Do employment-conditional earnings subsidies work?

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Table of contents

Abstract ........................................................................................................................................... 4
1 Introduction ...................................................................................................................................... 5
2 Employment-conditional earnings subsidies ............................................................................. 5
   2.1 Large refundable tax credit or cash transfer with phase-in and phase-out ranges .......... 6
   2.2 Large reduction in employee tax payments ......................................................................... 8
   2.3 Large tax credit or cash transfer with no phase-out ............................................................... 9
3 Effect on employment .................................................................................................................. 10
   3.1 Within-country evidence ......................................................................................................... 11
   3.2 Cross-country evidence ........................................................................................................... 13
4 Effect on wages ........................................................................................................................... 17
5 Effect on household incomes ...................................................................................................... 19
6 The German model ...................................................................................................................... 21
7 The Swedish model ...................................................................................................................... 23
8 Conclusions .................................................................................................................................. 24
References ......................................................................................................................................... 25
Appendix ........................................................................................................................................ 29
Abstract

Cash transfers and tax credits to people in paid work but with low earnings are increasingly prominent in affluent countries. How effective are these programs at reducing poverty and increasing employment?

The US and UK experience suggests that, in an economy with weak unions and limited labor market regulations, an employment-conditional earnings subsidy increases employment among persons at the low end of the labor market but reduces low-end wage levels somewhat. Overall, it appears to boost the absolute incomes of low-end households. Even so, cross-country comparison offers little support for a conclusion that the institutional configuration in these countries, including the employment-conditional earnings subsidy, is especially effective at generating high and rising employment, high and rising incomes among low-end households, or low and decreasing relative poverty rates. Quite a few other affluent nations have done as well as or better than the UK and the US in recent decades.

In rich countries with stronger collective bargaining, employment-conditional earnings subsidies tend to be small, sector-specific, or temporary and so are unlikely to have sizeable effects on aggregate employment or incomes. Germany and Sweden have implemented larger versions. Germany’s appears to have increased employment but reduced wage levels and low-end households incomes. Sweden’s is too new to permit assessment of its impact.

Keywords: employment-conditional earnings subsidy, in-work benefit, earned income tax credit, social policy, employment, poverty

JEL codes: I38, I32, H24
1 Introduction

Cash transfers and tax credits to people in paid work but with low earnings are increasingly prominent in affluent countries. The United States and the United Kingdom began using employment-conditional earnings subsidies in the 1970s, and in recent decades most of the other rich longstanding democratic countries have adopted some version of them, including Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Japan, (South) Korea, the Netherlands, New Zealand, Portugal, and Sweden.

These programs aim to reduce poverty and increase employment. How effective are they?

2 Employment-conditional earnings subsidies

While all employment-conditional earnings subsidies have in common that eligibility is contingent on paid work, they can vary along a number of dimensions (Immervoll and Pearson 2009; OECD 2009, 2010):

- Is the subsidy limited (targeted) to those with low earnings or income? Or is it available to everyone in employment (universal)?
- Is the benefit amount determined by individual earnings or by household earnings?
- Is eligibility for the subsidy conditional on a minimum number of hours of employment (such as 15 per week)? Or is any paid work sufficient?
- Is eligibility conditional on the presence of children?
- Is eligibility conditional on employment in a particular industry or sector, such as household services?
- Is the subsidy paid in cash, as a tax reduction, as a tax credit, or in kind (access to services or housing)? And if the subsidy is a tax credit, is it refundable? That is, if the individual or household owes less tax than the amount of the subsidy, do they receive the difference in cash?
- Is there a "phase-in" range where the amount of the subsidy increases as earnings rise?
- Is there a "phase-out" range where the amount of the subsidy decreases as earnings rise?
- Is the subsidy "permanent," with no limit on the length of eligibility? Or is it temporary — e.g., limited to a year or two following transition from social assistance or unemployment benefit into employment?
- Is the subsidy paid on a regular basis (biweekly, monthly) or as a once-a-year lump sum?

There are many possible combinations of these features, but in practice three types of employment-conditional earnings subsidy stand out as noteworthy:

1. Large refundable tax credit or cash transfer with phase-in and phase-out ranges: Ireland, New Zealand, United Kingdom, United States. Canada has a moderately-generous version.
2. Large reduction in employee tax payments: Germany.
3. Large tax credit or cash transfer with no phase-out: Sweden.

In the other nations that have an employment-conditional earnings subsidy — Australia, Austria, Belgium, Denmark, Finland, France, Japan, Korea, the Netherlands, Portugal — the subsidy is smaller. It takes the form of a small tax reduction or tax credit, in some cases temporary, in some cases limited to particular sectors of the economy, and in some instances tied to other benefits such as unemployment compensation or social assistance.

I’ll focus on the three noteworthy types.

2.1 Large refundable tax credit or cash transfer with phase-in and phase-out ranges

In the rich English-speaking countries, unions and collective bargaining are comparatively weak, so individuals and households at the low end are more vulnerable to economic pressures than in many other affluent nations. Each of these nations has a statutory minimum wage, and each also has a subsidy that boosts the income of low-earning households. Ireland and New Zealand have relatively generous subsidies, Canada introduced a moderately-generous one in 2007, and Australia has a small one. The best known and most extensively studied are the US Earned Income Tax Credit and the UK Working Tax Credit (now Universal Credit), and I will concentrate on these here.

The US Earned Income Tax Credit (EITC) was created in 1975. The EITC subsidizes pre-tax income by as much as 45%. It is paid to households rather than to individuals. As of 2014, households with at least one employed adult and a pre-tax household income below $55,000 are eligible. The credit is refundable; if it amounts to more than the household owes in federal income taxes, the household receives the difference as a cash refund. It therefore functions like a cash benefit.

Figure 1. US earned income tax credit benefit structure

![Figure 1](image_url)

The benefit levels shown are for 2014

Source: Tax Policy Center, “Earned Income Tax Credit Parameters.”
The amount of the subsidy increases with earnings up to a certain level, then plateaus, and then decreases with earnings. Figure 1 shows the benefit level for households with varying marital status and number of children.

An important feature of the EITC, clearly visible in figure 1, is that the benefit amount is very small for a household with no children. A household with one child can receive more than $3,000, but the maximum for a childless household is just $500. Childless households account for 25% of EITC recipients, but they receive only 5% of total EITC payments. The credit thus creates little employment incentive for childless adults, and it provides very little income support if they are employed.

Another key feature is that most recipients receive the credit in a single lump-sum once a year (in April, when income tax reports are filed in the US). This may affect its attractiveness to recipients, the degree to which it incentivizes employment, and the ways recipients spend the benefit money (Barrow and McGranahan 2002; Smeeding, Phillips, and O’Connor 2002; Sykes et al 2014).

The average amount recipient households get is $2,300 per year. As figure 2 shows, this amount increased sharply between 1987 and 1996. Since then it has been flat.

Figure 2. US earned income tax credit benefit amount

![Figure 2](image_url)

Average Earned Income Tax Credit per recipient family. In 2011 dollars; inflation adjustment is via the CPI-U-RS. The top value on the vertical axis, $6,000, is the maximum value of the credit. **Source**: Tax Policy Center, "Historical EITC Recipients," using Internal Revenue Service data.

Nearly one in four Americans receives the EITC. This share rose sharply between the late 1980s and the mid-1990s and again in the 2000s, as figure 3 indicates. These increases were a result of changes in eligibility criteria, increases in the benefit amount, and stagnant wage levels for Americans on the lower rungs of the wage ladder.
A number of the US states and a few cities have their own EITC (Center on Budget and Policy Priorities 2014b). Many of these are quite small, but some supplement the national EITC by as much as 75%.

The United Kingdom was the first country to have an employment-conditional earnings subsidy (Blundell et al. 2000; Dilnot and Macrae 2000; Brewer 2001; HM Treasury 2002). The Family Income Supplement, created in 1971, provided a means-tested benefit to adults working 24 hours or more per week with a dependent child. In 1988 the program name was changed to Family Credit. In the early 1990s the hours requirement was reduced to 16 per week and a child-care disregard was added.

In 1999 the Labour government replaced the Family Credit with the Working Families Tax Credit, substantially expanding eligibility and increasing the benefit amount. These changes had large effects on program use and generosity. Within four years the average benefit level increased by nearly half and the number of recipients doubled. In 2003 the credit was extended to childless households and the program name was changed to Working Tax Credit.

In 2012 the UK government began a process of merging the Working Tax Credit and five other government benefits into a single Universal Credit (Pareliussen 2013; Finch, Corlett, and Alakeson 2014). The new credit will simplify the application process, create a single rate of reduction in benefits as earnings increase, and enable benefit access for people working fewer than 16 hours per week. There also will be some reduction in the benefit amount.

### 2.2 Large reduction in employee tax payments

In nations with stronger unions and broader collective bargaining coverage, the wage floor tends to be higher, so policy makers see less need to boost the incomes of households with low earnings. The focus instead tends to be on increasing employment (jobs and/or hours) among those at the margins of the
labor market, and the subsidy often takes the form of a reduction or elimination of taxes paid by employees.

Germany has moved most aggressively in this direction (Bosch and Weinkopf 2008; Gautié and Schmitt 2010; Weinkopf 2010; White 2013; German Federal Ministry of Labor and Social Affairs 2014; Kirkegaard 2014). In the 1990s, in an attempt to boost labor force participation via part-time work, the German government created a new employment category called “mini-jobs,” and in the early 2000s it expanded eligibility for mini-jobs and increased their financial attractiveness.

Mini-jobs pay less than €450 per month. For workers, mini-jobs earnings are exempt from most payroll tax payments (social security contributions), which are especially heavy in Germany at 21% of pay, and from income tax payments. Employees pay only a 4% pension contribution, though upon request they can be exempted from this too. It is possible to add a mini-job on top of a standard job, to work two mini-jobs, and to hold a mini-job while still receiving entitlement to social protection as an "inactive spouse." Mini-jobs workers are eligible for sick pay, parental leave, holiday pay, and are covered by many of the same regulations and protections as workers in standard jobs.

For employers, tax payments for a mini-job are lower than for a standard job, and until 2015 the hourly wage could be below the collectively-bargained minimum. Beginning in 2015, the new statutory minimum wage of €8.50 per hour applies to most mini-jobs. Another advantage for employers is that they can more easily vary the number of employees or hours to accommodate changes in demand.

Approximately one in five employed Germans is a mini-jobs worker, though for some the mini-job supplements a regular job. While some other European nations have employment-conditional subsidies that reduce tax payments and/or allow subminimum wages, Germany’s has gone farthest and had the largest impact on employment patterns.

2.3 Large tax credit or cash transfer with no phase-out

If a country’s wage floor is very high, the wage distribution at the low end is likely to be compressed — there will be relatively little difference between the minimum wage, the tenth percentile wage, the twentieth percentile wage, and so on. This creates a problem for a US- or UK-type employment-conditional earnings subsidy, as Ive Marx, Josefine Vanhille, and Gerlinde Verbist (2012) have demonstrated by simulating the impact of implementing the UK’s Working Tax Credit in Belgium. If the aim is to focus on the most needy, the phase-out rate will need to be quite steep. This can create strong employment disincentives for individuals and households in the phase-out range. If the phase-out rate is flattened in order to avoid this problem, eligibility for the subsidy will extend farther up the earnings ladder. Given the crowding in the lower part of the wage distribution, this will sharply increase the budgetary cost of the subsidy.

As Marx, Vanhille, and Verbist note, this design problem is likely to deter many nations with a high wage floor from adopting a US- and UK-style earnings subsidy. Sweden, however, has done so. In fact, as figure 4 shows, Sweden’s Earned Income Tax Credit has no phase-out at all. The credit continues all the way up the earnings ladder. In this sense it is, like many social programs in the Nordic countries, a universal benefit rather than one targeted to the poor.

To facilitate comparison, figure 4 also includes the US Earned Income Tax Credit. For a single adult with children, the Swedish credit is less generous than its American counterpart if earnings are low but
more generous once earnings exceed about $25,000. If a Swedish household has two earners, each receives the credit separately, so its value doubles, making it larger than the US credit even when earnings are low. For childless individuals or couples, the Swedish credit is much larger (see figure 1).

Figure 4. Swedish and US earned income tax credit benefit structure

![Graph showing Swedish and US earned income tax credit benefit structure.](attachment:graph.png)

The benefit levels shown are for 2010, in US dollars. United States: single unmarried adult with one child. Sweden: one earner (not contingent on the presence or number of children). PPP conversion: 1 US dollar = 9 Swedish kroner.


Its universality and generosity make the Swedish Earned Income Tax Credit expensive. It costs approximately 2.4% of GDP, compared to 1.0% for the UK’s Working Tax Credit and 0.3% for the US Earned Income Tax Credit.

Let’s turn now to the impact of employment-conditional earnings subsidies on employment, wages, and household incomes.

### 3 Effect on employment

An earnings subsidy increases the financial incentive in favor of employment for persons at the low end of the labor market. It should thereby increase the share of people who are employed and the number of hours worked by those in employment. This is particularly true for those in the phase-in and flat ranges of the subsidy (see figure 1).

For people in the phase-out range, the employment incentive is weaker. In the US case, imagine a person with one child who is employed at a wage of $15 per hour. If the person works full-time year-round, her earnings are approximately $30,000 ($15 per hour multiplied by 2,000 hours). Such a person is in the phase-out range of the Earned Income Tax Credit; her credit will decrease as her earnings increase (figure 1). If she reduces her work hours, she will receive a larger EITC payment, which will offset some of the lost earnings, and she will have more time to spend with her child. For some people, this will make it attractive to work fewer hours. For similar reasons, in a low-earning household with
two employed adults, the phase-out of the earnings subsidy may induce the second earner to cut back on work hours or leave employment altogether.

3.1 Within-country evidence

Most studies of the US Earned Income Tax Credit conclude that it increases employment (Blank, Card, and Robbins 2000; Meyer and Rosenbaum 2002; Hoffman and Seidman 2003; Hotz and Scholz 2003; Eissa and Hoynes 2006; Leigh 2010; Meyer 2010; Chyi 2012; Chetty, Friedman, and Saez 2013). These studies typically use sophisticated econometric analysis, but a simple way to see the EITC’s impact is to compare the employment trend for single women with low education and one or more children — a group for whom the EITC is likely to exert considerable pull — to the employment trend for other comparable women. Figure 5 does this. The two comparison groups are single women with the same education and no children and single women with children and a little more education. During the economic downturns in the early 1990s and early 2000s and in the rest of the 2000s, the employment rates for all three groups moved in the same direction and at a similar pace, which suggests that these two comparison groups are useful ones.

We saw in figures 2 and 3 that the chief expansions of EITC eligibility and benefit amount occurred between 1987 and 1996, so we would expect the biggest effect on employment during this period. Consistent with this expectation, we see in figure 5 that the employment rate among non-married US women with children and less than a high school education increased sharply in the late 1980s, whereas that wasn’t true for similarly-educated women without children or for women with children a bit more education.

From 1993 to 2000, the employment rate for all three groups increased, but the pace of increase was by far the greatest for women with children and less than a high school education. This too is consistent with the expectation. Note also that the pace of increase for this group was just as rapid from 1993 to 1996 as from 1997 to 2000, which suggests that it wasn't solely the 1996 welfare reform that was driving the increase in the latter years.

Sweden's Earned Income Tax Credit is much newer, so its effects have been studied less. Karin Edmark and colleagues (2012) found little or no impact on employment rates when comparing across Swedish municipalities, but they concluded that the variation they observe may be too small to produce noteworthy employment differences. Rolf Aaberge and Lennart Flood (2013) found a strong positive effect on employment rates and employment hours of single mothers — stronger than for the US EITC. They attribute this, quite plausibly, to the Swedish credit's lack of a phase-out range. Daniela Andrén and Thomas Andrén (2013) found positive employment effects on single and married women and men.

Studies based on interviews and other qualitative research strategies tend to support the finding from quantitative analyses that employment-conditional earnings subsidies boost employment (Millar 2008; Sykes et al 2014).

If employment-conditional earnings subsidies do increase employment, is it by encouraging people to enter employment, or do they primarily encourage people to remain in employment once there? Lawrence Mead (2014) argues that, in the case of America's EITC, it is the latter. He notes that until recently, quantitative empirical studies have not tended to find a large impact of financial incentives on the quantity of employment of low-income women. In addition, the fact that the EITC is paid out in a once-a-year lump sum might limit its attractiveness to potential jobseekers, since the pay-out comes months in the future rather than right away. Also, many people don't know about the EITC prior to entering employment.
In this story, the EITC makes employment attractive enough financially that people with jobs stay in them rather than quit at the first opportunity (see also Dickens and McKnight 2008). But it doesn’t increase the likelihood that a person will enter employment initially. For that, other incentives or constraints are needed. Mead (2014, pp. 30-31) quotes Jason DeParle, a journalist who looked carefully at the impact of the mid-1990s US welfare reform on employment among low-skilled women:

"I haven’t heard people on welfare say the credit pushed them to go to work. My sense is that the hassle factor of welfare is much more powerful in pushing them off the rolls (and consequently into jobs) than the vaguer promise of later wage subsidies.

"On the other hand, that’s not to say that they don’t think about the EITC. They are hugely aware of it, especially after they start working. It’s a big part of their survival strategy. It no doubt reinforces the desirability of work (or, phrased the opposite way — it plays a huge role in blunting the harshness of the low-wage economy). In enabling people to buy cars, keep up with the rent, etc., it may even make work possible. Without it, many fewer people might be willing to stay in the workforce....

"So that’s why I say I accept the point that it raises work rates.... [M]y impression is that it’s not the thing that initially gets welfare recipients working. The first is the hassle of the welfare system. My sense is the EITC then plays an important secondary role, in stabilizing them economically and rewarding them psychologically."

If this is correct, the impact of an employment-conditional earnings subsidy on employment will be strongest when it is combined with other activation efforts that push or pull people into paid work.

### 3.2 Cross-country evidence

Can we see an employment-boosting effect of employment-conditional earnings subsidies if we compare across countries? If the subsidies have a large impact, the United Kingdom and the United States should have high a employment rate compared to other rich nations, and they should compare favorably when we look at change in the employment rate over time.
Figure 6. Employment rate

Employed persons aged 25-64 as a share of the population aged 25-64. The vertical axis does not begin at zero. The other eighteen countries are Australia, Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Korea, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, and Switzerland.

Source: OECD, stats.oecd.org.

Figure 6 shows employment rates in twenty-one rich countries since the late 1970s. The employment rates for the UK and the US are shown with thick lines, and those for 18 other countries with thin lines. There is little support in this picture for a conclusion that employment-conditional earnings subsidies significantly boost employment. The UK began the period in the middle of the pack. Its employment rate increased steadily, but not much faster than that of a number of other countries that don't have a large earnings subsidy. The United States also began in the middle of the pack. In the 1980s it jumped up, with quite rapid employment growth. But in the 1990s the pace of increase slowed, and in the 2000-2007 business cycle there was no increase. By 2007, the peak business cycle year prior to the 2008 economic crash, a number of other nations had caught up to the US.

Now, these countries differ in lots of ways that might affect employment (Kenworthy 2008). Canada is probably the closest comparison case to the UK and the US — the most similar in labor market regulation, union strength, taxation, and social policy. Canada's employment rate is the bold dashed line in figure 6. Canada didn't have an employment-conditional earnings subsidy prior to 2007, yet its employment performance was quite similar to that of the UK and the US. This too doesn't support the notion that earnings subsidies have a large impact on employment.
Figure 7. Employment rate: persons aged 35-44 with less than secondary education

![Graph showing employment rates among persons aged 35-44 with less than secondary education.]

The vertical axis does not begin at zero. The other eighteen countries are Australia, Austria, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Korea, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, and Switzerland.


Perhaps we can spot an impact if we narrow the lens a bit. One group that an employment-conditional earnings subsidy should be especially likely to attract into employment is those who have little education and are in prime parenting years. Their lack of education means their labor market prospects are limited, and as parents they typically qualify for the largest subsidy amount. Figure 7 shows employment rates among persons aged 35-44 who have less than a secondary education. These data are available only beginning in 2000.

Here too we see don’t see indication that UK- and US-type employment-conditional earnings subsidies have a large employment-boosting effect. The United Kingdom's employment rate begins in the middle of the pack, and it subsequently moves toward the bottom. The United States starts low and doesn’t improve its position. Canada is similar.

Another potentially informative indicator is the share of working-age households without an employed adult. The UK's employment-conditional earnings subsidy was significantly increased in 1999 and 2003, and Paul Gregg and colleagues (2012, figure 9) show that over the ensuing decade the share of workless households fell more rapidly in the UK than in France, Ireland, Italy, the Netherlands, or Spain. But this is a small set of comparison countries. The OECD has compiled data on workless households for a larger set of nations, though only beginning in 2007. Figure 8 shows that on this indicator the United States and the United Kingdom perform decently, but their record isn’t outstanding.
Overall, the evidence suggests that an employment-conditional earnings subsidy tends to boost employment in US- and UK-type economies, but the labor market institutions of those two countries, including their earnings subsidies, don’t appear to yield superior employment performance compared to the institutions of many other rich nations.

A UK- or US-style labor market might, however, be better at incorporating low-skilled immigrants. Such immigrants face not only skill deficits but also, in many cases, language barriers and employer worries about their likelihood of quitting to return to their country of origin. Countries with a low wage floor supplemented by an earnings subsidy may provide more opportunity for less-skilled immigrants to get a foothold in the formal labor market, because with labor costs lowered employers don’t need to be quite as concerned about workers’ productivity and turnover. Figure 9 shows the difference between the employment rate for foreign-born persons with less than secondary education and similarly-educated native-born persons. The United States and the United Kingdom are among the best performers on this measure, consistent with the prediction.
Figure 9. Employment rate: difference between low-education immigrants and low-education native-born

The data are for 2009-10. Persons aged 15 to 64. Low education refers to less than upper secondary completion.

Source: OECD, Settling In: OECD Indicators of Immigrant Integration, 2012, figure 6.2.

4 Effect on wages

An employment-conditional earnings subsidy might cause wage levels to fall. In the presence of the subsidy, employers might offer a lower wage than they otherwise would, and workers may be willing to accept a lower wage. Also, the subsidy may increase the supply of less-educated people seeking jobs, and without an increase in employer demand for such workers, this rise in supply is likely to push wages down.

What do we know about the impact of employment-conditional earnings subsidies on low-end wages? Because we lack cross-nationally comparable data on low-end wage levels, evidence here is confined to within-country studies.

Jesse Rothstein (2011) simulated a variety of potential effects of the US Earned Income Tax Credit on the wages of persons with low skills. He concluded that, under assumptions consistent with existing estimates of labor supply and wage responses to tax changes, part of the EITC benefit goes to workers and part goes to employers in the form of reduced wage payments.

Andrew Leigh (2010) used variation in state Earned Income Tax Credits across the United States to estimate the impact on wages. He also examined variation in the national EITC across gender-age-education groups. He too concluded that the EITC tends to reduce wages. Households with children receive a net income boost, according to Leigh’s estimates, because the value of the credit they receive more than offsets the decrease in earnings due to lower wages (see also Neumark and Wascher 2001). But households without children are likely to suffer a drop in income, since the EITC benefit is too small (see figure 1) to offset the reduction in wages.
Ghazala Azmat (2006) examined the impact of the 1999 increase in the UK’s Working Families Tax Credit and concluded that about 20% went to employers via reduced wages. Paul Gregg and Susan Harkness (2003) also found a reduction in wages, though only for non-recipients of the credit.

Is the over-time trend in low-end wages in the United States consistent with the notion that the EITC has a small negative effect on wage levels? Figure 10 shows inflation-adjusted hourly wages at the tenth percentile of the wage ladder since the late 1970s. The EITC was significantly expanded in generosity and coverage between 1987 and 1996 (see figures 2 and 3), and the tenth-percentile wage level was flat during those years. This seems supportive of the wage-reduction hypothesis.

Figure 10. US tenth-percentile wage

Hourly wage. In 2012 dollars; inflation adjustment is via the CPI-U-RS.
Source: Economic Policy Institute, stateofworkingamerica.org/data.

Then again, US wages at the tenth percentile were flat or declining during most of the period since the late 1970s, not just when the EITC was expanding. Moreover, there are many causes of this trend other than the EITC. One contributor is the flat statutory minimum wage (see below), but there is much more, including the shift of employment from manufacturing to services, increased product market competition, firms' heightened options for replacing workers (with machines or low-cost laborers abroad), shareholder pressure for constant cost-cutting, weakened labor unions, and a rise in low-skill immigration (Kenworthy 2014).

Overall, the evidence suggests that a US- or UK-style employment-conditional earnings subsidy may reduce wages somewhat, but we need more research on this question.

A relatively high wage floor can help to prevent a US- or UK-style employment-conditional earnings subsidy from causing low-end wages to fall. Figure 11 shows trends in the statutory minimum wage in the affluent nations that have one. The comparatively low minimum wage in the United States (above only Korea, Portugal, Spain, and Japan) and its lack of increase over time may help explain why the US Earned Income Tax Credit has reduced low-end wages according to the studies noted above.
For a US- or UK-style employment-conditional earnings subsidy, there is an additional reason why a moderately-high wage floor probably is preferable to a low floor. If the minimum wage is low, the amount of the subsidy will need to be large in order to accomplish the desired poverty reduction. Suppose policy makers want to keep the subsidy confined to households with low earnings. The phase-out rate — the slope of the lines on the right side in figure 1 — will then become quite steep, which will create a strong incentive for households in the phase-out range to reduce employment hours. If policy makers instead are willing to extend eligibility for the subsidy further up the income ladder, this problem can be avoided. But then the budgetary cost of the subsidy will rise, perhaps dramatically.

**5 Effect on household incomes**

Employment-conditional earnings subsidies can affect the incomes of low-end households in three ways. First, there is the direct impact of the subsidy. The US Earned Income Tax Credit adds an average of $2,300 to the pre-transfer/pre-tax incomes of recipient households (figure 2). In doing so it raises the incomes of 1% to 3% of the population from below the US government’s poverty line to above the line (Meyer 2010; Center on Budget and Policy Priorities 2014a; Scott and Crandall-Hollick 2014). A similar story holds for the United Kingdom (Brewer et al 2010; Hills 2013).

Because it is targeted to low-earning households rather than to low earning individuals, a US- or UK-style earnings subsidy is more efficient at boosting household incomes than an increase in the minimum wage (Neumark and Wascher 2001; Hotz and Scholz 2003; Marx, Vanhille, and Verbist 2012). This may or may not be true of a German- or Swedish-style earnings subsidy, as they go to individuals rather than to households.

Second, if the subsidy increases employment in low-end households, as the bulk of research reviewed above suggests it does, it will increase market (pre-transfer/pre-tax) incomes. The poverty-reducing
effect of higher employment can vary, however, depending on the magnitude of the increase and depending on whether employment also is increasing in middle-income households (Kenworthy 2011; Marx, Vandenbroucke, and Verbist 2012; Cantillon and Vandenbroucke 2013).

Third, an employment-conditional earnings subsidy may reduce wage levels. In this scenario, much of the subsidy ends up in the pockets of employers rather than workers. Any reduction in poverty is largely illusory, because in the absence of the subsidy wages would be higher and fewer households would have market incomes below the poverty line. As noted above, the limited research on this question suggests that a US- or UK-style subsidy may indeed result in lower wage levels but that overall it does boost the incomes of low-end households.

Does this make a noticeable difference to aggregate household income levels and poverty rates? Figure 12 shows country trends in the inflation-adjusted income of households at the tenth percentile. (In most of the rich countries, net government transfers are larger than earnings in the bottom decile, and then earnings become more and more important as we move above the tenth percentile; see Kenworthy 2011a, figure 2.2; Kenworthy 2011b, figure 2.) Despite America’s enormous wealth, the income of tenth-percentile US households is in the middle of the pack. And it was essentially flat over this period of several decades, so the US position compared to other countries slipped a bit. The UK began at the low end. It did well between the mid-1990s and the mid-2000s but still ended up well below the best performers.

As noted above, Canada is probably the best comparator nation for the US and the UK, as its labor market regulations and social policies are broadly similar and for most of this period it didn’t have an employment-conditional earnings subsidy. The US and UK haven’t done better than Canada at achieving high household incomes for those at the low end. Nor has the US been successful at increasing those incomes.

**Figure 12. Tenth-percentile household income**

![Graph showing tenth-percentile household income over time for various countries including Canada (Can) and the UK and US.](image-url)

Posttransfer-posttax household income. The incomes are adjusted for household size and then rescaled to reflect a three-person household, adjusted for inflation, and converted to US dollars using purchasing power parities. "k" = thousand. The lines are loess curves. The other fourteen countries are Australia, Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Norway, Spain, Sweden, and Switzerland.

**Source:** Luxembourg Income Study, "LIS Key Figures"; OECD, stats.oecd.org.
Figure 13 shifts from an absolute measure of well-being to a relative one. It shows country trends in the relative poverty rate, with the poverty line set at 60% of each nation’s median income. The United States had the highest relative poverty rate at the beginning of the period, and its comparative position didn’t improve at all. Canada didn’t improve either, but it started and ended lower than the US. The UK did poorly until the mid-1990s, with relative poverty increasing to nearly America’s level. After the mid-1990s, the UK achieved a sizeable decline in relative poverty. The enhanced Working Tax Credit was part of the reason for this success, but the New Labour governments also increased a number of other transfers to low-end households (Sefton, Hills, and Sutherland 2009; Waldfogel 2010).

We should adjust the performance of the US and the UK somewhat. The union movement in the US was comparatively weak throughout this period, and its British counterpart was weakening rapidly. As a result, the new economic pressures on low-end workers and households since the 1970s — competition, globalization, computers and robots, the shift from manufacturing to services, financialization — hit with greater force in these two nations than elsewhere. Even with some adjustment, however, the US and UK record in achieving decent and rising incomes for low-end households has been less than stellar.

6 The German model

Germany’s mini-jobs strategy embraces the development of a low-wage segment of the labor market, and in this respect it is a move toward the Anglo model. Because payroll and incomes taxes paid by employees are very high, exempting mini-jobs workers from payment of those taxes is a functional equivalent to the US- and UK-style tax credit. It is difficult, however, to assess the impact of the subsidy,
because it is one part of the mini-jobs package, which also has included allowance of below-minimum wage payments and a reduction in taxes paid by employers.

Let’s nevertheless take a look at Germany’s performance since the late 1990s (see also Bosch and Weinkopf 2008; Corneo, Pollack, and Zmerli 2013; OECD 2014, ch. 3). The most useful comparison is with other continental European countries. Figures 14-16 show employment rates, tenth-percentile household incomes, and relative poverty rates in Germany, Austria, Belgium, France, Italy, the Netherlands, Portugal, Spain, and Switzerland. The employment patterns since 2003, when the financial attractiveness of mini-jobs category was increased, are consistent with a conclusion that Germany’s strategy has helped to boost paid work. Germany’s employment rate increased more than that of any other continental nation during this period.

But the story is exactly the opposite for the incomes of low-end households and for relative poverty. Germany has lost ground on both of these indicators, both in absolute terms and in comparison to other continental countries.

**Figure 14. Employment rate in Germany and other continental countries**

For data description and source, see the note to figure 6. The other eight countries are Austria, Belgium, France, Italy, the Netherlands, Portugal, Spain, and Switzerland.
7 The Swedish model

Sweden introduced its employment-conditional earning subsidy in 2007, so its existence coincides with the Great Recession and the recession's aftermath, which have had a large impact on employment and household incomes. This makes it virtually impossible to detect the subsidy's true impact via over-time or cross-country comparison.
8 Conclusions

All of the English-speaking rich nations have a US- or UK-style employment-conditional earnings subsidy — a tax credit or cash transfer with a phase-in range and a phase-out range. In Ireland, New Zealand, the UK, and the US the benefit amount is large. In Canada it is moderate in size. Only Australia’s is small, and that is partly because Australia’s minimum wage is by far the highest among these countries.

For this type of economy, in which unions and collective bargaining are comparatively weak and labor market regulations are limited, the US and UK experience suggests that an employment-conditional earnings subsidy increases employment among persons at the low end of the labor market. It probably also reduces wage levels, though the evidence on this is thin. Overall, it appears to boost the absolute incomes of low-end households.

On the other hand, cross-country comparison offers little support for a conclusion that the institutional configuration in these countries, including the employment-conditional earnings subsidy, is especially effective at generating high and rising employment, high and rising incomes among low-end households, or low and decreasing relative poverty rates. Quite a few other affluent nations have done as well as or better than the UK and the US in recent decades.

In many other rich countries, unions and collective bargaining are stronger. Most of these countries currently have an employment-conditional earnings subsidy, but one that is small, sector-specific, or temporary. These are unlikely to have large effects on aggregate employment or incomes.

The use of small subsidies might remain the norm in these nations. Or some of them may opt to voluntarily move toward the Anglo path, as Germany has done. Some might find that a low-wage labor market develops against their will, if unionization continues its downward trend of recent decades, and this might push them too to adopt a US- or UK-style earnings subsidy.

Another potential path for countries in which collective bargaining remains strong is Sweden’s. Sweden has maintained a high wage floor and a compressed wage distribution. It has nonetheless introduced a large employment-conditional tax credit aimed at stimulating employment among the less-educated and supplementing low-end household incomes. Consistent with the bulk of Swedish social programs, the subsidy is universal; there is no phase-out. This makes the program expensive compared to its counterparts in the UK and the US, which are targeted to households well below the median income. The Swedish subsidy began in 2007, so we don’t yet know much about its impact.
References


Francesconi, Marco and Wilbert van der Klaauw. 2007. "The Socioeconomic Consequences of 'In-Work' Benefit Reform for British Lone Mothers." *Journal of Human Resources* 42.


OECD. 2014. OECD Economic Surveys: Germany. OECD.


Appendix

The following employment-conditional earnings subsidies are currently in use:

- Australia: Working Credit
- Austria: Kombilohnbeihilfe
- Belgium: Work Bonus, Jobkorting
- Canada: Working Income Tax Benefit
- Denmark: social assistance earnings disregard
- Finland: Earned Income Allowance, Earned Income Tax Credit
- France: Prime pour l'emploi
- Germany: Mini Jobs
- Ireland: Family Income Supplement and several other programs
- Japan: Reemployment Allowance
- Korea: Earned Income Tax Credit, Reemployment Allowance
- Netherlands: Employed Person’s Tax Credit
- New Zealand: Minimum Family Tax Credit, In-Work Tax Credit
- Portugal: social assistance earnings disregard
- Sweden: Earned Income Tax Credit (Jobbskatteavdraget)
- United Kingdom: Universal Credit (formerly Working Tax Credit)
- United States: Earned Income Tax Credit
ImPRovE: Poverty Reduction in Europe.
Social Policy and Innovation

Poverty Reduction in Europe: Social Policy and Innovation (ImPRovE) is an international research project that brings together ten outstanding research institutes and a broad network of researchers in a concerted effort to study poverty, social policy and social innovation in Europe. The ImPRovE project aims to improve the basis for evidence-based policy making in Europe, both in the short and in the long term. In the short term, this is done by carrying out research that is directly relevant for policymakers. At the same time however, ImPRovE invests in improving the long-term capacity for evidence-based policy making by upgrading the available research infrastructure, by combining both applied and fundamental research, and by optimising the information flow of research results to relevant policy makers and the civil society at large.

The two central questions driving the ImPRovE project are:

How can social cohesion be achieved in Europe?

How can social innovation complement, reinforce and modify macro-level policies and vice versa?

The project runs from March 2012 till February 2016 and receives EU research support to the amount of Euro 2.7 million under the 7th Framework Programme. The output of ImPRovE will include over 55 research papers, about 16 policy briefs and at least 3 scientific books. The ImPRovE Consortium will organise two international conferences (Spring 2014 and Winter 2015). In addition, ImPRovE will develop a new database of local projects of social innovation in Europe, cross-national comparable reference budgets for 6 countries (Belgium, Finland, Greece, Hungary, Italy and Spain) and will strongly expand the available policy scenarios in the European microsimulation model EUROMOD.

More detailed information is available on the website http://improve-research.eu.

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