

National Academy of Social Insurance
Policy Brief:
The Unemployment Insurance Payroll Tax

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In the United States, the Unemployment Insurance (UI) system is financed via a payroll tax imposed on a fraction of wages. Each state operates its own UI system, and sets up its own tax schedule. However, Federal incentives ensure that each state has a maximum tax rate of at least 5.4 percent, and that each state system is at least somewhat experience rated. An experience-rated system implies that each firm's tax rate is related to its past experience with the UI system. Figure 1 illustrates a typical state UI tax schedule. Firms with the fewest layoffs in the past will pay a minimum tax rate, but at a certain point, the UI tax begins to increase with past layoffs. Finally, there is a set of firms with the most past layoffs who have reached the top of the schedule. For these firms, the UI tax rate no longer increases with layoffs, as they simply pay at the maximum rate.

Funding the UI system via an experience-rated payroll tax system has resulted in two important problems. First, because the experience rating is incomplete, more stable firms subsidize the least stable firms, and temporary layoffs are encouraged. Second, because the burden of a payroll tax mainly falls on the worker through lower wages, and because most states have chosen very low taxable wage bases, the UI tax is a very regressive tax. In this policy brief, I take each of these problems in turn, discussing first the evidence on the extent of the problem, and then some potential solutions.

There is strong evidence that certain industries are perennially subsidized by other industries. That is, the amount of UI benefits received by workers in historically more volatile industries such as agriculture, mining, construction and manufacturing, are higher than the amount of UI taxes paid by firms in those industries. At the same time, the UI taxes paid by firms in historically more stable industries, such as transportation, trade,

services and finance, insurance and real estate (FIRE), are higher than the UI benefits received by these industries' workers. Thus, we can say that the former industries are being subsidized by the latter. Figure 2, based on data in Anderson and Meyer (1993) reflects the extent of these subsidies in the late 1980s. Interestingly, this pattern of subsidization is very similar to that found in the 1960s by Becker (1972), implying persistent subsidization. While it is true that FIRE has likely become more volatile in recent years, it is doubtful that a basic pattern of persistent cross-subsidization across industries has ended. Additional evidence in Anderson and Meyer (1993) shows that within industries, there is a similar pattern of across-firm subsidization. That is, year after year, the same firms tend to receive more in UI benefits for their workers than is paid in UI taxes, while the opposite is true for the subsidizing firms. This pattern can be found in both industries that are overall subsidized and in those that are overall subsidizers.

While incomplete experience rating leads to cross-subsidies, it is not clear that perfect experience rating is the appropriate answer. Theoretically, UI benefits paid to workers could be charged to the firm that laid off those workers. However, in this situation an important insurance component of the current system would be lost. Imagine a firm hit with an unexpected run of bad luck, forcing it to temporarily lay off many employees. The need to completely pay for the UI benefits of those employees could drive the firm out of business. By contrast, having those benefits subsidized by other, luckier, firms could help this unlucky firm return to profitability more quickly. The expectation, however, is that in other years our unlucky firm would be luckier, and would be able to subsidize that year's unlucky firms. While the persistent pattern of subsidies

we see implies that this sort of beneficial inter-temporal subsidization does not represent the bulk of the observed cross subsidization, it is an important point to keep in mind.

One possible approach to reducing the subsidies to those firms with the most variable employment, suggested in Feldstein (1978), would be to require firms to pay entirely for benefits received in, say, the first month of unemployment. In this manner, longer-lasting spells of unforeseen bad luck could still be subsidized by the luckier firms, but the continuous use of shorter (likely temporary) layoffs would be paid for completely by the firm. This approach would thus most likely also address the related problem from incomplete experience rating of higher-than-optimal use of temporary layoffs by firms at the maximum rate. Currently, for firms at the maximum tax rate, an additional layoff will have no impact on future taxes – it is essentially a costless way for the firm to provide a “UI holiday” to its workers. Research in Topel (1983), Anderson and Meyer (1994) and Card and Levine (1994) estimates that about 20 to 30 percent of temporary layoffs can be attributed to incomplete experience rating, and perhaps 50 percent of temporary layoffs at the bottom of the business cycle can be explained. Under the Feldstein (1978) suggestion, these types of temporary layoffs would no longer be free.

The second major problem with the UI payroll tax involves the burden it places on low wage workers. While in most states it is only the firm that is statutorily obligated to pay the UI payroll tax, research on payroll taxes in general and the UI payroll tax in particular have concluded that most of the true burden of the tax can be shifted on to workers in the form of lower wages (e.g. Anderson and Meyer, 1997; 2000). What makes the UI payroll tax actually regressive with respect to wages, rather than simply a flat tax, is that the UI payroll tax only applies to a fraction of wages. Each state sets its

own taxable wage base, but many take their cue from the Federal UI taxable wage base and set it as low as \$7,000, with only 17 states having a taxable wage base above \$15,000.¹ When UI and Social Security were begun in 1935, both had identical wage bases. Today, however, the Social Security taxable wage base is \$106,800, and is indexed to rise annually to inflation. Another difference between the two programs is that the UI taxable wage base is a per-employer base. Thus, if a worker was employed by two different employers, earning \$7,000 from each of them, the UI tax would be paid on a total of \$14,000 even if the state taxable wage base was just \$7,000.

Because the taxable wage base is generally quite low, the resultant statutory tax rates are on average relatively high in order to raise adequate funds. Using data from the 1994 panel of the Survey of Income and Program Participation (SIPP), Anderson and Meyer (2006) calculated the amount of UI taxes that would be paid on behalf of each individual, given their earnings and employment history. Assuming that the true burden falls on the worker, they calculate an effective tax rate of 1 percent by dividing aggregate taxes paid by aggregate earnings. Carrying out this calculation for each decile of the wage distribution (i.e. the lowest 10 percent of earners, the next 10 percent of earners, etc. up to the highest 10 percent of earners) makes clear that the lower-wage workers pay a much higher fraction of their earnings in UI payroll taxes. The lowest earners pay almost 3 percent, while the top group pays less than one half of one percent. Figure 3 presents the full distribution from Anderson and Meyer (2006) in the lighter shaded bars.

An obvious solution to the extreme unevenness of the UI payroll tax burden would be to increase the taxable wage base. If the wage base were increased, the

¹ A small 0.8% Federal tax on a \$7000 wage base is levied to pay for such things as administrative costs and the Federal share of extended benefits paid under the provisions of the Federal-State Extended Unemployment Compensation Act of 1970.

statutory tax rates could be reduced with no effect on the amount of money collected for the program. Anderson and Meyer (2006) simulate just such a revenue-neutral change in the UI taxable wage base. The darker shaded bars in Figure 3 represent an increase in the UI taxable wage base to the Social Security wage base, while at the same time reducing the tax rates to keep the amount of tax revenue collected stable. While the overall effective tax rate remains at 1 percent (by design), the burden across deciles is made much less uneven, ranging now from about 1.3 percent to 0.9 percent. Thus, raising the UI taxable wage base, while simultaneously lowering the statutory tax rate to keep tax revenues at an appropriate level, appears to be a very effective solution to the problem of the unequal burden of the UI payroll tax.

Funding of the UI system has changed very little over the 75 years of the program's existence. Nonetheless, two of the main problems with the system could likely be addressed with relatively straightforward changes. The change most certain to affect one of the drawbacks of the current system is an increase in the taxable wage base. In this case, it is clear that such a change paired with a revenue-neutral change in tax rates would result in a more equal allocation of taxes paid across the wage distribution. A change that would address the persistent cross-subsidies from stable firms to unstable firms and the incentive to overuse temporary layoffs due to incomplete experience rating is a bit more speculative. However, Feldstein's (1978) idea of charging firms fully for about the first month of their laid-off employees' UI benefits should remove the worst of the perverse incentives, while retaining a significant amount of the insurance aspect of the current system.

References

- Anderson, Patricia and Bruce Meyer (1993). "The Unemployment Insurance Payroll Tax and Interindustry and Interfirm Subsidies." *Tax Policy and the Economy*, 7, 111 - 144.
- Anderson, Patricia and Bruce Meyer (1994). "The Effects of Unemployment Insurance Taxes and Benefits on Layoffs Using Firm and Individual Data," *NBER Working Paper #4960*.
- Anderson, Patricia and Bruce Meyer (1997). "The Effects of Firm Specific Taxes and Government Mandates with an Application to the U.S. Unemployment Insurance Program." *Journal of Public Economics*, 65, 119 - 145.
- Anderson, Patricia and Bruce Meyer (2000). "The Effects of the Unemployment Insurance Payroll Tax on Wages, Employment, Claims and Denials." *Journal of Public Economics*, 78, 81 - 106.
- Anderson, Patricia and Bruce Meyer (2006). "Unemployment Insurance Tax Burdens and Benefits: Funding Family Leave and Reforming the Payroll Tax." *National Tax Journal*, 61, 77 - 95.
- Becker, Joseph M. (1972). *Experience Rating in Unemployment Insurance: An Experiment in Competitive Socialism*. Baltimore: The Johns Hopkins University Press.
- Card, David and Phillip B. Levine (1994). Unemployment insurance taxes and the cyclical and seasonal properties of unemployment. *Journal of Public Economics* 53, 1-29.
- Feldstein, Martin S. (1978). "The Effect of Unemployment Insurance on Temporary Layoff Unemployment." *American Economic Review*, 68, 834 - 46.
- Topel, Robert H. (1983). On layoffs and unemployment insurance. *American Economic Review*, 73, 541 - 59.

Figure 1: Typical UI Payroll Tax Schedule

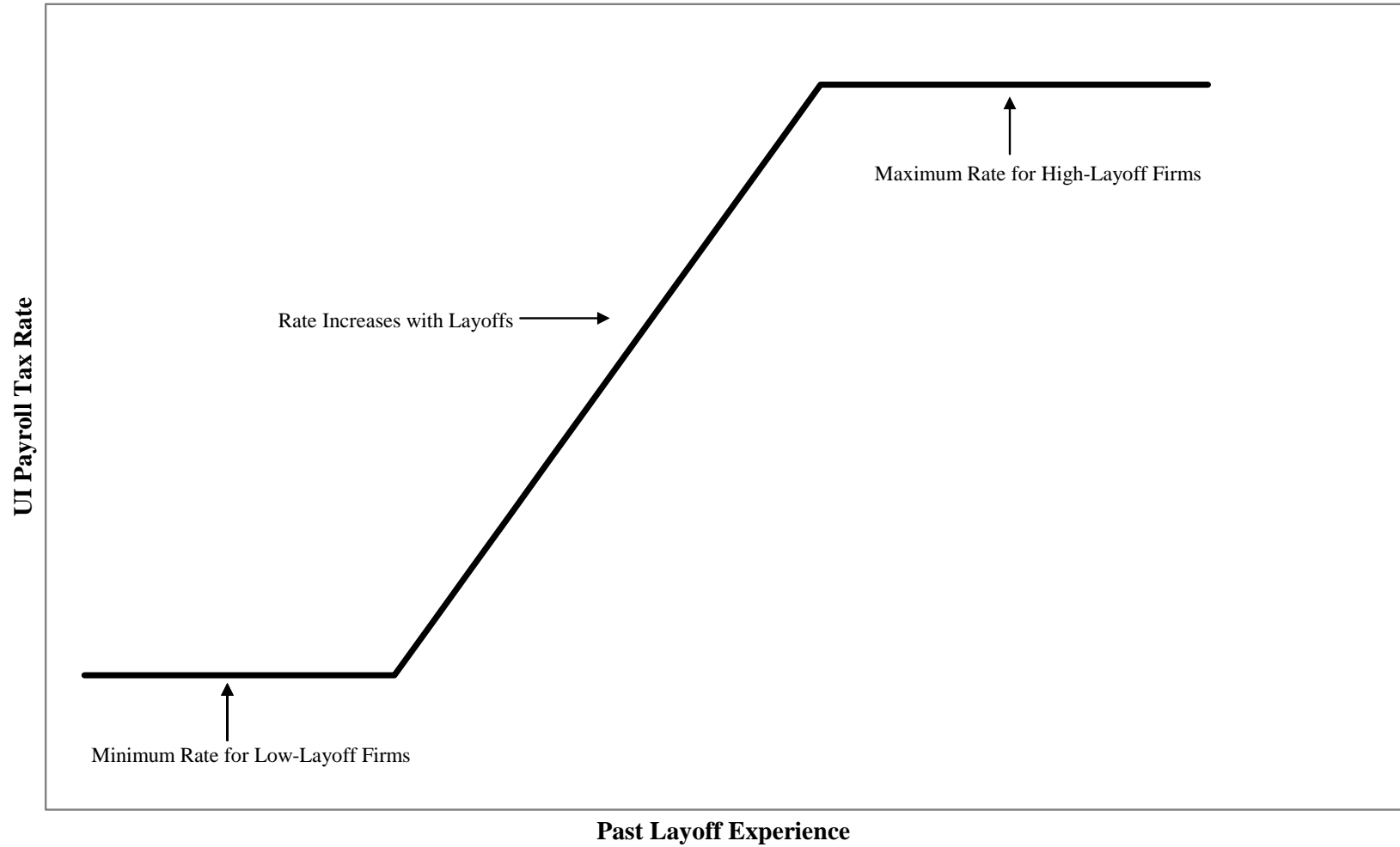
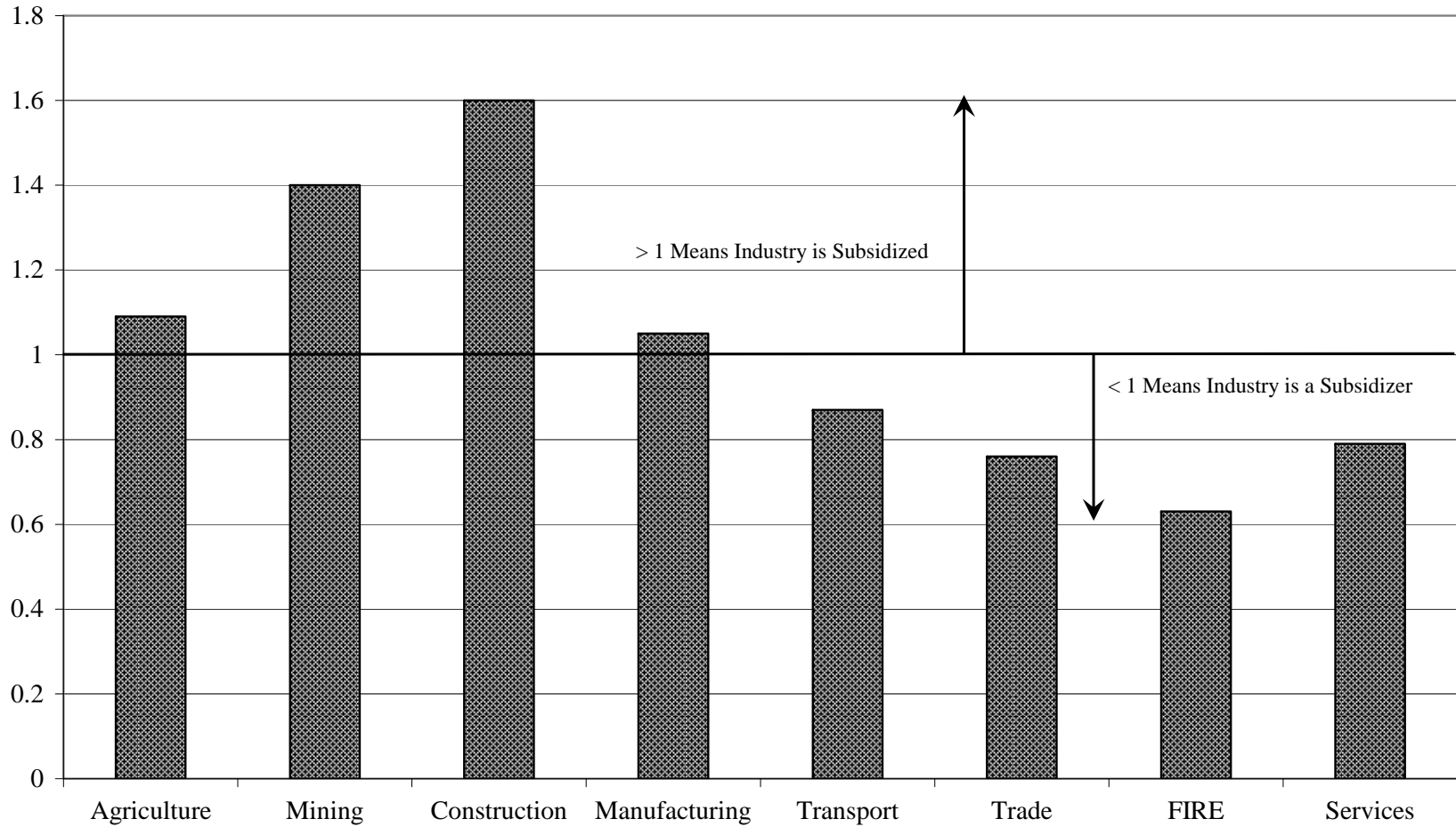
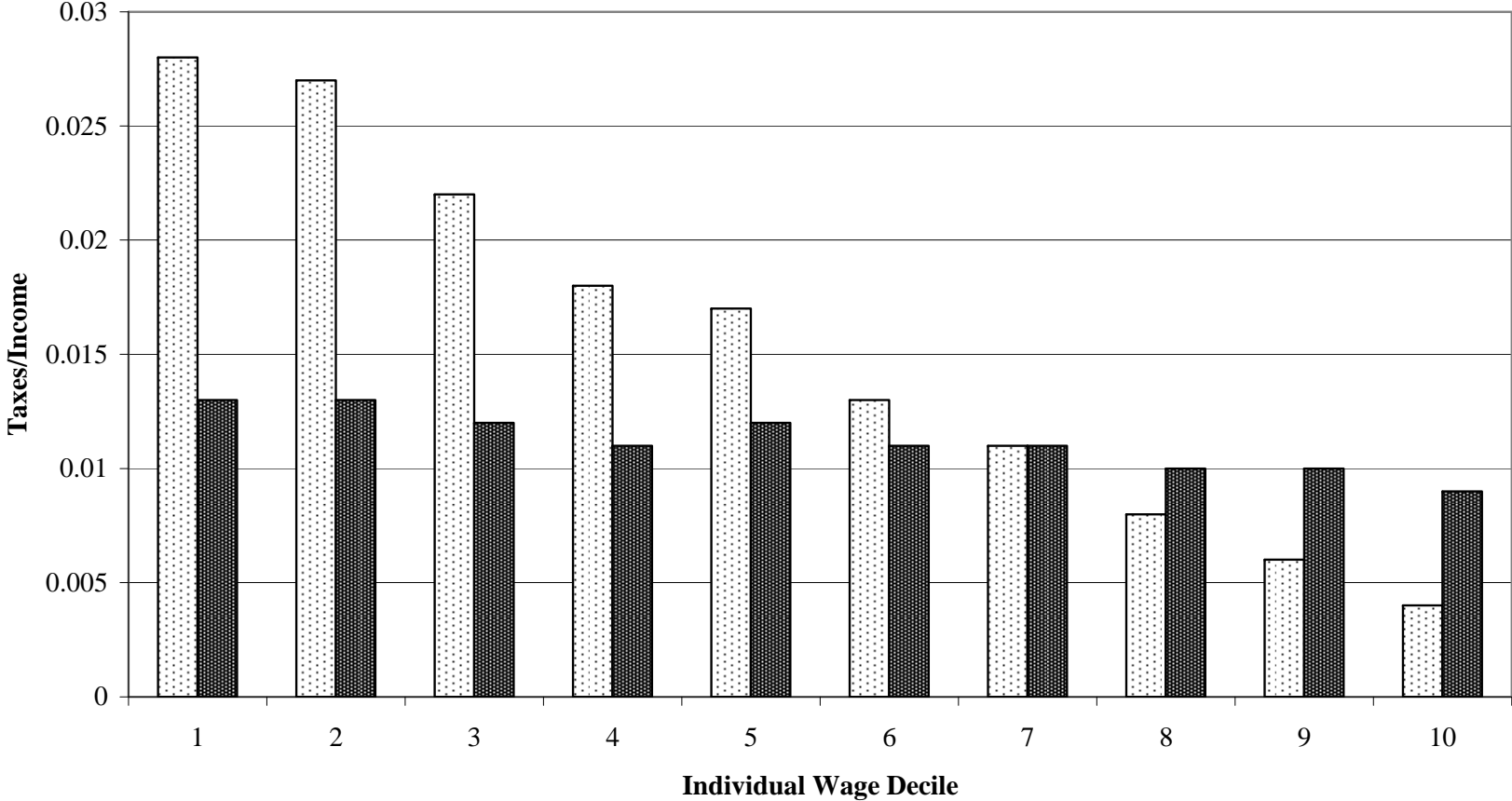


Figure 2: Benefit/Tax Ratio by Industry
Based on Data for 1985 - 1991 from 22 States



Note: Author's calculations from state employment security agencies. See Anderson and Meyer

**Figure 3: Distribution of the UI Payroll Tax Burden
Current Tax Base versus Revenue Neutral Increase in Base**



Note: Author's calculations using 1994 SIPP data. See Anderson and Meyer (2000).

□ Current Tax Base ■ Increased Tax Base