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## Local Payroll Taxes and Local Employment

In recent years, more and more U.S. cities have imposed municipal income or payroll taxes. In general, cities enact such taxes during financial crises to supplement traditional local revenue sources such as property taxes, sales taxes, and transfers from state and federal governments.

Labor taxes have several advantages over the more traditional revenue sources but they are frequently opposed by business and political leaders who argue that they drive firms and employment out of the taxing city. This Letter argues that a local tax on labor income is unlikely to cause a substantial employment loss to the taxing city, particularly if the city has unique characteristics that attract certain types of firms.

## Existing local payroll taxes

Existing U.S. municipal income tax structures vary widely, but four western jurisdictions have opted for a simple payroll tax structure. In these localities, firms pay tax according to their payroll expenses, and individuals have no direct tax liability. San Francisco and Los Angeles impose payroll taxes of 1.5 percent and 0.75 percent respectively. In Oregon, the Tri-County (Portland) and Lane County (Eugene) Transit Districts impose payroll taxes of up to 0.6 percent. Each of these jurisdictions is surrounded by localities that impose no such tax.

This Letterfocuses on San Francisco where the tax rate is relatively high and data are readily available. The payroll tax was first imposed in San Francisco in 1970, at the rate of 1 percent. The rate went up to 1.1 percent in 1977 and, in the wake of Proposition 13 (which limited property taxes), rose again to 1.5 percent in 1980.

## Local payroll tax incidence

Three different conceptually "pure" situations allow economists to analyze effects of an increase in taxes. One assumes that each dollar of additional tax revenue is matched by a dollar of additional government spending. Another holds that increases in revenue from one tax are matched by decreases in revenue from another tax, and the third assumes that a tax could be increased with no
corresponding spending increase or tax reduction. The actual situation is likely to be a mixture of these three theoretical cases, but each provides important insights into a complex issue.

If tax increases are matched with increased spending on public services, firms may treat the additional tax cost as the payment for additional municipal services. For example, higher tax payments may be accompanied by improved transportation for employees, or better streets, lighting, sewerage, or police protection. Only if the firm calculates that the additional benefits are not worth the extra cost, will it have an incentive to leave the taxing city. In general, if taxes are used to provide public services, firms should want to leave a city only if the city provides (and charges for) more or fewer services than businesses would freely purchase, or if the city provides an unfavorable mix of services. Tax rates that are either lower or higher than optimal in this sense may result in incentives to leave the city.

In fact, firms are unlikely to receive public services equal in value to the taxes they pay. One reason is that there are too few cities, and hence too few tax and public service combinations, from which to choose. A firm that would optimally spend $\$ 2000$ per year on street lights may be forced to choose between available options of $\$ 1000$ and $\$ 3000$. Another reason most firms do not receive benefits equal to their tax payments is that residents as well as firms pay taxes and receive benefits from public spending. Nevertheless, to the extent that higher taxes are offset by increased public services, firms have no incentive to leave the taxing jurisdiction.

Next, consider the situation when a payroll tax is imposed with no corresponding changes elsewhere in the local treasury. In that case, the overall tax burden has increased. In general, the burden will be distributed in part to the owners of firms, but also to workers in the form of lower wages and to consumers in higher prices. The distribution of the real burdens of different taxes among workers, property owners, and consumers is a matter of some dispute among economists. The most common assumption is that workers bear

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much of a newly imposed local payroll tax in the form of lower wages. (In an environment of rising wages, this reduction will show up in a lower rate of increase than would have been the case in the absence of the tax.)

In addition, the prices of some goods and services produced locally rise and the prices of land and buildings fall slightly. These latter assets are no longer as valuable to firms since using them in the city entails a tax liability. For a firm with no fixed assets, the lower costs for labor and rent (for land and structures) mitigate the impact of a higher tax rate. A firm that owns fixed assets, however, does not benefit from lower land and structure costs because it suffers a windfall loss in its asset values.

Finally, consider the case in which payroll tax increases are matched by property tax decreases. The effects in this case depend on the impact of the property tax as well as that of the payroll tax. Most tax analysts agree that a reduction in a single city's property tax rate results in a relatively large reduction in the prices of goods and services produced in a locality, a more moderate increase in property values, and a much smaller effect on raising wages and prices of other productive resources. Thus, the net effect of reducing the property tax and increasing the payroll tax should be lower wages and higher values for property (land and structures). The higher output price due to the labor tax and the lower output price due to the property tax should approximately offset each other.

Since each of these three situations can be present in an actual payroll tax increase, the net effect on a firm's decision to move depends on a number of factors - how much and what extra public services are provided, if there are compensating changes in other tax rates, and what reductions in wages and changes in property values occur as a result. Each of these potential accompaniments to higher payroll taxes reduces the impact of the tax on firm costs, and therefore dilutes the effect of the tax on the firm's employment decisions.

## Would firms leave?

There are several reasons to expect that payroll taxes such as those imposed in western cities do not cause large employment losses. Most important of these is that the tax has a relatively small effect on firm costs.

First, public services provided with tax revenues, and lower labor and property costs which result from the tax itself, mitigate the impact of the tax on firm costs.

Second, in practice, local payroll tax rates are quite low - almost always less than 2 percent. In addition, not all firms in the city are required to pay the tax. Nonprofit organizations and government agencies are exempt from most local taxes. Moreover, banks and insurance companies in California are exempt from all local nonproperty taxes. Since they pay special state levies, they are exempt from additional state or local taxes. Under the San Francisco tax, businesses with payroll tax liability of less than $\$ 2500$ per year also pay no tax. These exemptions reduce taxable payrolls and hence expected employment loss.

Third, if other differences exist between the taxing city and other jurisdictions, the firm's location decision cannot be made based on payroll taxes alone. Some localities have geographical or economic features that enhance productivity. Such cities may be able to "get away" with a higher tax rate than cities without such advantages. Indeed, firms in attractive cities typically incur higher costs for such items as space and labor, regardless of the city's tax structure. In cities with these advantages, firms that can increase the prices of the goods and services they sell can remain profitable. Job losses are therefore likely to be concentrated among firms unable to sell their products at a higher price.

## The evidence

Given these general expectations, it should be difficult to isolate tax effects on San Francisco employment. Statistical evidence from multiple regression analysis, which controls for long-run trends, reveals no statistically significant detrimental effect on San Francisco employment from the payroll tax. Two graphical examples give a flavor of these results.

If the San Francisco payroll tax does have a strong effect on employment, then tax rate increases should have been followed by reductions in San Francisco employment, relative to employment levels without a payroll tax. Over time, San Francisco employment has grown, but employment in outlying areas has grown faster as jobs have followed people to the suburbs. Therefore, San


Francisco's share of Bay Area (Alameda, Contra Costa, Marin, San Francisco, and San Mateo counties) employment has fallen. This is consistent with a long-run national trend toward more decentralized employment. If, beyond these long-run trends, the payroll tax causes firms to leave San Francisco for less costly Bay Area locations such as Oakland or Concord, then San Francisco's share of Bay Area employment should have fallen more after the tax rate increases.

The chart plots the San Francisco share of Bay Area employment from 1966 to 1982 (left vertical scale), the last year for which city-level data are available. Vertical lines show years in which the payroll tax rate was increased. While the trend is that employment share fell during the entire period, there were no sudden drops following tax increases. Neither did the rate of decline seem to have increased after the tax rate rose.

If the payroll tax reduces employment significantly, a higher tax rate should also lead untaxed employment in San Francisco to grow relative to employment in taxed sectors. Within the category of financial services, banks and insurance companies are exempt from the tax, while real estate firms, stock brokerages, and holding companies must pay
the tax. If the tax has a strong effect, the untaxed share of San Francisco's financial employment should have grown larger over time, particularly following tax increases.

Using the scale on the right, the chart also plots the share of untaxed financial employment in total San Francisco financial employment over the same time period. The untaxed share of financial employment does not appear to have risen after tax increases. In fact, the erratic movements of the curve bear no apparent relationship to tax changes.

## Conclusions

The above evidence suggests that the payroll tax may not have been as important a cause of employment loss in San Francisco as some believe. Indeed, in various surveys aimed at determining why firms have left San Francisco, few firms cited the payroll tax as a major factor. More important determinants include the cost and availability of space. This is not to say that the payroll tax has had no effect on firms' decisions. On the contrary, there is anecdotal evidence that some firms have decided against establishing in San Francisco because of the payroll tax. Nevertheless, the number of firms (and jobs) that have located elsewhere because of the tax may be smaller than some critics of the tax have argued. That is not to say that the actual employment loss should not be of concern.

It is not clear how these findings might generalize to other cities. On the one hand, San Francisco's tax is large relative to other western payroll taxes. Everything else being equal, San Francisco's losses would be larger than the effects in other locations. On the other hand, San Francisco is also a unique city, both in terms of the vitality of its financial and business service sector and in terms of its physical beauty and charm. These factors may make San Francisco employment less vulnerable to the tax than employment in many other cities.

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BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT
(Dollar amounts in millions)

| Selected Assets and Liabilities <br> Large Commercial Banks | Amount <br> Outstanding | Change <br> from | Change from $9 / 12 / 84$ <br> Dollar |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Percent ${ }^{7}$ |  |  |  |  |

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[^0]:    Opinions expressed in this newsletter do not necessarily reflect the views of the management of the Federal Reserve Bank of San Francisco, or of the Board of Governors of the Federal Reserve System.
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[^1]:    1 Includes loss reserves, unearned income, excludes interbank loans
    2 Excludes trading account securities
    3 Excludes U.S. government and depository institution deposits and cash items
    4 ATS, NOW, Super NOW and savings accounts with telephone transfers
    ${ }^{5}$ Includes borrowing via FRB, TT\&L notes, Fed Funds, RPs and other sources
    6 Includes items not shown separately
    7 Annualized percent change

