while it is a bit less than 1 year of college in manufacturing for instance. Experience in the banking sector, as measured by age, is slightly below the overall average across all industries.

VI. Regression Results

In this section we attempt to gauge whether and how much banking regulations and corporate taxes on the banking sector are reflected in wages in that sector. The exact empirical

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specifications vary, but the general idea is that we regress tax rates, a measure of bank

regulation, individual controls, state controls, and industry dummies on the log of wages:

$$
\begin{aligned}
\text{Log wage}_{ijs} = {} & \alpha_0 + \alpha_1 corptax_s + \alpha_2 banktax_s + \alpha_3 bankreg_s \\
& + \alpha_4 bankreg_s * D_{bank} + \alpha_5 banktax_s * D_{bank} \\
& + \sum \beta_m individual\_controls_{mi} \\
& + \sum \varphi_m other\_state\_controls_{ms} + \sum \gamma_m D_{mj} + u_{is}
\end{aligned}
$$

(1)

where the individual controls include variables suggested by the labor economics literature: age,

age squared, education level, race, and sex. Other state level controls are the sales tax rate and

the top personal income tax rate. In addition, US states differ with respect to unionization laws.

Some states require all workers to participate in unions once the union has been approved within

a company. Other states ("right to work" states) do not. Studies of the effect of unions on wages

find important differences across these types of states. We thus include a dummy for right-to-

work states following Felix and Hines (2009). For our main policy variables, we use the

corporate top marginal tax rate and the top marginal tax rate on banks. With respect to bank

regulation we use Jayaratne and Strahan's (1996, p. 641) description of states that deregulated

before 1972 and after 1972. Given the size of the lag, this measure seems likely to be

exogenous.

We are able to control for industry but we are unable to use state fixed effects for most of

our specifications since our policy variables of interest are state-level variables. (We do present

some state fixed effect regressions where we include only interactions of our policy variables.)

Since the underlying data are individual level data, this can lead to a downward bias in standard

errors (and hence unwarranted significance in coefficients). We can address the downward bias

problem by clustering the standard errors, which allows for an arbitrary correlation in the errors

of the cluster. We present results clustering by state, thereby allowing for arbitrary correlations of the errors within states.

The main empirical question is the degree to which bank regulations and company level taxes affect wages. We begin our analysis by looking at the effect of corporate taxes on wages in the manufacturing sector and comparing this to the effect of the financial corporate tax on wages in the banking sector. Columns 1 and 2 of Table 8 present the results. In column 1 of Table 8 we present regression results using only the data for the manufacturing sector. There is a clear and significant negative effect of the corporate tax on wages in the manufacturing sector. The estimated elasticity from column 1 is quite low, -0.06, which is even lower than the -0.14 result of Felix (2009). Column 2 of Table 8 presents the results when the sample is limited to just the banking sector. The results are strikingly different. The tax in the banking sector indicates a significant positive effect on wages in that sector. This is somewhat surprising and in marked contrast to the results with respect to the manufacturing sector.

The control variables of Table 8 all have the expected signs. Age increases wages, but at a decreasing rate. Females earn less, as do blacks, American Indians, and mixed race individuals. Greater educational attainment is associated with higher wages.

The control variable on right-to-work laws is negative and highly significant. Consistent with the literature on unions, this suggests that union wage premiums are diminished in these states. Another interesting difference between manufacturing and banking is with respect to the individual income tax. A higher individual income tax is found to lower wages in the banking sector but not in the manufacturing sector.

Columns 3 and 4 of Table 8 add variables representing the timing of bank regulations and agglomeration effects to the column 2 tax specification. To examine banking regulations, we add a dummy that reflects whether a state deregulated its banking sector before or after 1972. States that deregulated early on can be thought of as having banking sectors that are more elastic in supply. This would result in wages in the banking sector being reduced in these states relative to the banking industries in other states that did not de-regulate so soon. Agglomeration results from increased productivity due to a lot of similar firms located near each other, which would increase wages other things equal. Our measure of agglomeration in the banking sector is the share of state GDP that comes from banking.

The results with respect to the timing of bank regulations suggest a negative impact of early deregulation on wages in banking, but the coefficient is insignificant. The coefficient on agglomeration is positive and significant in Column 3 of Table 8, but becomes insignificant in Column 4 when interacted with the corporate tax in the banking sector.

Table 9 presents results that are similar to Column 2 of Table 8, but uses the entire sample and controls for industry with dummy variables. Column 1 of Table 9 uses no industry dummies, column 2 adds aggregate industry dummies, column 3 adds interactions of industry dummies and the tax variables, and column 4 uses fixed effects, dropping state-level variables but keeping their industry interactions. The coefficients on the tax terms remain strongly significant across all specifications. The interaction of the bank tax with the banking dummy is significant in the third and fourth columns, while the interaction of the manufacturing dummy and the corporate tax is insignificant. When state fixed effects are include in the final column (and all state variables dropped), the significance of the interactions of the tax and regulatory

variables are consistent with the previous columns, giving some confidence that the results in the previous columns are not due to state differences.

The other control variables in Table 9 maintain their sign and significance. Age and educational attainment increase wages. Females, blacks, and American Indians earn less. And right to work laws lower union wage premiums, resulting in lower wages in these states.

Table 10 presents results similar to Column 3 and 4 of Table 8 by adding controls for the timing of deregulation in the banking sector and agglomeration effects of the banking industry. Columns 1 and 2 of Table 10 present results for the deregulation variable, column 1 using aggregate industry dummies and column 2 disaggregated industry dummies. Columns 3 and 4 do the same with respect to the agglomeration variable, column 3 using aggregate industry dummies and column 4 disaggregated industry dummies. Column 5 of Table 10 adds fixed effects and uses interactions of tax, agglomeration and deregulation variables, but necessarily drops the non-interaction of these state-level variables.

The interaction of the dummy for early bank de-regulation with the banking sector dummy is negative but insignificant in both columns 1 and 2. However, when fixed state effects are added in column five, the interaction is highly significant. The magnitude is significant: a state that deregulated early has wages in the banking sector 8.4% lower than states that did not deregulate early. This suggests that deregulation in the banking sector, by making supply more elastic, decreases wages relative to regulated, less elastic states.

Columns 3 and 4 of Table 10 examine the impact of agglomeration on wages in the banking sector. The interaction of the agglomeration indicator with the banking sector dummy yields a positive but insignificant coefficient in columns 3 and 4. However, as with the

deregulation variable, when fixed state effects are added in column five, the interaction is highly significant. This suggests that agglomeration of banks increases wages in the banking sector.

V. Conclusion

Banks, regulation of banks, and the financial sector in general have come under increased scrutiny since the 2008 financial crisis. The 2010 IMF Report to the G-20 evaluates bank taxes as a means to correct for externalities and other issues in light of the financial crisis, and recommends the Financial Activities Tax which combines a tax on bank profits and payments to labor. (As such it is equivalent to a VAT.) The IMF recommendation thus combines two types of taxes that have been discussed, a on the profits of banks and a tax on bank wages. As the corporate tax may be borne by labor, a natural question to ask is whether the economic incidence of these two potentially separate taxes differs. Moreover, the cost of regulations can also be passed on, a potentially important factor in determining incidence in the banking sector.

The aims of this paper are empirical and two-fold. First, we ask whether there is an earnings premium in the financial sector. Second, we examine the issue of tax and regulatory incidence by estimating the degree to which banking regulations and company taxes on banks influence wages in the banking sector.

To shed light on these issues, we examine data on wages gathered at the individual level from the Integrated Public Use Microdata Series (IPUMS). Our wage data correspond to the American Community Survey for 2003. Using this data we are also able to control for a number of individual level variables known to affect wages, such as age, sex, education level, and race. We are also able to identify the industry of the worker and the state in which they reside. We

combine this information on individuals and industries with information on US states, such as the state tax rate on banks and the share of a state's GDP that emanates from the banking sector.

We find (i) a raw 45% earnings premium in the financial sector; (ii) a negative effect of corporate tax on wages in the manufacturing sector but a positive or no effect on wages in the banking sector, and (iii) lower wages in the banking sector in states that de-regulated earlier, and (iv) states with concentrations of financial sector activity have higher wages in that industry. The tax incidence result is somewhat surprising though it is consistent with Huizinga, Voget, and Wagner (2011), who find that home country corporate income taxation of foreign-source bank income is almost fully passed through to higher interest margins charged abroad. The result may have to do with specifics of the banking industry such as market power, labor mobility, or inelastic demand and elastic supply of banking services. Differentiating between these possible explanations is an interesting area for further research.

Table 1
US State Bank Taxes, 1993 and 2007 or recent

	1993			2007 or recent		
State	Financial Corporate income tax rate	Franchise tax rate	Share tax rate	Financial Corporate income tax rate	Franchise tax rate	Share tax rate
Alabama	0	6.5	1	0	6.5	0
Alaska	9.4	0	0	9.4	0	0
Arizona	9.3	0	0	6.968	0	0
Arkansas	6.5	0.27	0	6.5	0	0
California*	0	11.1	0	0	10.84	0
Colorado	5.1	0	0	4.63	0	0
Connecticut	0	11.5	0	7.5	0	0
Delaware	0	8.7	0	0	8.7-1.7	0
District of Columbia	0	10.25	0	9.975	0	0
Florida	0	5.5	0.15	5.5	0	0
Georgia	6	0.25	0	6	a	0
Hawaii*	0	11.7	0	7.92	b	0
Idaho	8	0	0	7.6	0	0
Illinois	7.3	0.25	0	7.3	0.25	0
Indiana	0	8.5	0.25	0	8.5	0
Iowa**	0	5	0	0	5	0
Kansas**	0	6.625	0	0	2.25	0
Kentucky**	0	0.001	0.95	0	1.1	0
Louisiana**	0	0	0	8	0.3	0
Maine**	0	1	0.14	0	1+.08(assets)	0
Maryland	0	7	0	7	0	0
Massachusetts*	0	12.54	0	10.5	0	0
Michigan	0	0	0	4.95	0	0
Minnesota	0	9.8	0	0	9.8	0
Mississippi	5	0.25	0	5	0.25	0
Missouri*	5	7	0.05	7	.03	0
Montana	0	7.329	0	0	6.75	0
Nebraska**	0	0.469	0	0	.00047(deposits)	0
Nevada	0	0	0	0	0	0
New Hampshire	8	1	0	8.5	0	0
New Jersey	0	9.375	0	9	0	0
New Mexico	7.6	0	0	7.6	0	0
New York	0	10.35	0	7.5	or .01 (AMT-assets)	0
North Carolina	7.9	0.003	0	6.9	.0015	0
North Dakota	0	7	0	0	7	0
Ohio**	0	1.5	0	0	1.3(net value of stock)	0
Oklahoma	6	0.125	0	6	0	0

Oregon	0	6.6	0	6.6	0	0
Pennsylvania**	0	0	1.25	0	0	1.25
Rhode Island	0	8	0	9	.0625(on deposits)	0
South Carolina**	0	4.5	0	0	4.5	0
South Dakota*	0	6	0	0	6	0
Tennessee	6	0.25	0	6.5	0.25	0
Texas	0	0.25	0	0	1	0
Utah	0	5	0	0	5	0
Vermont**	0	.00004	0	0	.0096(on deposits)	0
Virginia	0	1	0	0	1(on net worth)	0
Washington	0	0	0	0	.018(gross receipts)	0
West Virginia	9	0.75	0	8.75	0.55(on capital)	0
Wisconsin	0	8.3345	0	0	7.9	0
Wyoming	0	0	0	0	0	0

*2007 Financial corporate tax rate higher than corporate tax rate.

** 2007 Financial corporate tax rate lower than corporate tax rate.

a Georgia imposes a gross receipts tax known as the State Occupation Tax as well and financial institutions are additionally subject to personal property taxes, real property taxes, corporate net worth taxes, and corporate income taxes.

b Hawaii considered eliminating its franchise tax in in 2006 but it is unclear whether the corporate tax is currently considered a franchise tax.

Sources: Fox and Black (1994) for 1993; Tax Foundation for 2007 and individual State Bureau of Taxation websites as accessed in November 2012 to categorize franchise and share tax rates. If a search for "franchise tax" on a state's web site has no results the state is categorized as having a 0 rate.

Table 2
Timing of State Deregulation of Banking Sector (Intrastate Branching Permitted)

Deregulated Prior to 1972	Deregulated After 1972	Did not Deregulate
Alaska	Alabama	Iowa
Arizona	Arkansas	
California	Colorado	
Delaware	Connecticut	
District of Columbia	Florida	
Idaho	Georgia	
Maryland	Hawaii	
Nevada	Illinois	
North Carolina	Indiana	
Rhode Island	Kansas	
South Dakota	Kentucky	
Vermont	Louisiana	
	Maine	
	Massachusetts	
	Michigan	
	Minnesota	
	Mississippi	
	Missouri	
	Montana	
	Nebraska	
	New Hampshire	
	New Jersey	
	New Mexico	
	New York	
	North Dakota	
	Ohio	
	Oklahoma	
	Oregon	
	Pennsylvania	
	South Carolina	
	Tennessee	
	Texas	
	Utah	
	Virginia	
	Washington	
	West Virginia	
	Wisconsin	
	Wyoming	

Source: Jayaratne and Strahan (1996) and Kroszner and Strahan (1999).

Table 3
U.S. Labor Intensity by Industry, 2002

Industry	L/K ratio
All Industries	0.042
Agriculture, forestry, fishing, and hunting	0.081
Mining	0.019
Utilities	0.016
Construction	0.097
Manufacturing	0.042
Wholesale and retail trade	0.151
Transportation and warehousing	0.193
Information	0.048
Finance and insurance	0.012
Real estate and rental and leasing	0.059
Professional, scientific and technical services	0.272
Management of companies (holding companies)	0.010
Administrative and support and waste management and remediation services	0.181
Educational services	0.369
Health care and social assistance	0.540
Arts, entertainment, and recreation	0.162
Accommodation and food services	0.174
Other services	0.196

Source: Author calculation of (Wages and Salaries/ Total Assets) from SOI Returns of Active Corporations, Form 1120.

Table 4
Finance and Insurance Share of GDP by State, 2003

State	Share of GDP
Alabama	5.59
Alaska	4.30
Arizona	8.63
Arkansas	4.60
California	6.84
Colorado	7.13
Connecticut	15.33
Delaware	37.05
District of Columbia	5.48
Florida	6.80
Georgia	6.81
Hawaii	4.58
Idaho	4.45
Illinois	10.04
Indiana	6.36
Iowa	11.95
Kansas	6.64
Kentucky	5.18
Louisiana	4.12
Maine	6.91
Maryland	6.99
Massachusetts	10.66
Michigan	6.36
Minnesota	9.87
Mississippi	4.81
Missouri	6.50
Montana	5.39
Nebraska	8.81
Nevada	8.87
New Hampshire	8.39
New Jersey	7.77
New Mexico	3.65
New York	14.76
North Carolina	10.58
North Dakota	6.50
Ohio	8.18
Oklahoma	5.31
Oregon	5.70
Pennsylvania	7.75
Rhode Island	12.90

South Carolina	5.07
South Dakota	19.97
Tennessee	6.44
Texas	6.53
United States	8.16
Utah	10.03
Vermont	6.23
Virginia	7.57
Washington	5.86
West Virginia	4.30
Wisconsin	7.31
Wyoming	3.13

Table 5

Summary Statistics

Variable	Observations	Mean	Std. Dev.	Min	Max
age	522934	41.38025	13.56772	16	93
sex	522934	1.48479	0.499769	1	2
marital status	522934	2.703882	2.163499	1	6
race	522934	1.586835	1.600735	1	9
educ attainment	522934	7.396027	2.265519	0	11
log wage	522934	2.763637	0.672703	1.60944	11.3621
corporate tax rate	522934	6.630453	3.040776	0	12
bank tax rate	522934	5.535408	3.742748	0	10.84
sales tax rate	522934	5.25288	1.534957	0	7.25
individual tax rate	522934	5.382237	2.931602	0	11
right to work state	522934	0.398176	0.489523	0	1
bank deregulation	522934	0.233836	0.42327	0	1
banking share of GDP	522934	8.177581	4.063135	3.12811	37.05357

Source: Author Calculations.

Table 6

Correlation Matrix

	age	sex	marital status	race	educ attainment	wage	corporate tax rate	bank tax rate	sales tax rate	individual tax rate	right to work state	bank deregulation	banking share of GDP
age	1												
sex	-0.0017	1											
marital status	-0.3963	0.0353	1										
race	-0.0908	-0.0039	0.0478	1									
educ attainment	0.0763	0.043	-0.1107	-0.0851	1								
wage	0.0308	-0.0176	-0.0194	-0.0043	0.0425	1							
corporate tax rate	0.0098	0.0048	0.018	-0.0097	0.0226	0.0027	1						
bank tax rate	-0.0036	0.0024	0.0346	0.1005	0.042	0.0096	0.5587	1					
sales tax rate	-0.0062	-0.0068	0.0094	0.0706	-0.012	0.0032	-0.0511	0.0002	1				
individual tax rate	-0.0036	0.0008	0.0153	0.0492	0.0154	0.0036	0.6223	0.5171	-0.0887	1			
right to work state	0.001	-0.0022	-0.0372	-0.0456	-0.058	-0.0065	-0.3591	-0.2583	-0.0012	-0.3226	1		
bank deregulation	-0.0124	-0.0021	0.0284	0.1014	0.0036	0.0085	0.1414	0.3908	0.1263	0.3075	-0.0592	1	
banking share of GDP	0.0048	0.0069	0.0144	-0.0344	0.0315	0.005	0.1328	0.1435	-0.288	0.0447	-0.1507	0.154	1

Source: Author Calculation

Table 7

Calculated Wage, Annual Income, Age, and Education by Industry

	Variable	Observations	Mean	Std. dev.	Min.	Max.
All Industries						
	Wage	522934	22.44949	160.7975	5	86000
	Annual Income	522934	37001.65	40456.22	10	526000
	Age	522934	41.38025	13.56772	16	93
	Educ. Attainment	522934	7.396027	2.265519	0	11
Banking Industry						
	Wage	30469	32.44162	512.9819	5	86000
	Annual Income	30469	53349.38	61988.27	20	526000
	Age	30469	40.94125	12.41096	16	92
	Educ. Attainment	30469	8.07483	1.97368	0	11
Agriculture, Forestry, Fishing						
	Wage	9140	17.79564	149.9502	5	14000
	Annual Income	9140	25365.85	29867.06	20	445000
	Age	9140	39.60744	15.41938	16	92
	Educ. Attainment	9140	6.080744	2.560664	0	11
Mining						
	Wage	2798	26.81655	61.04231	5	1511.111
	Annual Income	2798	50364.28	36507.66	240	418000
	Age	2798	43.29664	11.51036	16	81
	Educ. Attainment	2798	6.61258	2.025052	0	11
Construction						
	Wage	34991	21.69404	87.59745	5	9000
	Annual Income	34991	36273.82	33848.46	10	526000
	Age	34991	39.95596	12.78829	16	92
	Educ. Attainment	34991	6.232517	1.961564	0	11
Manufacturing						
	Wage	76246	23.20919	93.29181	5	21250
	Annual Income	76246	43001.21	38731.44	10	526000
	Age	76246	42.95668	11.99424	16	93
	Educ. Attainment	76246	6.962765	2.223635	0	11
Transportation						
	Wage	32996	24.58184	95.06315	5	7500
	Annual Income	32996	42127.62	35471.87	50	526000
	Age	32996	42.95181	12.10735	16	93
	Educ. Attainment	32996	7.145715	1.932874	0	11
Utilities						
	Wage	7139	26.23421	122.7541	5	10000
	Annual Income	7139	48576.07	33500.85	10	445000
	Age	7139	44.13181	11.10299	16	92
	Educ. Attainment	7139	7.146239	1.944787	0	11

Wholesale and Retail Trade					
Wage	110342	17.33023	68.88434	5	10500
Annual Income	110342	27675.85	33405.41	10	526000
Age	110342	38.14906	14.94788	16	93
Educ. Attainment	110342	6.698546	1.952369	0	11
Real Estate					
Wage	7658	29.76143	142.2038	5	6166.667
Annual Income	7658	42621.65	52980.11	20	526000
Age	7658	46.00757	14.27575	16	92
Educ. Attainment	7658	7.453121	2.1431	0	11
Arts and Entertainment					
Wage	8331	17.16663	43.20642	5	2400
Annual Income	8331	23026.2	30748.76	20	445000
Age	8331	36.14176	15.8286	16	91
Educ. Attainment	8331	6.877086	2.081824	0	11
Health Care					
Wage	55647	23.59166	92.89728	5	17500
Annual Income	55647	39946.37	47319.56	10	526000
Age	55647	42.65511	12.52318	16	93
Educ. Attainment	55647	7.945532	2.114604	0	11
Other					
Wage	147177	23.03603	137.1407	5	40000
Annual Income	147177	35817.19	38594.13	10	526000
Age	147177	42.57716	13.62037	16	93
Educ. Attainment	147177	8.262942	2.349176	0	11

Source: Author's calculations.

Table 8
Effect of Taxes on Wages by Industry
(2003, standard errors clustered at state level)

Dependent variable: log of wage	(1) Manufacturing Sector Only	(2) Banking Sector Only	(3) Banking with Agglomeration and Deregulation Effects	(4) Banking with Tax Interactions
Corporate Tax	-0.00819*			
	(0.00408)			
Bank Tax		0.0209***	0.0198***	0.0101
		(0.00393)	(0.00455)	(0.00976)
Age	0.0462***	0.0658***	0.0659***	0.0658***
	(0.00140)	(0.00452)	(0.00450)	(0.00456)
Age squared	-0.000416***	-0.000633***	-0.000634***	-0.000632***
	(1.45e-05)	(5.46e-05)	(5.44e-05)	(5.50e-05)
Female	-0.244***	-0.353***	-0.351***	-0.350***
	(0.00710)	(0.0144)	(0.0146)	(0.0144)
Educ. Attainment	0.116***	0.115***	0.114***	0.114***
	(0.00384)	(0.00638)	(0.00599)	(0.00597)
Black	-0.100***	-0.120***	-0.122***	-0.127***
	(0.0226)	(0.0172)	(0.0176)	(0.0156)
Am Indian	-0.113***	-0.0752	-0.0546	-0.0577
	(0.0340)	(0.0799)	(0.0858)	(0.0865)
Chinese	0.102***	0.0369	0.0344	0.0323
	(0.0294)	(0.0518)	(0.0496)	(0.0492)
Japanese	0.181***	-0.171	-0.154	-0.149
	(0.0530)	(0.116)	(0.107)	(0.102)
Other Asian	-0.0383	-0.0790**	-0.0736**	-0.0761**
	(0.0252)	(0.0341)	(0.0351)	(0.0344)
Other race	-0.0851***	-0.0910***	-0.0895***	-0.0955***
	(0.0159)	(0.0311)	(0.0304)	(0.0286)
Two major races	-0.0541**	-0.116***	-0.107***	-0.108***
	(0.0258)	(0.0376)	(0.0358)	(0.0355)
Three+ major races	-0.00460	-0.0861	-0.0644	-0.0617
	(0.0827)	(0.0997)	(0.0937)	(0.0895)
Right to Work State	-0.105***	-0.119***	-0.105***	-0.0947***
	(0.0203)	(0.0339)	(0.0314)	(0.0345)
Individual Tax	0.00331	-0.0120**	-0.00945	-0.0112*
	(0.00573)	(0.00518)	(0.00565)	(0.00582)
Sales Tax	0.00789	0.00925	0.0206***	0.0201**
	(0.00948)	(0.00859)	(0.00750)	(0.00815)
Bank Dereg			-0.0212	-0.0727
			(0.0460)	(0.112)
Bank Dereg*Bank Tax				0.00833
				(0.0137)
Bank Share of GDP			0.00673*	-0.000523
			(0.00354)	(0.00901)
Bank Share* Bank Tax				0.00105
				(0.00108)
Constant	1.263***	1.059***	0.929***	0.999***
	(0.106)	(0.108)	(0.131)	(0.156)
Observations	76246	19724	19724	19724
R-squared	0.291	0.315	0.317	0.318

Robust standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

Table 9
Effect of Taxes on Wages with Industry Dummies
(2003, standard errors clustered at state level)

Dependent variable: log of wage	(1) No industry dummies	(2) Industry dummies	(3) Industry dummies and interaction	(4) State fixed effects
Corporate Tax	-0.00739***	-0.00804***	-0.00734***	
	(0.00263)	(0.00262)	(0.00271)	
Bank Tax	0.0130***	0.0135***	0.0131***	
	(0.00243)	(0.00246)	(0.00246)	
Age	0.0488***	0.0429***	0.0429***	0.0428***
	(0.00102)	(0.00107)	(0.00108)	(0.00105)
Age squared	-0.000454***	-0.000391***	-0.000392***	-0.000391***
	(1.08e-05)	(1.13e-05)	(1.13e-05)	(1.10e-05)
Female	-0.240***	-0.229***	-0.229***	-0.228***
	(0.00583)	(0.00509)	(0.00507)	(0.00507)
Educ. Attainment	0.103***	0.103***	0.103***	0.102***
	(0.00189)	(0.00168)	(0.00168)	(0.00179)
Black	-0.0570***	-0.0619***	-0.0623***	-0.0852***
	(0.0116)	(0.0117)	(0.0117)	(0.00989)
Am Indian	-0.0911***	-0.0867***	-0.0867***	-0.0687***
	(0.0232)	(0.0226)	(0.0225)	(0.0174)
Chinese	0.0396***	0.0426***	0.0425***	0.0132*
	(0.0120)	(0.0120)	(0.0120)	(0.00745)
Japanese	0.0118	0.0225	0.0228	0.0267
	(0.0370)	(0.0350)	(0.0349)	(0.0202)
Other Asian	-0.0258*	-0.0283*	-0.0282*	-0.0518***
	(0.0152)	(0.0162)	(0.0161)	(0.0126)
Other race	-0.0582***	-0.0562***	-0.0559***	-0.0828***
	(0.0114)	(0.0117)	(0.0117)	(0.00918)
Two major races	-0.0421***	-0.0389***	-0.0389***	-0.0450***
	(0.00927)	(0.00930)	(0.00926)	(0.00697)
Three+ major races	-0.0374	-0.0324	-0.0320	-0.0305
	(0.0298)	(0.0273)	(0.0273)	(0.0204)
Bank Tax*Bank			0.00643**	0.00512**
			(0.00266)	(0.00232)
Corp Tax*Manufacturing			-0.00407	-0.00407
			(0.00334)	(0.00323)
Right to Work State	-0.0990***	-0.0991***	-0.0985***	
	(0.0159)	(0.0161)	(0.0161)	
Individual Tax	-0.00513	-0.00503	-0.00508*	
	(0.00311)	(0.00300)	(0.00301)	
Sales Tax	0.00997*	0.00993*	0.00993*	
	(0.00524)	(0.00525)	(0.00524)	
Constant	1.196***	1.262***	1.259***	1.192***
	(0.0530)	(0.0552)	(0.0560)	(0.0360)
Observations	522934	522934	522934	522934
R-squared	0.257	0.274	0.275	0.283

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 10
Effect of Bank Regulations and Agglomeration on Wages
(2003, clustered at state level)

Dependent variable: log of wage	(1) Bank Deregulation with Aggregate Industry	(2) Bank Deregulation with Detailed industry	(3) Bank Agglomeration with Aggregate Industry	(4) Bank Agglomeration with Detailed industry	(5) Deregulation and Agglomeration – Fixed State and Industry Effects
Corporate Tax	-0.00642**	-0.00588**	-0.00749**	-0.00690***	
	(0.00254)	(0.00228)	(0.00282)	(0.00252)	
Bank Tax	0.0120***	0.0110***	0.0128***	0.0116***	
	(0.00267)	(0.00240)	(0.00251)	(0.00222)	
Age	0.0429***	0.0392***	0.0430***	0.0392***	0.0428***
	(0.00107)	(0.00102)	(0.00107)	(0.00102)	(0.000321)
Age squared	-0.000391***	-0.000349***	-0.000392***	-0.000349***	-0.000391***
	(1.13e-05)	(1.06e-05)	(1.12e-05)	(1.05e-05)	(3.68e-06)
Female	-0.229***	-0.204***	-0.229***	-0.204***	-0.228***
	(0.00509)	(0.00488)	(0.00510)	(0.00489)	(0.00169)
Educ. Attainment	0.103***	0.0932***	0.103***	0.0931***	0.102***
	(0.00169)	(0.00132)	(0.00167)	(0.00130)	(0.000381)
Black	-0.0624***	-0.0456***	-0.0626***	-0.0457***	-0.0852***
	(0.0115)	(0.0104)	(0.0116)	(0.0105)	(0.00303)
Am Indian	-0.0899***	-0.0760***	-0.0815***	-0.0678***	-0.0687***
	(0.0207)	(0.0206)	(0.0229)	(0.0228)	(0.00943)
Chinese	0.0400***	0.0164	0.0418***	0.0180*	0.0128
	(0.0112)	(0.0110)	(0.0114)	(0.0106)	(0.00838)
Japanese	0.0253	0.0225	0.0302	0.0276	0.0264**
	(0.0316)	(0.0250)	(0.0313)	(0.0244)	(0.0133)
Other Asian	-0.0299*	-0.0364**	-0.0267	-0.0333**	-0.0518***
	(0.0164)	(0.0162)	(0.0162)	(0.0161)	(0.00483)
Other race	-0.0585***	-0.0489***	-0.0566***	-0.0471***	-0.0830***
	(0.0116)	(0.0111)	(0.0113)	(0.0108)	(0.00444)
Two major races	-0.0394***	-0.0337***	-0.0357***	-0.0300***	-0.0447***
	(0.00855)	(0.00788)	(0.00885)	(0.00820)	(0.00730)
Three+ major races	-0.0290	-0.0178	-0.0246	-0.0132	-0.0303
	(0.0243)	(0.0245)	(0.0253)	(0.0254)	(0.0249)
Bank Tax*Bank	0.00615	0.00452	-0.00696	-0.00757	0.00464*
	(0.00397)	(0.00336)	(0.00919)	(0.00801)	(0.00238)
Corp Tax*Manufacturing	-0.00511	-0.00316	-0.00527	-0.00334	-0.00497***
	(0.00329)	(0.00264)	(0.00327)	(0.00266)	(0.000771)
Bank Tax*Bank*Dereg	0.00919	0.00905			0.00652**
	(0.00922)	(0.00856)			(0.00309)
Bank Dereg	0.0287	0.0265			
	(0.0235)	(0.0210)			
Bank Dereg*Bank	-0.104	-0.0898			-0.0840***
	(0.0625)	(0.0587)			(0.0267)
Right to Work State	-0.0956***	-0.0933***	-0.0908***	-0.0885***	
	(0.0165)	(0.0146)	(0.0167)	(0.0147)	
RTW State*Manuf	-0.0241	-0.0156	-0.0243	-0.0159	
	(0.0172)	(0.0137)	(0.0169)	(0.0136)	-0.0223***
Individual Tax	-0.00617**	-0.00537**	-0.00441	-0.00365	(0.00480)
	(0.00282)	(0.00261)	(0.00309)	(0.00291)	
Sales Tax	0.00871*	0.00793*	0.0126**	0.0118**	
	(0.00467)	(0.00420)	(0.00541)	(0.00499)	
Bank Share of GDP			0.00290	0.00297	

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	(1)	(2)	(3)	(4)	(5)
			(0.00217)	(0.00202)	
Bank Share*Bank			-0.00775	-0.00745	0.00638***
			(0.00645)	(0.00575)	(0.00246)
Share*Bank*BankTax			0.00157	0.00151	-7.61e-05
			(0.00110)	(0.000956)	(0.000300)
Constant	1.264***	1.262***	1.218***	1.217***	1.195***
	(0.0514)	(0.0483)	(0.0600)	(0.0548)	(0.0103)
Observations	522934	522934	522934	522934	522934
R-squared	0.275	0.305	0.275	0.305	0.283

Robust standard errors in parentheses

*** $p<0.01$, ** $p<0.05$, * $p<0.1$

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