The New Employment and Earnings Taxes Created by Social Programs

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by

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Chairman Boustany, Chairman Walorski, Ranking Member Doggett, Ranking Member McGovern, and members of the subcommittees: thank you for the opportunity and honor to discuss with you today how public policy has changed the reward to work. A multitude of programs have accumulated to affect that reward, and thereby affect who is employed and who is living near or below the poverty line.

Overview

A basic economic principle is that the monetary reward to working affects the number of people employed, and how much they work.

People without jobs or otherwise with low incomes sometimes receive benefits from social safety net programs. The benefits are rarely called taxes by laymen, but economists understand the benefits to have many of the characteristics of tax rates because a program beneficiary loses some or all of her benefits as a consequence of accepting a new job. The more income that a person receives when *not* working, the less is the reward to working.

I have illustrated the reward idea in Figure 1. The left bar measures the resources available when working, and the right bar measures the resources the same person would have if not working, including subsidies received net of taxes paid. The difference between the two bars is the monetary reward to working.

The combined effect of taxes and subsidies on the reward to accepting a new job can be summarized as a penalty: the effective amount that is lost from paying taxes and replacing benefits associated with not working. I like to express the penalty as a marginal tax rate: namely, as a percentage of employee compensation.

If there were no penalty, then the marginal tax rate would be zero. Thanks to a labyrinth of tax and subsidy programs, the marginal tax rate can equal or exceed 100 percent, which means that at least as many resources are available when not working as when working. In such cases, a person might have *more* resources available to use or save as a consequence of working *less*.

Legislation that "cuts" or "credits" taxes can nonetheless reduce the reward to working, and increase the marginal tax rate, if it cuts taxes more for those who work less than it cuts taxes for those who work more.

The reward to working affects behavior. High marginal tax rates are associated with small incentives to seek, create, and retain jobs. The consequences of high marginal tax rates are felt all over the economy, even by persons whose individual rates might not be all that high.

At the same time that safety net programs implicitly tax job acceptance, they also implicitly subsidize layoffs because the programs absorb some of the income and production that employer and employee together lose when an employee stops working. Layoff subsidies give employers and employees less incentive to take steps that might avoid or delay layoffs.

America absolutely must have taxes and safety net programs, even though they reduce the reward to working and subsidize layoffs. But if this Congress wants to understand what is happening in the labor market or to the budgets of social programs, it would be counter-productive to approximate marginal tax rates as zero, or to assume them to be eternally constant regardless of what incentives are embodied in new legislation.

New unemployment insurance (hereafter, UI) modernization provisions now provide unemployment benefits in a variety of circumstances when benefits were formerly unavailable. The SNAP program expanded in a variety of dimensions. While it lasted, the 2009 American Recovery and Reinvestment Act (hereafter, ARRA) helped unemployed people pay for their health insurance, and the Patient Protection and Affordable Care Act (hereafter, ACA) makes premium assistance permanent, and does so on a grander scale.

Figure 2 shows my estimates of nine years' marginal tax rates coming from tax and subsidy programs, taking into account that some of the poor and unemployed do not participate in all, or any, of the safety net programs. The combined effect of these and other changes through 2015 was to reduce the reward to work – that is, increase marginal tax rates – for most of the non-elderly population.

The new work-disincentive provisions include (i) the sliding scale that sets premiums for people who buy health insurance on the new marketplaces, (ii) a scheme for premium assistance that essentially resurrects the ARRA's subsidy in a more comprehensive form, (iii) employer penalties, and (iv) hardship relief from the individual mandate.

The cumulative effect of all of this legislation is to increase average marginal labor income tax rates by seven percentage points over what they were in 2007. As early as next year, the marginal rate experienced by much of the non-elderly adult population will exceed 50 percent of employee compensation, which means a decision to work or prevent a layoff will deliver more resources to the government than it will deliver to the employees and employees making the decisions.

We shouldn't have been surprised to see layoffs surge during the recession at the same time that new laws were adding to the layoff subsidies or to see unemployment durations lengthen as new rules added to marginal tax rates. A presumably unintended consequence of the recent safety net expansions has been to reduce the reward to working and thereby keep employment rates low, keep poverty rates high, and keep national spending low, longer than they would have been if safety net program rules had remained unchanged.

The remainder of my testimony offers more detail as to penalty and subsidy rate changes in recent years, and how they relate to the government safety net. The testimony is my own and does not necessarily reflect the views of the University of Chicago.

A Labyrinth of Public Policies Combine to Reduce the Reward to Working

The monetary reward to working is the difference between the resources a person has available to use or save if she works and what she has available when she does not work. Federal, state, and local governments deal in massive amounts of resources, and affect the reward to working both in the process of obtaining revenue and in the process of distributing revenue to beneficiaries.

The Bureau of Economic Analysis estimates that income, payroll, sales, and excise taxes amounted to about 23 percent of national income and over 30 percent of the nation's labor income, on average between 2000 and 2010. Even if none of that revenue had been spent on safety net programs, the tax collections by themselves would have reduced the reward to working.

Safety net program spending is also significant, especially during the last several years. Federal, state, and local spending on non-elderly beneficiaries of unemployment insurance, nutrition assistance, Medicaid, and other means-tested subsidies occurred at a combined rate of more than \$400 billion per year in 2009 and 2010, measured in fiscal year 2010 dollars (Mulligan 2012). Even if governments had somehow been able to fund these programs without any taxes, the process of distributing the program benefits would have reduced the reward to working.

Government tax and spending rules reduce the reward to working for two separate reasons. First, the rules include income contingencies: more income from work for a family means more taxes and fewer benefits. Second, and sometimes neglected by the experts, the rules include employment contingencies:

more employment for a family affects tax and benefit amounts (usually in the direction of more net taxes), even if their income is the same.

Benefits for the unemployed are employment contingent, and not income contingent. The ACA's employer penalty is (full-time) employment contingent, and not income contingent. Welfare program work requirements are employment contingent. When program rules are *both* employment and income contingent, as with the ACA's premium tax credits, there is a *double tax* on employment: one because employment affects eligibility and a second because employment affects income, which in turn affects benefit amounts. We do not have a full picture of the reward to working without acknowledging the employment contingencies in government tax and spending programs.

The effects of public policy on the reward to working and thereby poverty rates, the labor market, and the economy can be summarized in terms of various measures of marginal tax rates. My testimony primarily discusses one of those measures: the difference between taxes paid net of subsidies received when working and net taxes paid when not working, sometimes expressed as a fraction of the total compensation to be earned on the job.

This difference is a marginal tax rate concept related to the decision margins of when to accept a new job and when to experience a layoff. Among the variety of measures that economists use to study the reward to working, this concept of the marginal tax rate has the advantages that (a) it readily captures important combined incentive effects of a multitude of tax and subsidy programs and (b) it relates to decisions to exit and reenter employment (Gruber and Wise 1999).

Thanks to the labyrinth of relevant programs moving large amounts of resources, marginal tax rates can equal or exceed 100 percent in some cases, which means that the reward to working is zero or negative. In such cases, a person might have *more* resources available to use or save as a consequence of working *less*.

The reward to working affects behavior. High marginal tax rates mean small incentives to seek, create, and retain jobs, and to make the sacrifices of time, hassle, etc., naturally required by employers, customers, and clients in exchange for a paycheck. The consequences of a low reward to working are felt all over the economy, even by persons whose individual reward to working might not be all that low.

It might seem that work disincentives, especially those that come from social program spending rules, are hardly relevant for the 85 percent of the American population that lives above the poverty line in a calendar year (United States Census Bureau 2014). This impression is incorrect for a couple of reasons. A number of programs, such as health and cash assistance for the unemployed and the earned income tax credit, include participants who are well above the poverty line. Much of the health assistance in the ACA is targeted toward households with calendar year income between the poverty line and four times the poverty line, which is about half of the population.¹

Just as important, a great many of the nonpoor, especially those who are unmarried, can be and are out of work for periods of time less than a calendar year and during those periods would have incomes near or below the poverty line. They would not be counted among the poor by the Census Bureau or the Internal Revenue Service, but would nonetheless, during periods of nonemployment, likely be eligible for SNAP, Medicaid, and other programs that do not test income on a calendar year basis.

For unmarried middle class Americans, a program like SNAP is not a marginal tax on their income, despite the program's roughly 30 percent benefit-reduction rate, because they are ineligible for the program whenever they are working. But SNAP is a lot like a marginal tax on their employment, because every month out of work is another month of SNAP eligibility. This is another example where

¹ In 2012, 47 percent of the U.S. population was in households between 100 and 400 percent of the poverty line (Henry J. Kaiser Family Foundation 2014). If one were to account for the ACA's labor supply effects, presumably an even greater percentage will be in the 100-400 range.

the disincentives picture looks different when employment contingencies are acknowledged in addition to the income contingencies. This also shows why the work disincentives from social programs are visibly reducing the nationwide employment rate, and not just employment among families that are classified as poor by the usual measures.

The economic distortions created by marginal tax rates are not proportional: an increase from 90 percent to 100 percent has a greater effect on incentives than an increase from 40 to 50 percent, which itself has a greater effect on incentives than an increase from 0 to 10 percent. A rate increase from 0 to 10, for example, still leaves a worker with 90 percent of her reward from working, whereas a rate increase from 90 to 100 leaves her with no reward.

Because disincentives accumulate in this way, taxes and safety net programs need to be examined as a whole. A new tax has a different effect when it is added to an assortment of pre-existing programs than it would if the new tax were to be the only program contributing to the reward to work.

Recent Changes in Government Safety Net Rules Related to the Reward to Work

Using the term "tax" broadly enough to include implicit taxes, I find that two basic categories of taxes on labor have been increased since 2007: earnings taxes and employment taxes. Earnings taxes refer to schemes that require individuals or families with higher earnings to pay more to, or receive less from, the treasury, regardless of how many weeks or hours they work. Because earnings are a component of personal income, the federal personal income is a tax on earnings and is probably the most well known. But there are others.

The second and more important category is employment taxes: revenues paid to, or benefits withheld by, the treasury on the basis of how many weeks or months that a person is employed, with little regard to the annual income of the worker or her family. Unemployment benefits, which were enhanced by several pieces of legislation in 2008 and 2009, are an implicit employment tax because they are withheld from individuals during the weeks that they are employed.² The ACA's employer penalty is a tax on (full-time) employment because it does not accrue during months that persons are absent from an employer's payroll. The health insurance assistance in the ACA and, while it lasted, in the ARRA is an implicit employment tax because most workers were ineligible for the assistance because of their employment status.

In some instances, the work requirements in the SNAP and welfare programs are a kind of employment subsidy because the benefits are withheld for *not working*. It follows that the *removal* of work requirements has many of the same effects of a new implicit employment tax. Prior to 2009, the removal of SNAP work requirements was linked (at the state level) to federal unemployment benefits (Congressional Research Service 2012). The ARRA waived all states through October 2010. As recently as fiscal year 2015, 36 states remained eligible for statewide waivers.³

² The enhancements were not limited to the maximum duration for which benefits could be collected, which increased from 26 weeks to (in some states) 99 weeks in 2008 and 2009 and by the end of 2013 had returned to 26 weeks. The ARRA temporarily changed the tax treatment of unemployment benefits and added a weekly cash bonus. The Act also paid states to (perhaps permanently) relax the eligibility criteria for collecting unemployment benefits. Unlike the basic state unemployment benefits, none of these enhancements were charged back to employers according to their former employees' participation in the programs.

³ United States Department of Agriculture, Food and Nutrition Service (2014). The 36-state count includes the District of Columbia. In fiscal year 2014, 41 states were eligible for SNAP waivers (United States Department of Agriculture, Food and Nutrition Service 2013) and 33 implemented them (United States Department of Agriculture, Food and Nutrition Service 2012). Ten more states were implementing SNAP waivers for part of their state or part of their year. Of the 33 states, only Hawaii, Montana, and North Carolina are losing waiver eligibility effective FY

High levels of household debt spawned new implicit earnings taxes. A number of homeowners owed more on their mortgage than their house was worth, and both private and public sector renegotiations of the mortgage contracts have served as a large implicit tax on earning during the recession because borrowers can expect their earnings to affect the amount that lenders will forgive (Mulligan 2009). Renegotiations of business debts (Jermann and Quadrini 2009), consumer loans (Han and Li 2007), student loans, and tax debts present debtors with similar disincentives. Many of these are expected to return to what they were as households deleverage and gain equity in their homes, although student loan debt may well continue to remain high.

In addition to employment taxes, the ACA introduces two implicit income taxes that apply to households with at least one member that receives premium assistance sometime during the calendar year. One tax is a consequence of the income testing of the premium assistance between the poverty line and four times the poverty line and another tax is a consequence of the ACA's income-tested "reconciliation" provisions for settling end-of-year personal income tax liabilities. Among full-year program participants, the average phase-out rate on the assistance associated with the pricing of exchange plans is more than 20 percent (Mulligan 2014a). Because the health insurance assistance is not taxable, its phase-out rate needs to be added to the disincentives from long-standing personal income and payroll taxes, SNAP phase-outs, housing assistance phase-outs, etc.

Work incentives from SNAP and Medicaid are relevant because the program rules have become more generous and more inclusive since 2007. A wave of state laws permanently expanded SNAP by eliminating asset tests, which put many more (unmarried) households in a position of getting assistance during (potentially unlimited) periods of time that they are out of work. The 2008 Farm Bill increased the amount of the SNAP benefits paid to eligible households, and thereby increased marginal tax rates. The ACA expanded Medicaid eligibility in 29 states (including DC) and encourages states to eliminate asset tests.⁴ The value of Medicaid relative to workers' earning ability has increased secularly as healthcare costs have grown more, and low-skill wages less, than average wages.

The asset-test elimination increased marginal tax rates on labor income because households could receive benefits based solely on their net income, and not based on the value of their assets.

Federal officials have worked to make social programs more customer friendly. SNAP moved from paper food stamps to debit cards, and made other enhancements to the program to encourage participation (Eslami, Filion and Strayer 2011, p. 10). The federal and state governments have hired navigators to help people understand the ACA's exchanges and the application process (Bagley 2013). As program-participation barriers fall over time, the decline has many of the effects of rising marginal tax rates because it becomes easier to obtain resources when not working, but no easier to earn income while working.⁵

Few of these new taxes apply to the elderly. However, the ACA's implicit employment taxes on near-elderly workers are quite large (Mulligan 2015).

Mulligan (2012) and Mulligan (2013) summarize the work incentive effects of all of these rule changes, and more, with a statutory marginal tax rate index time series for the average non-elderly household head or spouse with median earnings potential. Each value in the series reflects, on the basis of the rules in place at the time, the causal effect of a work decision of about two months duration on the resources available to the worker and his family, expressed as a percentage of the total compensation (including fringes) that would be earned during that period. The index accounts for the fact that many

^{2015.} Temporary Assistance for Needy Families also had its work requirements relaxed by the ARRA (Mulligan 2012, p. 53).

⁴ Holding Medicaid eligibility fixed, the ACA's premium assistance for households above the poverty line alleviates some of Medicaid's longstanding disincentives to earn above the poverty line (Mulligan 2013).
⁵ Due to the difficulty of quantifying accessibility changes, I have not included them in my marginal tax rate

³ Due to the difficulty of quantifying accessibility changes, I have not included them in my marginal tax rate estimates. For this reason, my measures show less of an increase than has actually occurred.

people do not participate in safety net programs even when they are not working.⁶ By construction, the index changes when and only when new safety net program rules come into effect.

Figure 2 displays the index, updated through the end of 2015.⁷ The cumulative effect of the many rule changes was marginal tax rates that were seven percentage points greater in 2015 than they were in 2007.

Example: The Earned Income Tax Credit and Health Insurance Premium Assistance

The ACA has created a sliding scale for the cost-sharing and premium subsidies (hereafter, jointly referenced as "exchange subsidies") for households between 100 and 400 percent of the poverty line that purchase non-group insurance on the health insurance marketplaces established by the ACA. Households have a choice of plans – one of which might be the plan that their Congressman would purchase for himself – and the sliding scale will determine what they pay in premiums and out-of-pocket costs.

Figure 3 displays a sliding scale for the year 2014 based on a family of two with a \$13,000 annual actuarial value plan.⁸ The horizontal axis measures calendar year household income as a ratio to the federal poverty line. The vertical axis measures the combination of the required premium (net of premium assistance tax credits) and the average amount households will pay for out-of-pocket expenses as they participate in the plan. The schedule has various jumps, but for our purposes the important point is that it slopes up: households with more income pay more for the same plan than households with less income.

If one of the household members were to spend more of the calendar year not working – perhaps because it took additional time to find a new job or because his employer laid him off earlier in the year – the household would have less calendar year income and thereby be required to pay less for its health insurance. The amount of the payment reduction is, as a percentage of the lost income, the number of percentage points that the exchange subsidies add to the marginal tax rates of those eligible for them. I estimate that the exchange subsidies' marginal income tax rate averages (among exchange plan participants) more than 20 percent, and that rates of 25-30 percent are common, without even including the extra implicit tax from the reconciliation of advanced premium credits (Mulligan 2014a, Chapter 5).

It is well known that, in some circumstances, families before the ACA could face combined marginal income tax rates close to 50 percent for personal income and payroll taxes, not to mention the implicit taxes associated with the loss of unemployment benefits and means-tested subsidies.⁹ For example, even without the ACA, a family between 100 and 200 percent of the poverty line might be in a 10–15 percent normal federal personal income tax bracket, plus another 21 percentage points from the phase-out of its federal earned income tax credit (hereafter, EITC), plus 7.65 percentage points for employee payroll taxes, plus another five points or so for state income taxes.

⁶ The index combines incentives to work full-time relative to unemployment, out of the labor force, and part-time work.

⁷ The updated index is from Mulligan (2014b). It reflects both the expiration of the EUC program at the end of 2013 and the delay of the enforcement of the ACA's employer mandate until 2015. It does not reflect partial enforcement in 2015.

⁸ Schedules for smaller and larger families would look similar when plotted in Figure 3 because the axes are relative to the federal poverty line. For comparison, note that the population-weighted average of actuarial values for various family situations is \$14,643, assuming a \$19,000 AV for families of 3 or more and a \$7,000 AV for a family of one, and limited to households with heads aged 26-64 and calendar year incomes between 100 and 400 percent FPL.

⁹ Recent estimates include Congressional Budget Office (2012), Maag, et al. (2012) and Steuerle (2013).

High marginal tax rate situations are amplified by the rates shown in Figure 3 to the degree that high marginal tax rate families get health insurance on the exchanges. Table 1 illustrates the extreme possibilities by comparing two calendar year scenarios. The first column of the table is a scenario in which the sole earner is employed for 10 months and unemployed the other two. I assume that unemployment benefits replace half of the normal paycheck, so the first scenario yields 11 months' total pay for the year, before expenses, as shown in the top panel of the table. The second scenario yields 12 months' total pay before expenses, all of it from the employer. The final column of the table is the difference between the two scenarios, namely, one month additional total pay from working the two extra months.

The next panel shows the various expenses incurred as a consequence of working 12 months rather than 10. Only one month of additional personal income tax is owed by working 12 months rather than 10 because, as noted above, the extra two months of work generates only one additional month of personal income. The individual income taxes are of four types: normal federal tax at 10 percent, phaseout of the EITC at 21.06 percent, phaseout of exchange subsidies at 28 percent, and state income tax at 5 percent. Payroll taxes and work expenses accrue only for both of the months. Altogether, working the eleventh and twelfth months adds practically as much to expenses as to income, about one month's pay. In other words, the short-term financial reward to working the two extra months is essentially zero—0.006 paychecks to be exact.

Table 1's finding of large marginal tax rates is not the result of "cliffs" or "notches" in transfer program formulas in which many dollars of benefits are lost for earning a single marginal dollar (Yelowitz 1995) because I look at the consequence of more "discrete" decisions of accepting a job, or initiating a layoff, that change calendar year income by thousands of dollars. Instead, my large rates reflect the *combination* of tax and subsidy rules from the assortment of safety net programs in which millions of Americans have been and will be participating.

The findings of Table 1 are not the result of assuming that the family represented participates in all available programs. SNAP, housing assistance, energy assistance, and other programs are not shown in the table, and adding them would likely add to disincentives.¹⁰ Arguably none of the programs featured in the table are optional because taxes are mandatory (EITC is part of the personal income tax return) and the ACA mandates the purchases of health insurance. Taxes, health insurance pricing, and work expenses by themselves create Table 1's bottom line.

Table 1 also shows that the earner in the family represented could, through no fault of her own (more on this below), experience two months of unemployment without losing financial resources for the year. This result is sometimes interpreted as a success of the safety net (Sherman 2011). However, Table 1 illustrates how full insurance against employment and income changes is one in the same with 100 percent taxation, which is why economic analysis suggests that full insurance is excessive.

The Income Maximization Fallacy

It is sometimes claimed, by non-economists at least, that the safety net does not prevent anyone from working because everyone strives to have more income rather than less, and would gladly take any available job that paid them more than the safety net did. This "income maximization" hypothesis is contradicted by the most basic labor market observations, not to mention decades of labor market research.

¹⁰ Using the Survey of Income and Program Participation, Moffitt (2014) finds that 91 percent of SNAP families in 2008 were receiving at least one other major social program benefit (TANF, Subsidized Housing, WIC, the EITC, the CTC, SSI, SSDI, OASI, and UI), especially the EITC. Based on the results of Meyer, Mok, and Sullivan (2009), one could view Moffitt's estimates of multiprogram participation as an underestimates, although the amount of the underestimation is presently unclear.

Before the recession began, over 80 million American adults were not working. To be sure, some of them could find no reward in the labor market and would be stuck without gainful employment no matter how lean the safety net got. But many others were not working by choice. You probably know skilled stay-at-home mothers or fathers who could readily find a job but believe that the net pay from that job would not justify the personal sacrifices required. They are examples of people who deliberately do not maximize their income. Other examples are people who turn down an out-of-town promotion in order to avoid relocating their families, and workers who eschew higher paying but less safe occupations. Earning income requires sacrifices, and people evaluate whether the net income earned is enough to justify the sacrifices.

When the nutrition or unemployment programs pay more, the sacrifices that jobs require do not disappear. The commuting hassle is still there, the possibility for injury on the job is still there, and jobs still take time away from family, schooling, hobbies, and sleep. But the reward to working declines, because some of the money earned on the job is now available even when not working.

A related fallacy is that employees would do absolutely anything to avoid a layoff, regardless of the layoff subsidy rate. It is true that employers sometimes experience reductions in demand from their customers, as auto manufacturers and home builders did early in the recession. But layoffs are not always the inevitable result. Employers and employees could adapt to less demand by work sharing (Baker 2011), reducing prices charged to customers, reducing wages, or have pursued a less cyclical line of business in the first place. Heavy layoff subsidies give them less reason to pursue the alternatives to layoffs (Topel and Welch 1980).

Decades of empirical economic research show that the reward to working, as determined by the safety net and other factors, affects how many people work and how many hours they work. To name a small fraction of the many studies: Hoynes and Schanzenbach (2012) show how potential participants stopped working or reduced their work hours when the food stamp program was introduced. Studies of unemployment insurance find that program rules have a statistically significant effect on how many people are employed, and how long unemployment lasts. Yelowitz' (2000) research shows how a number of single mothers found employment exactly when, and where, state-level Medicaid reforms increased their reward from working. Gruber and Wise (1999) and collaborators show how the safety net for the elderly results in less employment among elderly people. Autor and Duggan (2006) and the Congressional Budget Office (2010) explain how the number of disabled people who switch from work to employment-tested disability subsidies depends on the amount of the subsidy relative to the earnings from work. Murphy and Topel (1997) show how poor wage growth among less-skilled men helps explain their declining employment rates during the 1970s and 1980s.

Programs assisting the poor and unemployed interact with private-sector demand shocks in determining the number unemployed. An adverse demand shock increased unemployment more under the ARRA than it would if the same demand shock had been experienced under 2007 tax and subsidy rules because each dollar that wages are reduced is a bigger proportion of the reward to work for someone whose reward has been largely whittled away by tax and subsidy programs than it is for someone who keeps a large fraction of what she earns.

Recent research has shown that the recent safety net expansions have had effects in line with the historical pattern: less reward to work means fewer jobs. Using the marginal tax rate series above, Mulligan (2014a) estimates that the end-of-2013 expiration of the Emergency Unemployment Compensation (EUC) program would increase employment thereafter. As of the end of 2014, the increase was about 1.6 million jobs.¹¹ Hagedorn, Manovski, and Mitman (2015) use a different

¹¹ Mulligan (2014a) shows the effect over a three-year horizon, after which 8 percent of the long-run labor-market adjustment still remains. Over a one-year horizon, that means that 43 percent would remain, or that the one-year impact of EUC's expiration is 57 percent ($0.57 = 1-(0.08)^{(1/3)}$) of its long-run impact, which Mulligan (2014a) estimates to be about 2 percent. With 2014 employment of 139 million, that is a one-year impact of about 1.6 million.

methodology – comparing states over the years 2013 and 2014 that were differentially effected by the EUC program – and estimate that the EUC expiration created 1.8 million jobs nationwide.

Other Misconceptions about the Reward to Working

I previously cited several changes in subsidy rules that served to raise marginal tax rates. Any one of them may appear insignificant by itself, especially for the purpose of aggregate labor market analysis. But that does not mean that the combination of a dozen or more potentially small marginal tax rate increases is itself small.

Focusing on just one of any of the safety net expansions is also misleading as to the magnitude of the overall increase in marginal tax rates and therefore potentially misleading as to the sources of the major changes in the labor market since 2007. It is even possible that attention to one program in isolation of the wider safety net could motivate backwards public policy responses.

To see this, imagine that UI rules became more generous, and that added to the number of households who were unemployed and with less income than they have when working. A number of the added unemployed people apply for SNAP, which from the SNAP program's point of view makes it look like "the economy is getting worse," so SNAP officials recommend enhancing SNAP benefits, which further increases the marginal tax rate. But, in this example, the added SNAP applications come from higher marginal tax rates created by UI, and the right SNAP policy response may be to reduce benefits in order to stabilize the overall marginal tax rate. The point of this example is not that the actual safety net expansions were excessive but rather that the economics of the safety net can be different when the safety net is viewed as a whole rather than on a program-by-program basis. The distinction is more than academic: contemporary events involve expansions of the safety net in many dimensions, and all of that occurs on top of an assortment of other safety net programs.

Among the hundreds of labor market studies, two of them – Rothstein (2011) and Ben-Shalom, Moffitt and Scholz (2011) – have been misrepresented as showing that recent safety net expansions had no visible effect on employment. Ben-Shalom et al. (2011) looks at the pre-recession safety net, and thereby does not consider the safety net expansions that have occurred since then. Rothstein (2011) looks at the allowable duration of unemployment benefits, finding that benefit durations have a statistically significant effect on unemployment exits, but otherwise does not examine a single one of the safety net program parameters that are included in Figure 2's marginal tax rate series. Neither study considers layoff subsidies or what happens when marginal tax rates approach one hundred percent.

The number of job openings per unemployed person fell sharply during the recession (U.S. Bureau of Labor Statistics 2013). This fact has been misinterpreted by journalists as proving that unemployment subsidies are not a significant factor depressing the labor market. To the contrary, expanding unemployment subsidies can by themselves, or in conjunction with other factors, reduce job openings per unemployed person (Pissarides 2000; Hagedorn, Karahan, et al. 2013). If you want to understand what caused and prolonged the recession, you have to look beyond the ratio of job openings to people unemployed.

It is sometimes thought that safety net transactions only affect the people who participate in the programs. To the contrary, the safety net is funded by taxpayers, lenders, owners of government debt, beneficiaries of government programs other than the safety net, or some combination thereof. As a portion of the beneficiaries opt to earn less, they also opt to spend and save less, as their household budget constraint frequently requires. They lawfully pay less tax. Businesses anticipate having fewer employees and invest less. These behavioral changes are bad news for employers in general, for people who produce the consumer and investment goods that beneficiaries would be buying if they were back at work (and goods the program funders would be buying if they were not funding the expansions), and for people who

live in places like Michigan whose economies are especially intensive in the production of such goods (Galí, Gertler and Lopez-Salido 2007).

Research has shown that the poor and unemployed tend to quickly spend what they have on basic needs, which is why helping them is intrinsically valuable (Gruber 1997), but "stimulus" advocates sometimes further assert that spending patterns of the poor are why redistribution serves as a great boost in total spending and thereby total employment. Even if redistribution did not depress the reward to working, the stimulus assertions would be wrong because they ignore the spending of the people who fund the programs. Redistributing resources to the poor from everyone else changes the composition of spending and employment in the direction of industries like discount groceries that disproportionately serve poor customers and away from industries like high-end restaurants serving relatively few poor customers, but redistribution by itself has little effect on *aggregate* spending.¹²

When redistribution is combined with increases in marginal tax rates - as a number of recent policies have done - it significantly reduces aggregate spending because people typically spend less when they are not working.¹³

It is technically correct to characterize high marginal tax rates as discouraging people from working and earning. However, from an economic perspective, this characterization should not be understood as blaming potential workers for the low employment that results from implicit taxes. One could just as easily say that employers voluntarily decide to keep wages below the level that would compensate employees for the implicit taxes the latter experience. The economics of taxes does not support one of these interpretations over the other. Both employers and potential employees are influenced by the various new taxes that have been created since 2007. The new taxes mean that employees and employers *together* do not always benefit enough to justify continuing their employment relationship and thereby pay the law's new taxes (implicit or explicit). In those cases, the result from their combined decisions is less employment.

Conclusions

The bottom line is that helping the poor and economically vulnerable has a price in terms of labor market inefficiency. In recent years, we have been paying progressively more: American public policies moved significantly in the direction of less labor market efficiency.

As long as marginal tax rates remain far above what they were eight or nine years ago, we cannot reasonably expect the labor market to return to where it was back then. We cannot expect the poverty rate to fall back to its pre-recession levels. We cannot expect employment per capita to go back to where it was.

Nobel laureate James Tobin was a leading Keynesian economist and key adviser to President Kennedy, and pointedly described high implicit tax situations. He said that they "caus[e] needless waste and demoralization.... It is almost as if our present programs of public assistance had been consciously contrived to perpetuate the conditions they are supposed to alleviate." (Tobin 1965, p. 890)

¹² Redistribution to the poor may reduce aggregate labor demand if the poor tend to purchase goods and services that are less labor intensive in their production than are the rest of the goods and services in the economy. Also note that (a) government transfers are very different from government purchases of goods and services such as military spending or highway construction, which have been shown to significantly increase GDP in many instances (if nothing else, government purchases are automatically considered part of GDP, whereas transfers are not), and (b) aggregate spending is the sum of investment spending, consumer spending, government purchases, and net exports.

¹³ Aguiar and Hurst (2005). To the extent that it redistributed resources to low-income families, the 2011-12 payroll tax cut is an exception because it achieved its redistribution while increasing the reward to work.

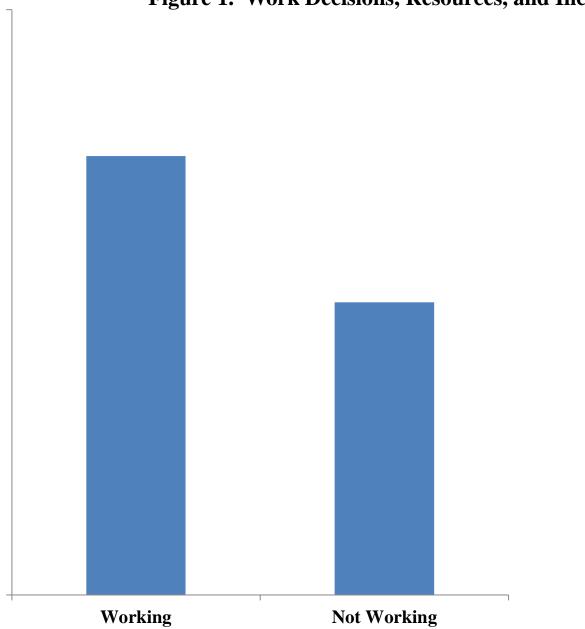


Figure 1. Work Decisions, Resources, and Incentives

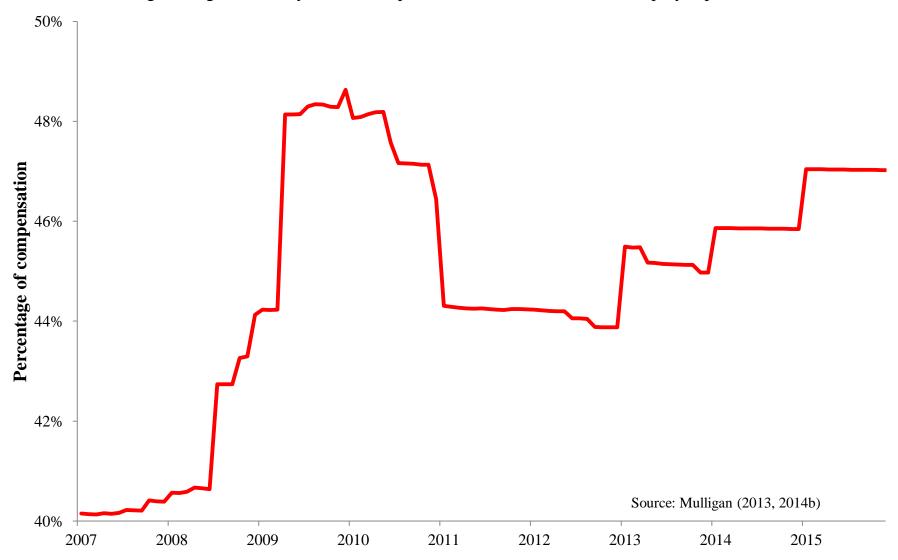


Figure 2. Statutory Marginal Labor Income Tax Rates over Time

avg. among non-elderly heads and spouses, includes subsidies and employer penalties

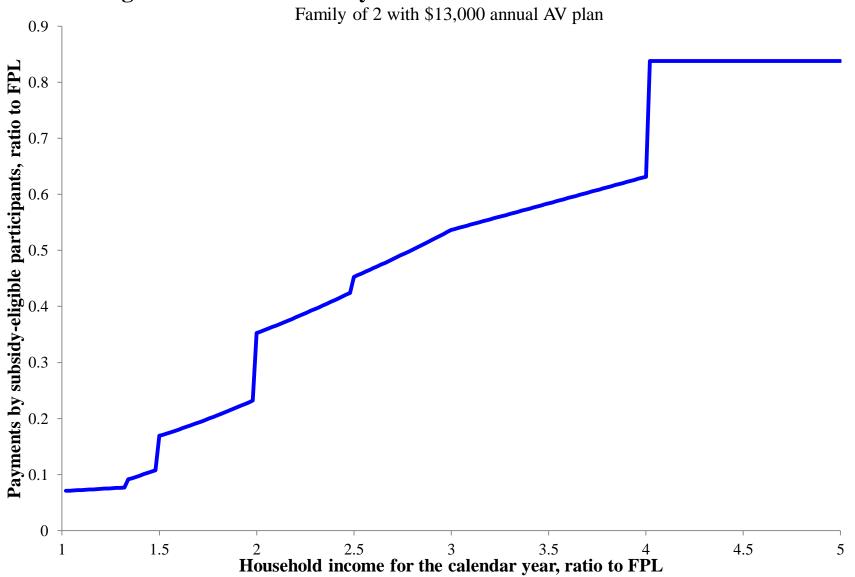


Figure 3. 2014 Health Payments as a Function of Household Income

Table 1. UI and the personal income tax can erase the reward to work for
exchange plan participants

			Difference =
	Scenario for the calendar year		consequence of working
	10 months employed	Employed all year	12 months rather than 10
Income sources			
Employment	10 paychecks	12 paychecks	2 paychecks
UI (only replaces half)	1 paycheck	0 paychecks	-1 paycheck
All income sources	11 paychecks	12 paychecks	1 paycheck
Incremental work-related expense amounts Individual Income Tax (IIT) normal federal tax @ 10% * 1 paycheck EITC phase out @ 21.06% * 1 paycheck exchange subsidy phase out @ 28% * 1 paycheck state IIT @ 5% * 1 paycheck			0.100 paychecks 0.211 paychecks 0.280 paychecks 0.050 paychecks
Employee payroll @ 7.65% * 2 paychecks			0.153 paychecks
Work expense 10% * 2 mo	onths		0.200 paychecks
All expense categories			0.994 paychecks
Incremental income sources net of work-related expenses			0.006 paychecks
		fo	or 2.000 months work
Notes: A "novebook" is on	amount of monov oqual to	ono month'a solory f	rom work III donoto

An example of how unemployment can be almost "free" under the ACA

Notes : A "paycheck" is an amount of money equal to one month's salary from work. UI denotes unemployment insurance benefits. EITC denotes earned income tax credits. To simply illustrate the economics of a 50 percent UI replacement rate, UI is assumed to fully replace employment income for half of the time unemployed rather than replacing half of the income all of the time. UI is taxable by the IIT, but not by the payroll tax.

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