

Increasing the Minimum Wage through Tax Policy^{*}

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Abstract: This document describes how to use tax policy to achieve the same economic goal as a minimum wage increase: increasing the net pay of low paid workers using extra taxes on their employers. The policy has two parts. First, there is a new refundable tax credit for low paid workers equal to a fraction τ of the pay gap (the gap between current pay and pay under the aspirational living wage). Second, these refundable credits are funded by a new employer level payroll tax at rate τ assessed on the pay gap generated by each employer. Employers will be encouraged to credit the new payroll tax directly on their workers' paycheck. For ease of administration, small employers are exempt from the policy if none of their workers is paid below the current minimum wage plus a fraction τ of the gap between the aspirational living wage and the current minimum wage. The parameter τ would grow each year (e.g., 20%, 40%, 60%, 80%) to make low wages come close to the aspirational living wage within a few years. This policy is effective in increasing low pay, it is easy to administer, and relies on well tested policy components. It is different from a straight minimum wage increase because it creates a new tax and a new credit outlay which can be administered and regulated separately.

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The US federal minimum wage is at an all time low relative to living standards. Increasing the minimum wage is a popular policy: 25 out of the last 27 state level minimum wage ballot initiatives passed since 1996 including many in Republican leaning states, most recently in Florida.¹ Congress and the President favor a minimum wage increase at the federal level. However, a straight minimum wage increase cannot pass the Senate under current rules: a regular bill would be filibustered by the Republican minority, and a minimum wage increase cannot be achieved through reconciliation as it is not a tax and spending policy.² In this document, we draw upon various strands of economic research to propose a tax and spending plan that (a) comes closest economically to a minimum wage increase, (b) is easy to administer, (c) relies on well tested policy components. A direct minimum wage increase would be even simpler and hence preferable in principle. Our point is that minimum wage policy can be translated into tax policy with little loss. Therefore, the US senate cannot hide behind reconciliation rules to block it.

General economic analysis.

A minimum wage is a floor wage that all employers have to meet. Economically, for employers, this increases the labor cost of low paid employees; for employees, this increases the wages they receive.³ It is a transfer of resources from the employer to low paid employees. Therefore, a tax and transfer policy that replicates the minimum wage should tax employers who pay low wages to fund transfers to low paid workers. How could this work?

Let w_{\min} be the current minimum wage (\$7.25 today) and let w_{liv} be the *aspirational living wage* (e.g. \$15 as proposed by the Biden campaign and Democrats in Congress). A worker paid wage w below w_{liv} has a wage gap of $w_{liv}-w$ relative to the aspirational living wage. Therefore, to move toward the aspirational wage w_{liv} , the government could provide a transfer to the worker equal to a fraction τ of her wage gap. Hence, the effective wage of the worker becomes $w + \tau (w_{liv}-w)$. Concretely, suppose Mary is paid \$10/hour; she works 2000 hours for annual earnings of \$20,000. Her pay gap is \$5/hour or \$10,000 in annual earnings. With $\tau=20\%$, she would receive \$2000 from the government, making her *effective wage* \$11/hour.

How could this outlay be covered? The natural solution is to impose a new payroll tax on the employer also equal to a fraction τ of the wage gap that the employer generates. The employer in the example above would have to pay \$2000 extra in payroll taxes for employing Mary at \$10/hour for 2000 annual hours. The *employer wage cost* is also \$11. By design, the tax funds the transfer.

How does this affect the wage? Naturally, employers can adjust the wage they pay. If wages are flexible (as assumed in the standard economic model), an employer can lower the wage to exactly

¹ Ballot data https://ballotpedia.org/Minimum_wage_on_the_ballot The two ballot measures that failed (Missouri and Montana in 1996) were followed by successful ballots ten years later. In a number of states, proposed ballot measures also led to legislative and executive support for increased minimum wages as a substitute.

² Senators Ron Wyden and Sanders proposed some ideas to encourage employers to pay higher wages to low paid workers through tax incentives but these ideas did not make it into the final COVID-19 relief package of March 2021.

³ Naturally, there can be many additional economic consequences that have been extensively studied in the academic literature. The overall view is that adverse employment effects are modest making the minimum wage an attractive redistributive policy (see e.g. Dube 2019 for a recent review of international evidence).

offset the new transfer and tax. Theoretically, the wage is lowered to w' such that $w' + \tau (w_{liv} - w') = w$ so that, with the tax, the employer faces the same wage cost w as before and, with the transfer, the employee nets out the same wage w as before. In the case of Mary, the wage would be reduced from \$10 to \$8.75 but she would get a credit of \$1.25 and the employer would pay a tax of \$1.25 bringing back the worker effective wage and the employer wage cost to \$10. So effectively, the policy has zero impact. But there are two crucial caveats.

First, there is a limit to how much employers can lower the wage, namely the current minimum wage w_{min} . If the employer goes to this limit, the worker nets out $w_{min} + \tau (w_{liv} - w_{min})$ so that the effective new minimum wage has moved up toward w_{liv} . With $\tau=20\%$, the new effective minimum wage is $\$7.25 + .2 * (\$15 - \$7.25) = \8.8 . In our example, if Mary had been paid \$8 initially (instead of \$10), even if the employer reduces her wage down to the minimum possible of \$7.25, she nets out \$8.8 with the credit (and the employer also has to pay \$8.8 inclusive of the tax). Hence, with flexible wages, our proposed policy is exactly equivalent to increasing the minimum wage from w_{min} to $w_{min} + \tau (w_{liv} - w_{min})$.

Second, in practice, wages are not fully flexible. Cutting nominal wages is almost impossible because it hurts workers' morale (Bewley 1999). If the employer cannot lower nominal wages, then the policy has real bite (even absent a true minimum wage constraint). Whether employers will offset the tax by lowering wages depends on how salient and direct the link is between the payroll tax and the credit (Bozio, Breda, and Grenet 2019). If the link is direct and salient, then offsetting is more likely: workers won't protest a pay cut if it is paired with a visible compensating transfer increase. If the link is not direct and salient, then workers will protest pay cuts and offsetting is less likely. Therefore, with wage rigidity, our proposed policy ends up being more generous than a minimum wage increase to $w_{min} + \tau (w_{liv} - w_{min})$ as it pushes up any wage w below w_{liv} up to $w + \tau (w_{liv} - w)$.

In sum, under flexible wages, our policy is equivalent to a minimum wage increase part way toward the aspirational living wage. With some wage rigidity, it helps even more workers by pushing all wages below the aspirational living wages up.

Practical implementation

The implementation would be achieved through the combination of a refundable tax credit for low paid workers and a payroll tax on the employers of low paid workers.

A new refundable tax credit for low paid workers. The first component of the policy is a new refundable tax credit for low paid workers equal to a fraction τ of the pay gap defined as the difference between the aspirational living wage and the actual wage times the number of hours worked in the year. In terms of administration, the refundable tax credit would normally be claimed at the time of tax filing. In the basic policy, the credit would be fully refundable for all taxpayers.⁴ Note also that claiming the credit would require to file individual income taxes.

⁴ Conceivably, the government could limit the credit for some taxpayers such as taxpayers with high income (such as a secondary earner with a high earning primary earner) or dependents of taxpayers with high income (such as a teenage worker from an affluent family). This introduces additional complexity which is undesirable but it also illustrates the different nature of the policy relative to a direct minimum wage increase (see below).

Employers would have to report on W2 forms the necessary information on the wage gap for the administration of the new credit.

A new payroll tax on employers of low paid workers. Employers would have to pay a new payroll tax equal to a fraction τ of the pay gap they generate on their payroll. The computation of the pay gap would simply aggregate the pay gap across all employees and the tax would be remitted through the same procedure as currently done for existing employer payroll taxes. Employers payroll systems already record hours of work and wages.⁵ Therefore, the computation would be straightforward. Indeed, some states such as Washington already require employers to keep track and report quarterly hours of work for the administration of their unemployment insurance program. For enforcement, employers would have to report on W2s sent to their workers how much wage gap tax they have paid on behalf of each worker. This information would be used for enforcement of both the employer side tax and the employee side credit.

Administering the credit in real time. Because the transfer is equal to the tax paid worker by worker in the basic policy, employers will be encouraged to provide the credit immediately to their workers on the paycheck (instead of remitting the payroll tax to the administration and then paying out the refundable credit to beneficiaries the following year when taxes are filed). This could follow the same model as the Advanced Earned Income Tax Credit (A-EITC). The A-EITC was not used much (and was abandoned in 2010) because EITC eligibility rules are complex.⁶ A considerable advantage of the current policy is that employers know exactly which workers are eligible for the credit and the exact amount each worker is entitled to so that there is minimal risk of improper payment. For tax administration, the advanced credit would also have to be reported on W2s so that there is no double payment. If the credit is administered in real-time, even low paid workers who do not file an income tax return will benefit from the policy.

Reducing the compliance burden on small employers. The new policy creates an extra administrative burden on employers and employees. While large employers use sophisticated payroll tools and can easily administer the new policy, this could be challenging for smaller employers (such as a family restaurant for example). Therefore, it would be valuable to reduce the administrative burden on small employers by providing a safe harbor exemption option, at least initially. As our economic analysis above has shown, both the wage cost to the employer (inclusive of the tax) and the effective wage of the employee (inclusive of the credit) cannot go below $w_{\min} + \tau (w_{\text{liv}} - w_{\min})$. Therefore, if the employer is small and decides to pay all its workers a wage of at least $w_{\min} + \tau (w_{\text{liv}} - w_{\min})$, it can claim the safe harbor exemption and not have to administer the tax (and correspondingly, taxpayers are not eligible for the credit on such earnings).

Beyond the administrative simplification, this safe harbor option is favorable to small businesses because the rational and most advantageous response of employers to the policy is to reduce wages to offset the policy. The safe harbor option effectively achieves this for the

⁵ Salaried workers would be deemed to have worked normal hours of 40 per week.

⁶ The British Family Credit (introduced in 1988) is an example of a tax credit for low paid workers administered successfully in real time through employers' payroll (and which also required measuring hours of work).

employer without the cost of negotiating nominal wage cuts with employees and the risk of conflict they may generate. Therefore, it minimizes adverse impacts on small employers while ensuring that nobody gets a wage below $w_{\min} + \tau (w_{\text{liv}} - w_{\min})$. Concretely, most small employers will simply choose to increase their wage floor from w_{\min} up to $w_{\min} + \tau (w_{\text{liv}} - w_{\min})$ so that they can qualify for the safe harbor exemption. The safe harbor also makes enforcement of the policy easier as taxes are harder to enforce than minimum wage provisions on small employers (as the minimum wage is very salient and directly relevant to workers who can then challenge violations).

How should small vs. large employers be defined? Being liberal in the definition of small employers (such as all firms except the Fortune 1000 largest firms) makes the policy closest to a straight minimum wage increase and reduces administrative costs. Being stricter in the definition of small employers (such as not being subject to the Obamacare mandate, i.e., having fewer than 50 full-time employees) differentiates the policy from a minimum wage increase and makes it more likely to pass the Byrd rules for reconciliation bills.

How should be tax rate τ be set and how should it move overtime? The tax rate τ governs the extent to which wages move toward the aspirational living wage w_{liv} . With a tax rate τ , no effective wage can be below $w_{\min} + \tau (w_{\text{liv}} - w_{\min})$. Hence, it makes sense to have an upward path for the tax rate τ such as 20% in 2022, 40% in 2023, 60% in 2024 and 80% in 2025 which would correspond to effective minimum wages of \$8.8 in 2022, \$10.35 in 2023, \$11.9 in 2024, and \$13.45 in 2025. A tax of 100% would correspond to an effective minimum wage of \$15 but might run afoul of reconciliation rules (as a 100% tax entirely discourages pay below w_{liv}). However, it is easy to adjust w_{liv} up to target an effective minimum wage of \$15 even with a tax rate less than 100%. For example, by setting the aspirational living wage at $w_{\text{liv}} = \$17.25$, a tax rate of τ creates an effective minimum wage of $7.25 + 10\tau$. The tax rates of 22.5%, 37.5%, 52.5%, 67.5%, 77.5% then generate the same path of minimum wages as the Raise the Wage Act of 2021, namely \$9.5, \$11, \$12.5, \$14, and \$15. Conversely, lower tax rates can accommodate lower effective minimum wages as needed to obtain a majority vote in congress.

How to deal with existing payroll taxes? The simple policy outlined abstracts from existing payroll taxes. As such, the extra pay through the new credit is effectively exempt from payroll taxes (and also income taxes). This can be easily remedied by adjusting up the new employer tax (effectively charging the normal employer payroll tax on the new employer tax) and by reducing the credit by the normal employee payroll tax. The credit could also count for regular income tax purposes (in particular for EITC purposes). More generally, the credit could be counted as regular income for means-tested transfers such as SNAP or Medicaid. This would further the economic equivalence with a minimum wage increase.

How is this different from a straight minimum wage increase?

To pass the senate under reconciliation rules, the policy needs to be a tax and spending policy. Formally, it is indeed a tax and spending policy. In terms of government and national income

accounting, the policy increases tax revenue (the new employer payroll tax) and also increases outlays (the new refundable tax credit). But in terms of economic substance, isn't this a minimum wage increase in disguise? The policy was indeed constructed to come as close as possible to a minimum wage policy economically. But its tax and outlay nature make it genuinely different from a pure minimum wage policy along several important dimensions.

Budget impacts. CBO (2021) official scoring estimates that the increase in the minimum wage to \$15 by 2025 proposed by "Raise the Wage Act" of 2021 would increase pay of low wage workers on net by \$333 billion over the 2021-2031 budget window. This net pay increase comes from higher pay (\$509 billion) for people who were employed at higher hourly wages under the bill, offset by lower pay (\$175 billion) because of reduced employment under the bill.⁷

Approximating this increase through our policy would directly increase tax revenue by about \$333 billion (the new payroll tax) and would also directly increase outlays by about \$333 billion (the new refundable credit). There will also be indirect impacts on the budget which should be very similar to a minimum wage policy.⁸ The crucial point is that our proposed policy is a direct tax and spending policy eligible for reconciliation.⁹

Administration and receipt. The credit is a refundable tax credit and not a wage increase. It will be administered by jointly by the IRS and the department of labor. Even if the credit is administered almost entirely in real time through paychecks, regulations could require employers to flag on the paycheck stub that this is a refundable credit and not a wage increase. Politically, it could be beneficial to flag to recipients that they are benefitting from a new government policy.

Interaction with local minimum wages. Many states have minimum wages w_{\min} higher than the federal \$7.25 minimum wages. As a result, the effective minimum created by our proposed policy $w_{\min} + \tau (w_{\text{liv}} - w_{\min})$ will vary across states. For example with $\tau=20\%$ and $w_{\text{liv}}=\$15$, the new minimum effective wage is \$8.8 in states using the federal minimum wage of \$7.25. In Michigan where the state minimum is \$9.65, our policy increases the effective minimum wage to \$10.72. Under our policy, all states below $w_{\text{liv}}=\$15$ will be immediately affected and see an increase toward \$15. In contrast, a straight federal minimum wage does not affect states which use a higher minimum until this higher minimum is overtaken by the federal minimum (e.g. Michigan does not benefit from an increase to \$9.5 the first step increase in the Raise the Wage Act).

⁷ Economic Policy Institute (2021) and Reich (2021) find larger effects on net pay because they assume smaller adverse employment effects. Dube (2021) argues that the adverse employment effects baked in the CBO scoring are too large relative to the most compelling and recent findings of academic research on this question.

⁸ CBO (2021) official scoring analysis finds a modest federal revenue deficit of \$54 billion over the 10-year budget window from the Raise the Wage Act of 2021 that increases the minimum wage to \$15 by 2025. Reich (2021), assuming smaller adverse employment effects, finds instead a revenue surplus.

⁹ Reconciliation does not allow changes affecting social security which is also funded by payroll taxes. However, the proposed payroll tax increase is independent of social security funding and hence admissible under reconciliation rules.

Large vs. small employers. The proposed policy does not treat large and small employers the same. Because wages are downward rigid, the policy is likely to have a larger impact on large employers (as renegotiating wages down is fraught making the offset more difficult). Therefore, the policy would likely increase low wages more among large employers. The safe harbor rule for small employers looks the most like a minimum wage policy (although affecting employers in different states differently). If it runs afoul of reconciliation rules, it is possible to delegate its design to Treasury (“The Treasury shall design a way to reduce the administrative cost on small employers without changing the economic substance of the Act”).

Tax and credit linkage. Under the proposed policy, it is possible to modify the link between the tax and the credit (while this is not possible through a pure minimum wage policy). For example, no tax could be charged on the employer side in the first year of operation (to further encourage job creation and stimulate the economy). The government could set different parameters credit rate τ for different beneficiaries (such as a higher τ for those with low annual income or specific family situations, a lower τ for those with high annual incomes) even though the tax rate τ on the employer side remains uniform. The employer side tax rate τ could also be lowered for specific groups such as workers with disabilities. Or specific small employers in disadvantaged areas could get a lower tax rate τ (without a reduction of the credit for their workers). Differentiation creates complexity and administrative costs but it demonstrates that the policy cannot be replicated by a minimum wage and this may help comply with reconciliation rules.

Future of the minimum wage. Minimum wages are widely used because they are simple and effective. The proposed policy is translating a minimum wage increase in tax code which is more complex and less transparent and hence should not be seen as a permanent substitute. A future administration and congress could easily shift to a regular minimum wage increase to w_{iv} so that our policy becomes obsolete (nobody pays the tax nor receives the credit anymore).

Could a future Republican administration repeal it without a minimum wage increase replacement? If low paid workers have low bargaining power, such a straight repeal could cut back their wage down to the old minimum wage. But such a reduction in effective wages would also prove extremely unpopular among the tens of millions of low pay beneficiaries.¹⁰ Hence, just like Republicans haven’t been willing to cut the EITC, they probably won’t try to cut the low wage credit. They could conceivably cut the payroll tax on employers and keep the credit. This would make the policy look similar to the EITC that provides a benefit to low paid workers without any cost on employers who pay low wages. Workers would keep their higher pay but low paying employers would no longer be held accountable for it. From there, a subsequent Democratic administration could still propose a straight minimum wage increase (without necessarily eliminating the credit either).¹¹

¹⁰ Economic Policy Institute (2021) estimates that a \$15 minimum wage increase by 2025 would directly benefit 32 million US workers in 2025.

¹¹ The academic literature has shown that EITC type programs and minimum wages should be complements as a minimum wage ensures that employers cannot take advantage of the workers’ subsidy by lowering wages (Lee and Saez 2012; Rothstein and Zipperer 2020). However, because the federal minimum wage is currently so low (only .3% of employees are paid at the federal minimum wage), it hardly plays any backstop role at all for the currently large EITC (that benefits about 15% of employees).

Why not just penalize firms that pay low wages? This was proposed by Senators Ron Wyden and Sanders in late February 2021. If the penalty is high enough, all firms will pay higher wages to avoid the penalty. But this would no longer be considered a tax and spending policy. Hence, the policy should not be too harsh so that some firms pay higher wages and some firms pay the tax penalty.¹² This requires careful (and uncertain) calibration and would not benefit workers whose firms choose to pay the penalty. Imposing tax penalties on small businesses (which employ most minimum wage workers) is also deemed politically infeasible. In contrast, our proposed plan does not rely on incentives (as the tax is offset by the credit) and hence works for all firms.

Conclusion

This policy in its simple form outlined here is substantively equivalent to a minimum wage increase. For the public: the policy increases take-home pay of low wage workers and makes their employers pay for it, just like a minimum wage increase. For economists: the combination of the tax and the credit neutralize each other so that the usual arguments against taxes do not apply (but the usual arguments about a minimum wage increase still do). For the Senate's parliamentarian: this is formally a tax and a credit with direct budget impact.

Taxes are powerful and versatile. This political moment requires designing policy through taxes and transfers. This document has shown how to achieve this for minimum wage policy.

¹² Bruenig (2021) proposes a tax on firms equal to 300% of the pay gap (mimicking the current penalty for firms violating the minimum wage). This policy would lead virtually all firms to increase the wage up to the aspirational living wage. The revenue raised however would be minimal and hence could be ruled incidental to the policy by the Parliamentarian. Our proposed policy is similar in spirit but more moderate. It achieves the same goal with a significant budgetary impact.

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